



CITY COUNCIL MEETING & PUBLIC HEARING JULY 17, 2023

ALPHARETTA CITY HALL
COUNCIL CHAMBERS
2 PARK PLAZA

6:30 PM or at the conclusion of the City Council Work Session

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PLEDGE TO THE FLAG**
4. **PRESENTATIONS & PROCLAMATIONS**
 - A. **Presentation of Championship Rings to the 1965 Bailey Johnson School Basketball Team**
 - B. **Bike Alpharetta Award Presentation to Alpharetta Public Safety Officer, Amanda Clay**
5. **BOARDS & COMMISSIONS**
 - A. **Swearing in of Code Enforcement Board Member, Leander Murphy**
6. **CONSENT AGENDA**
 - A. **City Council Meeting Minutes (Meeting of 6/26/2023)**
Consideration of approval of the City Council meeting minutes from the meeting of June 26, 2023.
 - B. **Natural Area Conservation Easement: 201 Marietta Street**
Consideration of approval of a Natural Area Conservation Easement for property located at 201 Marietta Street between the City of Alpharetta and Fergal Brady and Audrey M. Brady.
 - C. **Financial Management Report (Month Ending May 31, 2023)**
Consideration of approval of the Financial Management Report for the month ending May 31, 2023.
7. **PUBLIC HEARING**
 - A. **MP-23-03 Fulton Science Academy**
Consideration of a master plan amendment to allow for the construction of several athletic fields (tennis and soccer) in conjunction with the Fulton Science Academy athletic program. A master plan amendment is requested to reduce building setbacks along Fanfare Way. The property is located at 3035 Fanfare Way and is legally described as being located in Land Lots 688, 689, and 700, 1st District, 2nd Section, Fulton County, Georgia.
8. **NEW BUSINESS**
 - A. **Invitation to Bid 23-010: Construction of Pedestrian Safety Barriers on the Town Green**
Consideration of approval of the award ITB 23-010 to Tri Scapes, Inc. for an amount totaling \$206,584.31 and authorize the Mayor to execute all necessary documents.
 - B. **Purchase Approval: Fleet Replacement for Freightliner Tandem Dump Truck**
Consideration of approval of the purchase of a 2024 Freightliner 114SD Plus Tandem Dump Truck utilizing State Contract 9999-SPD-SPD0000155-007 from Peach State Truck Center in the amount of \$172,280.00.
 - C. **Geographic Information System (GIS) Enterprise Agreement and Annual Subscription with Environmental Systems Research Institute, Inc.**
Consideration of approval of the procurement of the enterprise agreement annual subscription from Environmental Systems Research Institute, Inc. (ESRI) for three years at a fixed cost that is renewed annually in the amount of \$62,375.00, and authorize the Mayor to execute all necessary documents.
 - D. **Purchase Approval: Cisco Duo Software as a Service Subscription (SaaS) with Verinext**
Consideration of approval of the issuance of a purchase order to Verinext, as the vendor to provide the annual Cisco Duo SaaS Subscription, in the amount of \$52,963.90.

E. Purchase Approval: Microsoft Azure Cloud Infrastructure as a Service (IaaS) Subscription with SHI International Inc.

Consideration of approval of the issuance of a purchase order to SHI International, Inc., as the vendor to provide the annual Microsoft Azure Cloud IaaS Subscription, using state contract number 99999-SPD-SPD0000060-003 in an amount not to exceed \$320,000.00.

F. Ratification of Emergency Procurement Declaration: City Hall HVAC System

Consideration of approval of the ratification of an emergency procurement declaration in order to repair the City Hall HVAC system.

G. Ratification of Purchase Approval for City Hall HVAC Repairs

Consideration of ratification of the issuance of a purchase order to Comfort by Design, Inc., as the vendor to provide maintenance and repairs to the City Hall HVAC system, in the amount of \$131,006.67.

- 9. PUBLIC COMMENT**
- 10. REPORTS**
- 11. EXECUTIVE SESSION (IF NECESSARY)**
- 12. RATIFICATION OF EXECUTIVE SESSION ITEMS (IF NECESSARY)**
- 13. ADJOURNMENT**



STAFF REPORT

Department: City Clerk
Submitted By: Lauren Shapiro
Meeting Date: July 17, 2023

AGENDA ITEM:

City Council Meeting Minutes (Meeting of 6/26/2023)

Consideration of approval of the City Council meeting minutes from the meeting of June 26, 2023.

STAFF RECOMMENDATION:

Approve the City Council Meeting minutes from the meeting of June 26, 2023.

BUDGET & PROCUREMENT:

BUDGETED ITEM: NO

FISCAL IMPACT: NO

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST:

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-----------------------------	----------------------

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-----------------------------	----------------------

ITEM DESCRIPTION:

City Clerk, Lauren Shapiro, prepared a synopsis of the pertinent information that occurred during the City Council meeting on June 26, 2023.

ALTERNATIVES:

ATTACHMENTS:

1. CC Minutes 6.26.2023



City Council Meeting & Public Hearing

JUNE 26, 2023

UNOFFICIAL MINUTES

Office of the City Clerk

ALPHARETTA CITY HALL

COUNCIL CHAMBERS | 2 PARK PLAZA | 6:30 PM

This summary is provided as a convenience and service to the public, media and staff. It is not the intent to record proceedings verbatim. Any reproduction of this summary must include this notice. This is not an official record of the Alpharetta City Council Meeting proceedings. Meetings are recorded and available for review at <https://www.youtube.com/user/alpharettagov>.

1. CALL TO ORDER

- Mayor Gilvin called the meeting to order at 6:30 p.m.

2. ROLL CALL

• Council Members

- Mayor Jim Gilvin
- Mayor Pro Tem Dan Merkel
- Donald F. Mitchell
- Brian Will
- Douglas J. DeRito
- John Hipes
- Jason Binder

• Council Members Absent

- Donald F. Mitchell

• Staff

- Chris Lagerbloom, City Administrator
- Molly Esswein, City Attorney with Jarrard & Davis
- James Drinkard, Assistant City Administrator
- Lauren Shapiro, City Clerk
- Ryan Thomas, Municipal Project Manager
- Kathi Cook, Director of Community and Economic Development
- Morgan Rodgers, Director of Recreation, Parks, and Cultural Services
- Pete Sewczwicz, Director of Public Works
- David Cureton, Information Technology Manager

3. PLEDGE TO THE FLAG

4. PRESENTATIONS & PROCLAMATIONS

A. Proclamation: 2023 National Recreation and Parks Month

- Mayor Gilvin presented a proclamation to the Director of Recreation, Parks, and Cultural Services, Morgan Rodgers, and several members of his department, to recognize 2023 National Recreation and Parks Month.

5. CONSENT AGENDA

A. Special Called City Council Meeting Minutes (Meeting of 6/19/2023 at 11:30 a.m.)

Consideration of approval of the Special Called City Council meeting minutes from the meeting of June 19, 2023 at 11:30 a.m.

B. City Council Meeting Minutes (Meeting of 6/19/2023)

Consideration of approval of the City Council meeting minutes from the meeting of June 19, 2023.

C. Alcoholic Beverage License Applications

Consideration of approval of the following alcoholic beverage license application:

1. PH-23-AB-13 Alpharetta Revolving Sushi Factory, Inc. 865 North Main Street, #108 Alpharetta, GA 30009

Restaurant

Consumption on Premises

Adding Distilled Spirits to an existing license

Owner: Alpharetta Revolving Sushi Factory, Inc.

Registered Agent: Scott Hamilton

❖ Council Member Hipes offered a motion to approve the Consent Agenda.

- Council Member Will seconded the motion.
- The motion was approved unanimously (6-0).

6. PUBLIC HEARING

A. MP-23-03 Fulton County Science Academy

DEFERRED: This item has been deferred by the Applicant to the July 17, 2023 City Council Meeting and Public Hearing.

Consideration of a master plan amendment to allow for the construction of several athletic fields (tennis and soccer) in conjunction with the Fulton Science Academy athletic program. A master plan amendment is requested to reduce building setbacks along Fanfare Way. The property is located at 3035 Fanfare Way and is legally described as being located in Land Lots 688, 689, and 700, 1st District, 2nd Section, Fulton County, Georgia.

7. NEW BUSINESS

A. PH-23-08 UDC Text Amendment – Zoning Procedures Law

SECOND READING

The first reading of this item occurred during the June 19, 2023 City Council Meeting & Public Hearing.

Consideration of text amendments to the Unified Development Code (UDC) to amend procedures to ensure consistency with the Zoning Procedures Law of the State of Georgia.

- City Attorney, Molly Esswein, read the ordinance aloud and presented this item.
- There were no changes to the draft of the text amendments for this item. There were two versions presented at the last City Council meeting, and the version that is being presented this evening, is what the state requires at a minimum, and which Council approved during the first reading.

PUBLIC COMMENTS:

- There were no public comments.
- ❖ Mayor Pro Tem Merkel offered a motion to approve PH-23-08 UDC Text Amendment – Zoning Procedures Law, as presented this evening.
 - Council Member Will seconded the motion.
 - The motion was approved unanimously (6-0).

B. PH-23-09 Alpharetta Design Review Board Ordinance and Design Guidelines Text Amendment – Zoning Procedures Law

SECOND READING

The first reading of this item occurred during the June 19, 2023 City Council Meeting & Public Hearing.

Consideration of text amendments to the Alpharetta Design Review Board Ordinance and Design Guidelines, Article II of Chapter 36 of the Code of Ordinances of the City of Alpharetta, Georgia to amend procedures to ensure consistency with the Zoning Procedures Law of the State of Georgia.

- City Attorney, Molly Esswein, read the ordinance aloud and presented this item.
- There were no changes to the draft since the last reading.

PUBLIC COMMENTS:

- There were no public comments.
- ❖ Mayor Pro Tem Merkel offered a motion to approve PH-23-09 Alpharetta Design Review Board Ordinance and Design Guidelines Text Amendment – Zoning Procedures Law.
 - Council Member Hipes seconded the motion.

- The motion was approved unanimously (6-0).

C. Resolution: Fulton County Community Development Block Grant Program Cooperation Agreement

Consideration of adoption of a Resolution authorizing the Mayor and City Council to approve the submission of the cooperative agreement for Fulton County's Community Development Block Grant Program for federal fiscal years 2024, 2025, and 2026. City Attorney, Molly Esswein, read the resolution title aloud.

- City Administrator, Chris Lagerbloom, came forward to present this item.
- By entering into the cooperative agreement with Fulton County, the City of Alpharetta is eligible to receive funding (as a third-party recipient) for CDBG and HOME projects through the County. In addition, the City is able to receive assistance from Fulton County in managing the CDBG and HOME programs.
- Fulton County submitted a copy of the 2024 - 2026 Community Development Block Grant Cooperative Agreement to the City of Alpharetta. If Alpharetta intends to participate in the program via Fulton County (as in the past), the agreement must be approved, signed, and delivered to Fulton County.
- The U.S. Department of Housing and Urban Development (HUD) has determined that Fulton County is eligible, as an "Urban County", to receive Entitlement Community Development Block Grant (CDBG) funds under Title I of the Housing and Community Development Act of 1974, as amended and HOME Investment Partnership Program funds.

PUBLIC COMMENTS:

- There were no public comments.
- ❖ Mayor Pro Tem Merkel offered a motion to approve a resolution of the Fulton County Community Development Block Grant Program Cooperation Agreement, as read by the City Attorney.
 - Council Member Hipes seconded the motion.
 - The motion was approved unanimously (6-0).

D. Request For Proposal 23-118: United Towing Contract for Towing Services

Consideration of approval of the award of RFP 23-118 to United Towing, Inc. for a 5-year towing contract and to authorize the Mayor to execute all necessary documents.

- City Administrator, Chris Lagerbloom, came forward to present this item.
- The City requires towing and certain roadside services for vehicles that are involved in accidents or are otherwise obstructing traffic, for towing and storing vehicles abandoned on the roadway, towing vehicles that need to be held as evidence, and occasionally for towing City-owned vehicles due to accidents or mechanical issues.
- The Department of Public Safety usually initiates calls for such services through the 911 Center. In virtually all cases, the vehicles' owners pay the fees.

- One of the most important considerations is response time, particularly to incidents that involve obstructions of major roadways and/or hazardous conditions. Other considerations include the proximity and security of storage lots, the skill and reliability of drivers, and the availability and capabilities of trucks and equipment.
- The Public Safety Department desires to enter into a 5-year contract with United Towing, Inc. The department has contracted with United Towing, Inc. for wrecker services since approximately 2003, and while the relationship and service have been excellent, the current contract expires on July 14, 2023.

PUBLIC COMMENTS:

- There were no public comments.
- ❖ Council Member Will offered a motion to approve the award of RFP 23-118 to United Towing, Inc. for a 5-year towing contract and to authorize the Mayor to execute all necessary documents.
 - Council Member DeRito seconded the motion.
 - The motion was approved unanimously (6-0).

E. Request for Proposal 23-109: Log Cabin Park Stormwater Mitigation Design Services

Consideration of approval of the award of RFP 23-109 to Rummel, Klepper and Kahl, LLP (RK&K) for the performance of the Log Cabin Park Stormwater Mitigation Design Services in an amount not to exceed \$154,065.00 and to authorize the Mayor to execute all necessary documents.

- Director of Public Works, Pete Sewczwicz, came forward to present this item.
- The award of this request for proposals is for design services for one or more stormwater management facilities in a manner that augments the capture and infiltration or storage of stormwater on the Log Cabin Park property.
- A tributary to Foe Killer Creek flows through the Log Cabin Park and is upstream of the Meadow Brooks/ Milton Estates neighborhood, which suffers from nuisance flooding.
- The goal is to capture and infiltrate or retain stormwater within the city-owned property in combination with the existing and future park amenities. The Consultant will perform engineering services including, but not limited to, HEC-HMS hydrologic modeling, HEC-RAS hydraulic modeling, final design of one or more stormwater management facilities, cost estimation for construction, permitting, and development of an operations and maintenance plan.
- The options identified in the assessment will be presented to the city staff and the Consultant will then develop design drawings for the preferred alternative.
- Once a contract Council approval is received and necessary documents executed, design may begin immediately. The anticipated completion date is 32 weeks from notice to proceed.
- This approval is just for design services, not construction.

- Later on, when bids have been received for construction, Public Works will come back before Council to request approval of the contract in order to select the vendor for construction.

PUBLIC COMMENTS:

- There were no public comments.
- ❖ Council Member DeRito offered a motion to approve the award of RFP 23-109 to Rummel, Klepper and Kahl, LLP (RK&K) for the performance of the Log Cabin Park Stormwater Mitigation Design Services in an amount not to exceed \$154,065.00 and to authorize the Mayor to execute all necessary documents.
 - Mayor Pro Tem Merkel seconded the motion.
 - The motion was approved unanimously (6-0).

8. PUBLIC COMMENT

- There were no public comments.

9. REPORTS

- Council Member Hipes shared that there are several upcoming recreation events in Alpharetta, including: Food Truck Alley has been rescheduled to this Thursday night, June 29th (since it was rained out last Thursday) and the yearly Fireworks Show will take place at Wills Park on July 4th.
- Mayor Pro Tem Merkel shared that he visited the I-Can Bike camp program earlier today and wanted to share that the Recreation and Parks Department, along with the Alpharetta Public Safety Foundation, is doing an outstanding job and have really grown this program.

10. EXECUTIVE SESSION (IF NEEDED)

- There was not an executive session.

11. ADJOURNMENT

- With there being no further items to consider or discuss, Mayor Gilvin adjourned the meeting at 7:14 p.m.

Respectfully submitted,



Lauren Shapiro, City Clerk



STAFF REPORT

Submitting Department: Community & Economic Development

Submitted By: Kathi Cook

Sponsored By: Staff Initiated

Meeting Date: July 17, 2023

I. AGENDA ITEM TITLE: 201 MARIETTA STREET NATURAL AREA CONSERVATION EASEMENT
THE DEVELOPER FOR 201 MARIETTA STREET SEEKS A NATURAL AREA CONSERVATION EASEMENT.

II. RECOMMENDATION:

Staff is requesting Mayor and Council accept the Natural Area Conservation Easement related to 201 Marietta Street, which is presently under development.

III. BUDGET IMPLICATIONS:

BUDGETED ITEM: NO

FISCAL IMPACT: NO

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST: THIS DISCUSSION ITEM
HAS NO CURRENT BUDGETARY IMPACT.

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-----------------------------	----------------------

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-----------------------------	----------------------

IV. REPORT IN BRIEF:

The developer for 201 Marietta Street seeks a 0.08 acre Natural Area Conservation Easement on the subject property. The natural area conservation easement provides stormwater credits related to land development activities on the subject property.

Stormwater management regulations allows for a variety of measures to treat, retain, or control the release of stormwater runoff from a development project. Typically, this is done on residential properties through infiltration trenches, pervious pavers, rain gardens, underground pipes and vaults, etc. One option for meeting some of the water quality stormwater management requirements is to place a portion of land into a natural conservation easement area, which is often associated with stream buffers. This area is set aside, recorded, and is not able to be disturbed nor developed in perpetuity. In exchange, the developer receives a reduction in the required water quality treatment volume. The intent is that the natural buffer, with a good stand of trees, shrubs, and ground cover, be allowed to remain and perform the natural function of slowing down, intercepting, and treating stormwater runoff ahead of release from the site.

V. ALTERNATIVES:

The developer could address stormwater with alternative measures, such as infiltration trenches, pervious pavers, rain gardens, underground pipes and vaults, and/or similar measures.

VI. ATTACHMENTS:

Natural Area Conservation Easement 201 Marietta Street

After Recording, Please Return To:

Molly Esswein, Esq.
Jarrard & Davis, LLP
222 Webb Street
Cumming, Georgia 30040

Re: TPN: 22 482412700266

Cross Reference:
DB 66779, PG 155
PB 443, PG 70

NATURAL AREA CONSERVATION EASEMENT

STATE OF GEORGIA

COUNTY OF FULTON

This Natural Area Conservation Easement (the "Easement") is made this ____ day of _____, 2023, between **FERGAL BRADY AND AUDREY M. BRADY** (hereinafter "Grantor") and the **CITY OF ALPHARETTA, GEORGIA**, a political subdivision of the State of Georgia (hereinafter "Grantee"). Herein, the words "Grantor" and "Grantee" shall include their respective heirs, executors, administrators, personal representatives, successors, and assigns where the context requires or permits.

WITNESSETH:

WHEREAS, Grantor is the owner of all that area of land located in Land Lot 1270, of the 2nd District, 2nd Section, Fulton County, Georgia, totaling **3,353 sq. ft. (0.08 ac.)** and as more particularly depicted in Exhibit "A" attached hereto and incorporated herein by this reference as if fully set forth (hereinafter the "Easement Property");

WHEREAS, the Easement Property is a part of that certain tract or parcel of land located at situs address 201 Marietta Street, Alpharetta, Fulton County, Georgia, with assigned tax parcel number (TPN) 22 482412700266, and being more particularly described in that certain Limited Warranty Deed recorded on May 4, 2023, in the Fulton County real property records at Deed Book 66779, Page 155;

WHEREAS, Grantor desires to grant to Grantee this Easement to fulfill all or part of the requirements of Section 3.3 of THE UNIFIED DEVELOPMENT CODE OF THE CITY OF ALPHARETTA, GEORGIA (hereinafter the "UDC");

WHEREAS, Grantee is a municipal corporation and political subdivision of the State of Georgia empowered, under the laws of said state, to hold an interest in real property;

WHEREAS, Grantee is a "qualified organization" within the meaning of Section 170(h) of the Internal Revenue Code of 1986, as amended, and as defined by Section 170(b)(1)(A)(v) and Section 170(c)(1) of said code;

WHEREAS, Grantee is a qualified "holder" within the meaning of Section 44-10-2(2)(A) of the Official Code of Georgia Annotated;

WHEREAS, Grantee, by recording this Easement, accepts the grant and dedication of the rights and interest in the Easement Property under the terms as hereinafter specified.

NOW, THEREFORE, as an absolute gift of no monetary consideration but in consideration of the mutual covenants, conditions, and restrictions set forth herein, Grantor hereby grants and conveys unto Grantee, its successors and assigns, this Natural Area Conservation Easement in, to, over, under, through, and across the Easement Property, and in furtherance of the conservation intent of Grantor and Grantee, Grantor hereby attaches the following covenants, conditions, and restrictions to the Easement Property:

- 1) The purpose of this Easement is to assure that in the future the Easement Property retains its present natural, scenic, aesthetic, watershed, wildlife, forest, and habitat conditions.
- 2) In furtherance of the purpose of this Easement and except as provided for herein, the Easement Property shall remain in its current, undisturbed state.
- 3) No activities, actions, or uses detrimental or adverse to water conservation, erosion control, soil conservation, and/or fish, wildlife, or habitat preservation shall be allowed on or within the Easement Property.
- 4) No building, fence, or other structure shall be erected on or within the Easement Property; provided, however, that the following shall be allowed to remain on the Easement Property and be maintained by, and at the sole expense of, Grantor: existing foot trails, fire lanes, farm roads, or other accesses not contrary to the purpose of this Easement.
- 5) No advertising or signage of any kind shall be placed, located, or remain on or within the Easement Property.
- 6) No soil, ashes, waste, or natural or artificial material of any kind shall be deposited or otherwise dumped on or within the Easement Property.
- 7) No loam, gravel, soil, rock, sand, mineral, deposit, or other material located on or within the Easement Property shall be excavated, mined, dredged, or otherwise removed or interfered with. Neither Grantor nor Grantee shall have the right, or permit any other person or entity, to mine the surface or subsurface of the Easement Property, in contravention of Section 170(h)(5)(B) of the Internal Revenue Code of 1986, as amended.

- 8) Trees, shrubs, or other vegetation on or within the Easement Property may be removed, destroyed, cut, or harvested only (a) with the prior written approval of Grantee; and (b) to the extent necessary for: (i) the maintenance of existing foot trails, fire lanes, farm roads, and/or other accesses not contrary to the purpose of this Easement; (ii) the prevention or treatment of vegetative disease; or (iii) other forest, stream, and/or ecological preservation or restoration practices.
- 9) If and where the Easement Property is adjacent to the public right-of-way, the Easement Property shall be marked with visible signage, the design, frequency, and location of which shall be approved by the Grantee. Said signage shall be a minimum twelve (12) inches by eighteen (18) inches and clearly identify the Easement Property as a "Conservation Area".
- 10) If (a) Grantor requests Grantee convey back to Grantor the rights conveyed by this Easement so as to remove the covenants, conditions, and restrictions imposed on the Easement Property hereby; and (b) Grantee agrees to, and effectuates, said conveyance, then any and all credits afforded under any applicable provisions of the UDC shall no longer be valid, and additional runoff reduction and/or water quality and/or detention measures must be provided for the real property for which the Easement Property served as said credit, based on the provisions and requirements of the UDC in effect at the time of said reconveyance.
- 11) If all or part of the Easement Property is ever taken by eminent domain, Grantor shall negotiate for, or otherwise provide, improvements that offset the loss of credit, if any, resulting from the taking of all or part of the Easement Property by eminent domain with additional runoff reduction and/or water quality and/or detention measures for the real property for which the condemned portion of the Easement Property served as said credit, based on the provisions and requirements of the UDC in effect at the time of said conveyance.
- 12) Grantor and Grantee acknowledge and agree that Grantor retains and owns certain property (hereinafter the "Retained Property") located immediately adjacent to the Easement Property. For the benefit of Grantor and the Retained Property, Grantor hereby reserves the right to continue to use the Easement Property for all purposes not inconsistent with this Easement.
- 13) No representation is made by Grantee as to the tax implications to Grantor of this Easement.
- 14) The covenants, conditions, and restrictions of this Easement shall be binding upon, inure to the benefit of, and burden the Grantor and Grantee and their respective heirs, executors, administrators, personal representatives, successors, and assigns and shall continue as an easement, covenant, and servitude running with the Easement Property in perpetuity and enforceable against Grantor and any and all present and future owners, tenants, and other holders of any interest in the Easement Property.
- 15) Nothing contained herein will result in a forfeiture or reversion of Grantor's title, in any respect, and any and all covenants, conditions, restrictions, or other matters contained

herein shall be construed as covenants, an easement, and/or servitude.

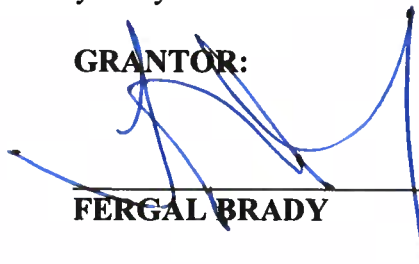
- 16) Grantor shall maintain the Easement Property in accordance with the covenants, conditions, and restrictions set forth herein under Grantors own volition or, if Grantor fails to do so, at the request of Grantee.
- 17) Grantor shall ensure that the covenants, conditions, and restrictions set forth herein are not breached at any time by Grantor, its permittees, invitees, licensees, the like, or any other person or entity.
- 18) Grantee, by failing to exercise, or delaying exercise of, any of its rights hereunder, does not waive or forfeit the right to exercise its rights hereunder at any time to ensure compliance with the covenants, conditions, and restrictions of this Easement.
- 19) Grantee reserves the right to enter the Easement Property at all reasonable times for the purpose of inspecting the Easement Property to determine if it is in compliance with the covenants, conditions, and restrictions of this Easement.
- 20) In the event Grantee, in its sole discretion, determines a violation of the covenants, conditions, or restrictions of this Easement exists or occurred, Grantee may, if after thirty (30) days' notice to Grantor such violation remains uncured or remedied, as determined in the sole discretion of Grantee, (a) institute a suit (i) to enjoin such violation; (ii) to require the restoration of the Easement Property to its condition prior to such violation; and/or (iii) for damages for breach of covenant; and/or (b) to the extent practicable, remediate and return the Easement Property to its condition prior to such violation and charge and collect from Grantor the reasonable expenses and/or fees, including attorneys' fees, incurred by Grantee in (i) so remediating and returning the Easement Property; (ii) collecting from Grantor said expenses and/or fees; and/or (iii) otherwise enforcing the covenants, conditions, and restrictions of this Easement.

(remainder of this page intentionally left blank)

(signature page follows)

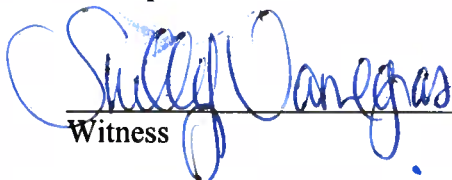
IN WITNESS WHEREOF, Grantor has signed and sealed and Grantee has accepted this Natural Area Conservation Easement, as of the day and year first above written.

GRANTOR:

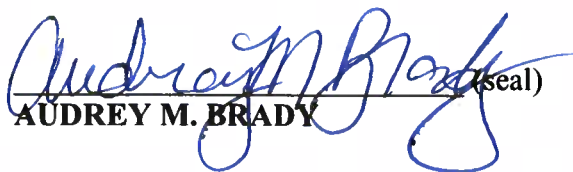


FERGAL BRADY (seal)

Signed, sealed and delivered
in the presence of:



Witness

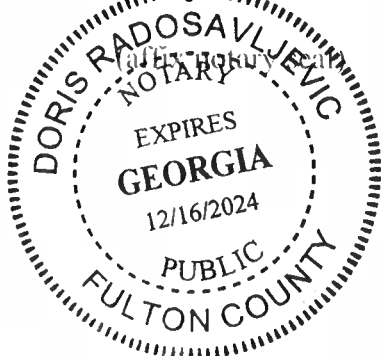


AUDREY M. BRADY (seal)



Notary Public

My Commission expires: **12/16/2024**



Signed, sealed and delivered
in the presence of:

Witness

Notary Public

My Commission expires:

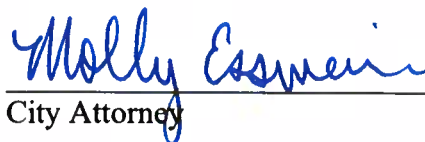
(affix notary seal)

GRANTEE:

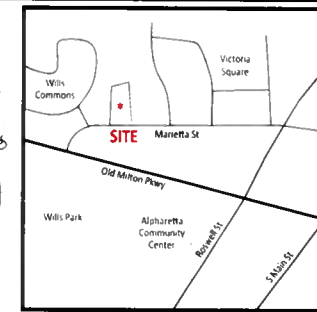
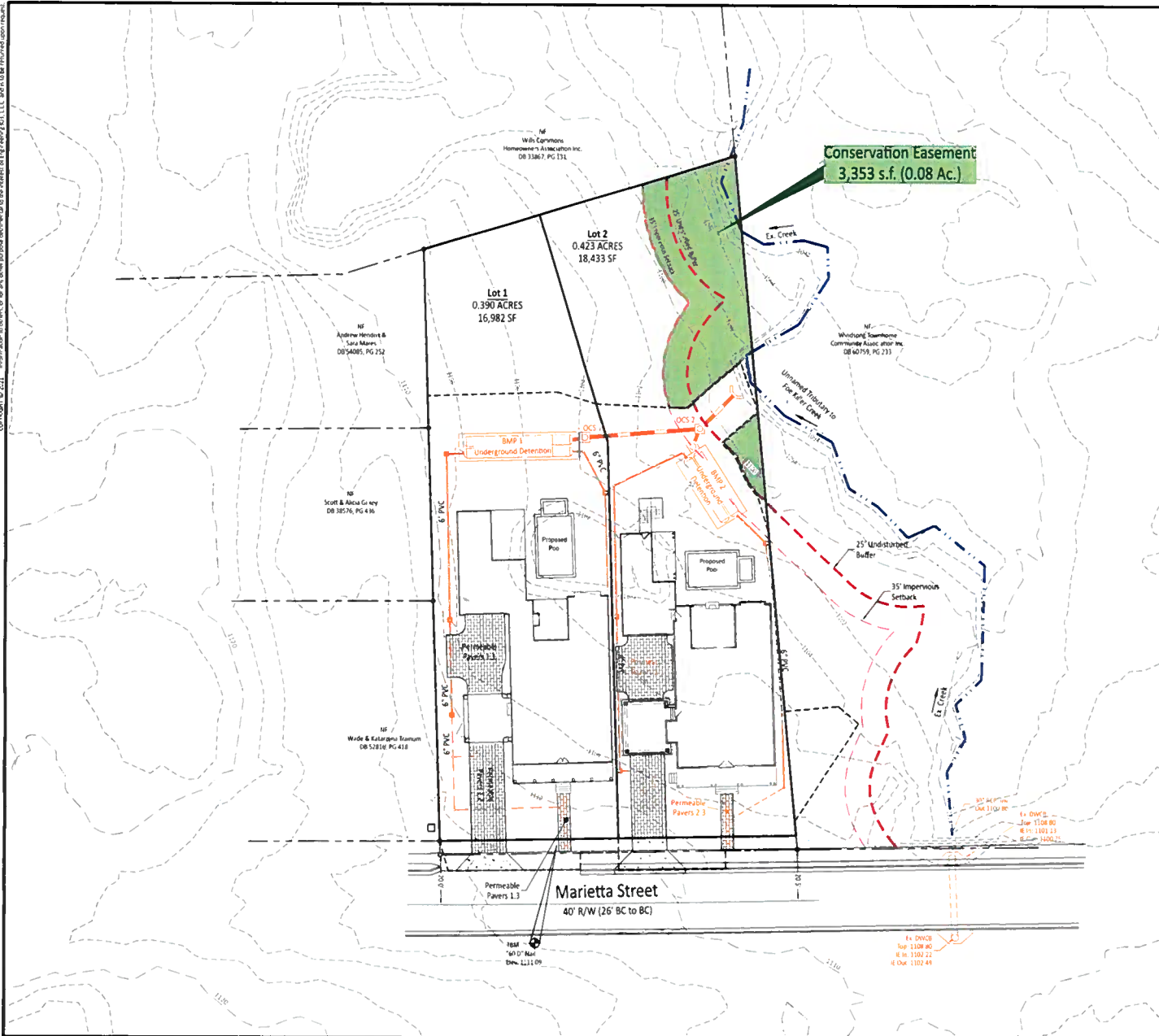
CITY OF ALPHARETTA, GEORGIA

By: _____
Jim Gilvin, Mayor

APPROVED AS TO FORM:



City Attorney



Location Map

Engineer

Engineering303, LLC
108 Allen Street
Cumming, Ga. 30040
Project Engineer: Brian King, PE
brian@engineering303.com
Phone (770) 442-0500

Owner/Developer

Fergal Brady
511 Veranda Court
Alpharetta, GA 30009

24 Hr Contact:
Fergal Brady
Phone: 404.441.3374
Email: bradyfergal@gmail.com

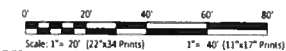
Area This Tract

Lot 1	16,982 Sq. Ft. 0.390 Acres
Lot 2	18,433 Sq. Ft. 0.423 Acres
B/W Taking	804 Sq. Ft. 0.019 Acres
Total	36,219 Sq. Ft. 0.832 Acres

FLOOD HAZARD NOTE:
No portion of this property is contained within the limits of a Special Flood Hazard Zone as defined by the Federal Emergency Management Agency Flood Insurance Rate Map No. 13121C0058F of Fulton County, GA. (Community Panel No. 1300640058F), most recently revised September 18, 2013.

REFERENCES:

1. Lot configuration and buffers show as per "Minor Subdivision Plat of: 201 Marietta Street for Fergal Brady", by Engineering303, LLC, Dated 9/15/21, Recorded in DB 443 PG 70.
2. Offsite Parcels, Topography and Stormwater infrastructure etc shown as per GIS data downloaded from Fulton County's GIS Data Portal on September 16, 2021.
3. Aerial Imagery downloaded from Google Earth on October 18, 2021.



Conservation Easement Exhibit for
201 Marietta Street
Fergal Brady
City of Alpharetta
2nd District 2nd Section
Land Lot 12-5

Civil Engineering, Land Surveying,
Stream and Wetland Restoration
108 Allen Street Cumming, Georgia 30040
Phone: 770-442-0500 www.engineering303.com

Drawn: ZC1
Date: 6-5-2023
Sheet
Easement
Project Number
21-4823



STAFF REPORT

Department: Finance
Submitted By: Shawn Mitchell
Meeting Date: July 17, 2023

AGENDA ITEM:

Financial Management Report (Month Ending May 31, 2023)

Consideration of approval of the Financial Management Report for the month ending May 31, 2023.

STAFF RECOMMENDATION:

Approve the Financial Management Report for the month ending May 31, 2023 (period 11 of Fiscal Year 2023).

BUDGET & PROCUREMENT:

BUDGETED ITEM: NO

FISCAL IMPACT: NO

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST:

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-----------------------------	----------------------

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-----------------------------	----------------------

ITEM DESCRIPTION:

On a monthly basis, the Finance Department prepares detailed revenue and expenditure statements for all city operating funds (including prior-year comparisons for the General Fund). In addition, this report includes:

1. Detailed capital project report including life-to-date activity;
2. Payments \$5,000 and greater; and
3. Purchase orders with an estimated cost between \$5,000 and \$50,000.

ALTERNATIVES:

Do not approve the financial management report for the month ending May 31, 2023 as part of the consent agenda and remove this item from the consent agenda.

ATTACHMENTS:

1. FY 2023 Financial Management Report (11-May)

Financial Management Reports



**for the month ending
May 31, 2023
(period 11 of 12 – unaudited)**

Please visit the Financial Transparency Portal for additional information including audited financial statements, adopted budgets, and automated tools aimed at simplifying access to the City's financial data.

<https://www.alpharetta.ga.us/government/departments/finance/transparency-portal>

Financial Management Reports

Fiscal Year 2023

Table of Contents

Performance Dashboard	1
Transmittal Letter	2
General Fund	6
Revenue Summary and Collection Comparison	7
Expenditure Summary by Department	9
Expenditure Summary by Category	10
Grant and Capital Funds	11
Grant Funds	12
Capital Funds	16
Special Revenue Funds (w/capital projects)	28
Other Reports	31
Payments \$5,000 and Greater	32
PO's between \$5,000 and \$50,000	36
GAAP Financial Statements (Governmental/Enterprise Funds)	37
Alpharetta Development Authority	43
Revenue & Expenditure Report	44
GAAP Financial Statements	46
Republic Services	
Accountability and Performance Dashboards (available online – link below):	
https://www.alpharetta.ga.us/government/departments/finance/services/trash-and-recycling	



CITY OF ALPHARETTA

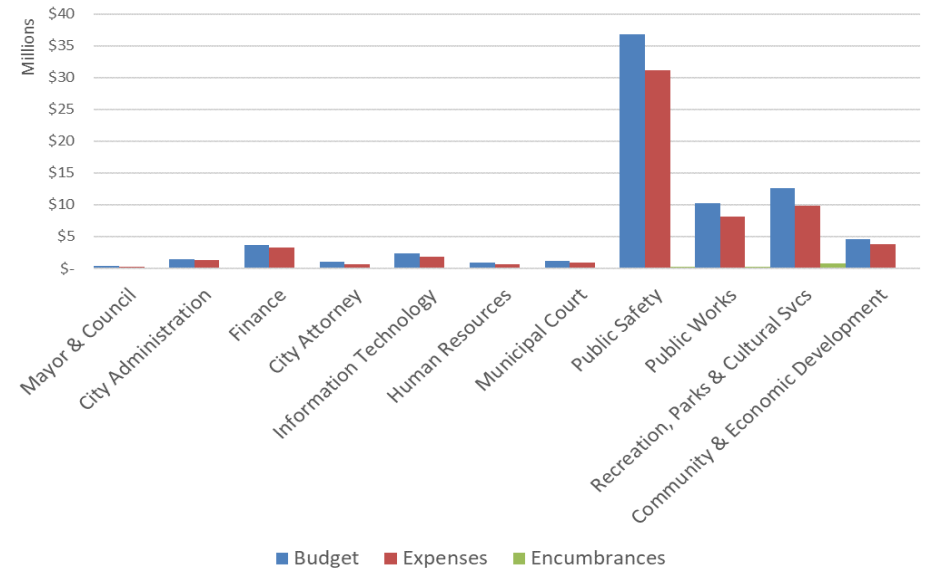
Financial Management Reports
Performance Dashboard
For the month ended May 31, 2023

LEGEND	
↑	Positive
↔	Neutral
↓	Negative

GENERAL FUND DETAIL

Revenues	Performance Status	Forecasted Gain/Loss
Top-10		
Property Taxes (current year)	↑	\$1,250,000
Property Taxes (delinquent/MV Title Fees)	↑	\$623,500
Local Option Sales Tax	↑	\$2,314,927
Franchise Tax	↔	(\$287,335)
Alcohol Beverage Excise Tax	↑	\$425,000
Building Permit Fees	↑	\$450,000
Business and Occupational Tax	↑	\$125,000
Court/Traffic Fines	↑	\$1,031,973
Recreation/Special Event Fees	↓	(\$558,407)
Hotel/Motel Tax (City portion)	↑	\$750,000
Other Revenues	↑	\$466,725
Minimum Surplus Goal Needed to Fund Capital: (\$15M Annual Capital Need less \$4M allocated in the budget)		\$11M
Less: Projected Revenue Gain		(\$6.6M)
Less: Projected Expenditure Savings		(\$3.5M)
Favorable (Unfavorable) Net Surplus vs \$15M Capital Need:		(\$909K)

Departmental Budget Snapshot



FUND SYNOPSIS

	Revenue	Expenses	Non-Allocated
General Fund (1)	↑	↑	\$682,249
Special Revenue Funds			
Confiscated Assets Fund (DEA)	↔	↔	\$126,357
Confiscated Assets Fund (State)	↔	↔	\$0
Emergency 911 Fund (1)	↔	↔	\$452,552
Impact Fee Fund	↔	↔	\$137,271
Hotel/Motel Fund (1)	↑	↑	\$586,022
Debt Service Fund	↑	↑	\$778,397
Proprietary Funds			
Solid Waste Fund (2)	↔	↔	\$29,520
Risk Management Fund	↔	↔	\$1,112,193
Medical Insurance Fund	↔	↔	(\$40,603)

	Non-Allocated
Grant Funds	
Operating Grant Fund (3)	\$37,664
Capital Grant Fund (3)	(\$9,179)
Capital Project Funds	
Capital Project Fund (3)	\$1,819,709
Stormwater Capital Fund	\$72,863
Series 2016 Bond Fund (Parks)	\$0
Series 2022 Bond Fund (Parks)	\$62,055
TSPLOST I Capital Fund	\$384,079
TSPLOST II Capital Fund	\$0
American Rescue Plan Act Capital Fund	\$0
Development Authority Fund	\$258,551

BOND RATING

AAA

strongest rating available

EMERGENCY RESERVE

General Fund

\$19.7M (25%)

Emergency 911 Fund

\$1.25M (25%)

Sanitation Fund

\$116K (2%)

rate adj. improving reserve

Please Note: Current year revenue in excess of budgeted amounts may be available to augment Non-Allocated balances upon City Council approval (e.g. Impact Fees and Confiscated Asset collections).

(1) General Fund value represents Contingency balance. Hotel/Motel Fund value represents Debt Service Reserve (target is \$1.5 million). Other Funds represents amounts in excess of the 25% fund balance target.

(2) Solid Waste Fund operational trends will remain neutral despite the recent rate adjustment as it will take multiple years to replenish the fund balance target.

(3) Does not include amounts, if any, currently set aside for matches on active grant applications.



2 PARK PLAZA
ALPHARETTA, GA 30009
PHONE: 678.297.6000
WWW.ALPHARETTA.GA.US

TO: HONORABLE MAYOR AND CITY COUNCIL MEMBERS

FROM: THOMAS G. HARRIS, FINANCE DIRECTOR *TH*

DATE: JULY 17, 2023

RE: FINANCIAL MANAGEMENT REPORTS AS OF MAY 31, 2023

The documents contained herein represent the financial management reports for the City of Alpharetta ("city") as of the period ending May 31, 2023.

General Fund

Revenue: The following section pertains to information detailed in the attached Revenue Summary and Collection Comparison report. FY 2023 revenues are budgeted at \$80 million (net of Carryforward Fund Balance totaling \$13 million). As of May 31, 2023, actual revenue collections total 99% or \$79 million. Trends (property digest valuations and collection trends) indicate a net gain over budget of \$6.6 million with the detail as follows:

• Property Taxes (current year):	\$ 1,250,000
• Property Taxes (prior-year/delinquent):	208,500
• Property Taxes (motor vehicle tax/title):	415,000
• LOST:	2,314,927
• Franchise Tax:	(287,335)
• Alcohol Beverage Excise Taxes:	425,000
• Building Permit Fees:	450,000
• Business and Occupational Taxes:	125,000
• Court/Traffic Fines:	1,031,973
• Recreation/Special Event Fees:	(558,407)
• Hotel Taxes:	750,000
• Other:	<u>466,725</u>
Estimated Gain:	\$ 6,591,383 (rounded)

MAYOR
JIM GILVIN

MAYOR PRO TEM
DAN MERKEL

COUNCIL MEMBERS
JASON BINDER
DOUGLAS J. DERITO
JOHN HIPES
DONALD F. MITCHELL
BRIAN WILL

CITY
ADMINISTRATOR
CHRIS LAGERBLOOM

Motor Vehicle Title Fee collections is trending 10% higher than FY 2022 (\$3.1 million). Collection estimates for FY 2023 total \$3.4 million (\$400,000 greater than budget).

Local Option Sales Tax collections is trending 6% higher than FY 2022 (\$20.6 million). Collection estimates for FY 2023 total \$21.5 million which is \$2.3 million greater than budget.

Franchise Tax collections for electricity represent a 16% increase over FY 2022. Specifically, GA Power collections totaled \$4.5 million for FY 2023 (compared to \$3.8 million in 2022) and Suwanee totaled \$638,649 (compared to \$625,103 in 2022). Collections for natural gas will most likely exceed the 2023 budget. Collections for cable are trending lower than FY 2022 and are not forecast to meet budget. Additionally, telephone (Bellsouth primarily) collections will not meet budget as the 2023 forecast was based off prior-year trend data that may have included non-recurring audit collections. Staff is communicating with Bellsouth to obtain clarity on the franchise fee remittances. Overall, the Franchise Tax collection estimates for FY 2023 total \$6.8 million which is \$287,335 less than budget.

Alcohol Beverage Excise Tax collections is trending 8% higher than FY 2022 (\$2.8 million). Collection estimates for FY 2023 total \$3 million (\$425,000 greater than budget).

Building Permit Fee collections is trending 8% higher than FY 2022 (\$2 million). Collection estimates for FY 2023 total \$2.3 million (\$450,000 greater than budget).

Collections for Municipal Court Fines is trending 36% higher than FY 2022. Current estimates for FY 2023 total \$2.1 million which is \$450,000 greater than budget. Collections for School Zone Speed Citations is trending -8% lower than FY 2022 and is estimated to generate \$1.3 million which is \$600,000 greater than budget.

Recreation/Special Event fee collections exceed budget estimates for multiple accounts including non-resident fees, art program fees, Alpharetta Community Center program fees, etc. That said, revenue estimates for multiple other sources will most likely trail budget estimates and these sources include athletics, Wills Park Recreation Center, and equestrian center (due in part to active construction).

Hotel/Motel tax collections is discussed within the Special Revenue Funds section of this letter.

Expenditures: The following section pertains to information detailed in the attached Expenditure Summary by Department (expenditure rollup by department) and Expenditure Summary by Category (expenditure rollup by account) reports. As of May 31, 2023, city departments (not including General Government¹) have encumbered and expensed 84%, or \$63.5 million, of their FY 2023 budget appropriations. Forecasts indicate a surplus of \$3.5 million compared to budget and is primarily composed of savings at the personnel services category (e.g., approximately 15 vacancies within General Fund departments as of May 2023).

Contingency: The General Fund contingency balance totals \$682,249.

¹ General Government is utilized to account for non-operating transactions such as transfers-out to other city funds, contingency, etc.

Other Funds

The following section references information included within the attached Performance Dashboard, Grant and Capital Funds Detail Reports, GAAP Financial Statements, etc.

Operating Grant Fund (Fund 220): Unspent/unencumbered project appropriations total \$111,310. Remaining appropriations are set aside for a non-allocated reserve (\$37,664).

Capital Grants Fund (Fund 340): Unspent/unencumbered project appropriations (net) total \$625,340.

General Capital Project Fund (Fund 301): Unspent/unencumbered project appropriations total \$4.9 million. Remaining appropriations are set aside for a non-allocated reserve (\$1.8 million).

Stormwater Capital Fund (Fund 302): Unspent/unencumbered project appropriations total \$4 million. Remaining appropriations are set aside for a non-allocated reserve (\$72,863).

American Rescue Act Capital Fund (Fund 303): Unspent/unencumbered project appropriations total \$576,813.

Series 2016 Parks and Transportation Bond Fund (Fund 317): Remaining proceeds have been substantially spent and the Fund is in process to be closed-out in FY 2023.

Series 2022 Parks Bond Fund (Fund 318): Unspent/unencumbered project appropriations total \$24.5 million. Remaining appropriations are set aside for a non-allocated reserve (\$62,055).

TSPLOST 1 Capital Project Fund (Fund 335): This fund accounts for collections under the Transportation Special Local Option Sales Tax (TSPLOST) that went into effect on April 1, 2017, and expired on March 31, 2022. Unspent/unencumbered project appropriations total \$26.2 million. Remaining appropriations are set aside for a non-allocated reserve (\$384,079).

TSPLOST 2 Capital Project Fund (Fund 336): This fund accounts for collections under the Transportation Special Local Option Sales Tax (TSPLOST) that went into effect on April 1, 2022. Appropriated funding totals \$51 million and represents Tier-1 project funding. Tier-1 projects are funded at 85% of forecasted revenue collections over the life of the 5-year tax. For comparison purposes, TSPLOST 1 collections have trended at over 90% of forecasted revenue collections. Unspent/unencumbered project appropriations total \$28 million.

Hotel/Motel Fund: FY 2023 revenues are budgeted at \$7.5 million (net of carryforward fund balance totaling \$1.1 million) with budgeted disbursements as follows: Alpharetta Convention & Visitor's Bureau (43.75% or \$3.3 million); Facilities (18.75% and a portion of the carryforward fund balance detailed above; \$1.4 million for debt service on the Series 2016 Convention Center Bonds; \$592,687 for eligible initiatives such as Equestrian Center and Wills Park Master Plan Improvements; with residual funding for bond/debt service reserve); and the city (37.5% or \$2.8 million).

Specifically, Debt Service Reserve funding (Convention Center Bonds) from the Facilities portion of the tax totals \$586,022. This reserve figure dipped below the \$1.5 million target level in 2019 due to the impact of the COVID-19 pandemic on the hospitality industry and is being replenished as revenues within the Fund continue strengthening.

Hotel tax collections is continuing its strong growth and estimates for FY 2023 total \$9.5 million which is \$2 million greater than budget.

Solid Waste Fund: FY 2023 revenues are currently budgeted at \$6.1 million. As of May 31, 2023, the city has collected \$6.6 million representing the 1st - 4th quarter billings, associated investment earnings, and the 1st quarter advanced billing for FY 2024. During the year-end close process, the 1st quarter advanced billing will be accrued to FY 2024. Budget for 2023 (revenue/expense) includes the annualized estimate of glass service which has been discontinued. As such, actuals will be under budget for both revenue and expenditures but sufficient to cover operational needs within the Solid Waste Fund.

Other Items

Council Member Stipend Activity Listing: The FY 2023 budget includes appropriations of \$7,200 for the Mayor and \$4,000 for each City Council Post and the available balances as of May 31, 2023 are as follows:

	Budget	Expenditures	Available Balance
Mayor: Jim Gilvin	\$ 7,200	\$ 4,722	\$ 2,478
Post #1: Donald Mitchell	\$ 4,000	\$ 183	\$ 3,817
Post #2: Brian Will	\$ 4,000	\$ 242	\$ 3,758
Post #3: Doug DeRito	\$ 4,000	\$ 155	\$ 3,845
Post #4: John Hipes	\$ 4,000	\$ 2,659	\$ 1,341
Post #5: Jason Binder	\$ 4,000	\$ 88	\$ 3,912
Post #6: Dan Merkel	\$ 4,000	\$ 1,013	\$ 2,987

Development Authority² (Component Reporting Unit)

As of May 31, 2023, the Development Authority has \$258,551 in available resources to support its main functions of promoting the public good and general welfare, trade, commerce, industry, general tax base and the employment opportunities available in the city.

² The Development Authority is a public corporation created and existing under the Constitution and laws of the State of Georgia and is governed by seven directors duly appointed by the Alpharetta City Council.



GENERAL FUND

Revenue Report



CITY OF ALPHARETTA
Financial Management Reports
General Fund (Unaudited)
Revenue Summary and Collection Comparison
As of May 31, 2023

	Current Fiscal Year					Prior Fiscal Year		
	2023 Budget	2023 YTD	% Collected	2023 Estimated	Variance	2022 Actual	2022 YTD	% Collected
Top 10 Revenues:								
Property Taxes								
Current Year	\$ 26,300,000	\$ 27,520,066	104.6%	\$ 27,550,000	\$ 1,250,000	\$ 26,738,657	\$ 26,728,663	100.0%
Delinquent	147,000	317,170	215.8%	355,500	208,500	167,407	94,308	56.3%
Motor Vehicle Tax	55,000	64,444	117.2%	70,000	15,000	79,585	67,091	84.3%
Motor Vehicle Title Fee	3,000,000	2,852,698	95.1%	3,400,000	400,000	3,142,797	2,584,697	82.2%
Local Option Sales Tax	19,185,073	17,933,930	93.5%	21,500,000	2,314,927	20,552,835	16,926,818	82.4%
Franchise Tax	7,100,000	6,427,774	90.5%	6,812,665	(287,335)	6,634,631	6,194,179	93.4%
Insurance Premium Tax	5,418,627	5,418,627	100.0%	5,418,627	0	4,759,402	4,759,402	100.0%
Alcohol Beverage Excise Tax	2,575,000	2,391,148	92.9%	3,000,000	425,000	2,764,435	2,213,070	80.1%
Building Permit Fees	1,850,000	1,928,732	104.3%	2,300,000	450,000	1,987,196	1,778,551	89.5%
Business and Occupational Tax	1,000,000	1,109,994	111.0%	1,125,000	125,000	1,063,180	1,033,935	97.2%
Court/Traffic Fines	2,370,000	3,187,241	134.5%	3,401,973	1,031,973	2,970,763	2,721,967	91.6%
Recreation/Special Event Fees	3,324,465	2,524,317	75.9%	2,766,058	(558,407)	2,566,047	2,287,516	89.1%
Hotel/Motel Tax (City portion)	2,812,500	2,578,433	91.7%	3,562,500	750,000	2,975,786	2,305,953	77.5%
subtotal	\$ 75,137,665	\$ 74,254,574	98.8%	\$ 81,262,323	\$ 6,124,658	\$ 76,402,722	\$ 69,696,151	91.2%
Other Revenues	5,026,689	5,235,731	104.2%	5,493,414	466,725	4,743,356	4,400,768	92.8%
Total Revenues	\$ 80,164,354	\$ 79,490,305	99.2%	\$ 86,755,737	\$ 6,591,383	\$ 81,146,078	\$ 74,096,920	91.3%
 Carryforward Fund Balance	 12,639,800							



GENERAL FUND

Expenditure Reports



CITY OF ALPHARETTA
 Financial Management Reports
 General Fund (unaudited)
Expenditure Summary by Department
 As of May 31, 2023

Expenditures by Department:

	Current Fiscal Year						Prior Fiscal Year		
	2023 Budget	2023 Encumbrances	2023 Exp. (YTD)	Funds Available	% Enc./Exp.	% Exp.	2022 Exp. (Total)	2022 Exp. (YTD)	% Exp.
Mayor & Council	\$ 399,287	\$ 5,713	\$ 293,269	\$ 100,306	74.9%	73.4%	\$ 350,347	\$ 317,230	90.5%
City Administration	1,478,133	5,780	1,254,865	217,488	85.3%	84.9%	1,440,308	1,326,120	92.1%
Finance	3,698,826	11,987	3,299,091	387,748	89.5%	89.2%	3,451,127	3,108,013	90.1%
City Attorney	1,100,300	15,000	656,595	428,705	61.0%	59.7%	1,062,905	711,975	67.0%
Information Technology	2,397,117	19,931	1,843,623	533,564	77.7%	76.9%	1,894,045	1,676,105	88.5%
Human Resources	855,513	11,970	672,612	170,931	80.0%	78.6%	606,075	541,479	89.3%
Municipal Court	1,148,200	18,459	979,459	150,281	86.9%	85.3%	1,080,027	954,154	88.3%
Public Safety	36,784,627	252,835	31,186,796	5,344,996	85.5%	84.8%	32,217,831	28,568,927	88.7%
Public Works	10,211,073	281,333	8,184,260	1,745,480	82.9%	80.2%	8,853,638	7,635,605	86.2%
Recreation, Parks & Cultural Svcs	12,642,458	748,325	9,834,763	2,059,369	83.7%	77.8%	10,281,112	8,579,205	83.4%
Community & Economic Development	4,631,115	37,151	3,837,881	756,084	83.7%	82.9%	4,081,289	3,620,545	88.7%
subtotal	\$ 75,346,649	\$ 1,408,484	\$ 62,043,214	\$ 11,894,951	84.2%	82.3%	\$ 65,318,703	\$ 57,039,358	87.3%
General Government:									
Insurance Premiums (Risk)	\$ 823,300	\$ -	\$ 754,692	\$ 68,608	91.7%	91.7%	\$ 779,750	\$ 714,771	91.7%
Gwinnett Tech Bond P&I	288,640	-	288,640	-	100.0%	100.0%	289,640	289,640	100.0%
Transfer(s) to other Funds	15,639,800	-	14,336,483	1,303,317	91.7%	91.7%	7,486,799	6,862,899	91.7%
Contingency	705,765	3,600	19,916	682,249	3.3%	2.8%	60,167	56,842	94.5%
subtotal	\$ 17,457,505	\$ 3,600	\$ 15,399,731	\$ 2,054,174	88.2%	88.2%	\$ 8,616,356	\$ 7,924,152	92.0%
Total Expenditures	\$ 92,804,154	\$ 1,412,084	\$ 77,442,945	\$ 13,949,125	85.0%	83.4%	\$ 73,935,059	\$ 64,963,510	87.9%



CITY OF ALPHARETTA
 Financial Management Reports
 General Fund (unaudited)
Expenditure Summary by Category
 As of May 31, 2023

	Current Fiscal Year							Prior Fiscal Year		
	2023 Budget	2023 Encumbrances	2023 Exp. (YTD)	Funds Available	% Enc./Exp.	% Exp.		2022 Exp. (Total)	2022 Exp. (YTD)	% Exp.
Expenditures by Category:										
Salaries & Benefits:										
(1) Regular Salaries	\$ 33,362,618	\$ -	\$ 27,250,373	\$ 6,112,245	81.7%	81.7%		\$ 28,833,638	\$ 24,887,506	86.3%
Overtime	2,192,413	-	2,563,551	(371,138)	116.9%	116.9%		2,452,865	2,089,480	85.2%
Group Insurance	10,080,112	-	7,649,675	2,430,437	75.9%	75.9%		8,085,777	7,434,521	91.9%
FICA and Social Security	2,707,687	-	2,174,302	533,385	80.3%	80.3%		2,277,379	1,958,442	86.0%
Defined Benefit Pension	2,869,712	-	2,869,712	-	100.0%	100.0%		2,818,660	2,818,660	100.0%
401(A) Retirement/Match	2,977,039	-	2,487,011	490,028	83.5%	83.5%		2,548,264	2,244,420	88.1%
(2) Other	1,580,526	-	1,476,175	104,351	93.4%	93.4%		1,402,233	1,333,071	95.1%
subtotal	\$ 55,770,107	\$ -	\$ 46,470,799	\$ 9,299,308	83.3%	83.3%		\$ 48,418,816	\$ 42,766,101	88.3%
Maintenance & Operations:										
Professional Services	\$ 3,187,539	\$ 346,671	\$ 2,343,651	\$ 497,217	84.4%	73.5%		\$ 2,848,177	\$ 2,470,776	86.7%
Legal Services	1,100,300	15,000	656,595	428,705	61.0%	59.7%		1,062,905	711,975	67.0%
Vehicle Fuel/Maintenance	1,094,880	-	1,144,897	(50,017)	104.6%	104.6%		1,237,660	1,089,746	88.0%
Maintenance Contracts	3,809,553	501,969	3,007,219	300,366	92.1%	78.9%		3,005,871	2,290,812	76.2%
IT Professional Services	2,544,848	251,970	2,090,907	201,971	92.1%	82.2%		1,962,573	1,770,302	90.2%
General Supplies	1,035,593	80,398	842,341	112,855	89.1%	81.3%		893,611	770,279	86.2%
Utilities	2,919,681	-	2,358,989	560,692	80.8%	80.8%		2,748,597	2,286,493	83.2%
Insurance Premiums (Risk)	823,300	-	754,692	68,608	91.7%	91.7%		779,750	714,771	91.7%
Other	3,208,515	208,813	2,465,441	534,261	83.3%	76.8%		2,462,929	2,173,514	88.2%
subtotal	\$ 19,724,209	\$ 1,404,821	\$ 15,664,730	\$ 2,654,658	86.5%	79.4%		\$ 17,002,074	\$ 14,278,667	84.0%
Capital:										
OSSI/Fire Truck Leases	\$ 659,858	\$ -	\$ 659,852	\$ 6	100.0%	100.0%		\$ 675,893	\$ 707,690	104.7%
Other	15,775	3,663	2,525	9,587	39.2%	16.0%		1,671	1,671	100.0%
subtotal	\$ 675,633	\$ 3,663	\$ 662,376	\$ 9,593	98.6%	98.0%		\$ 677,563	\$ 709,361	104.7%
General Government:										
Gwinnett Tech Bond P&I	\$ 288,640	\$ -	\$ 288,640	\$ -	100.0%	100.0%		\$ 289,640	\$ 289,640	100.0%
Transfer(s) to other Funds	15,639,800	-	14,336,483	1,303,317	91.7%	91.7%		7,486,799	6,862,899	91.7%
Contingency	705,765	3,600	19,916	682,249	3.3%	2.8%		60,167	56,842	94.5%
subtotal	\$ 16,634,205	\$ 3,600	\$ 14,645,039	\$ 1,985,566	88.1%	88.0%		\$ 7,836,606	\$ 7,209,381	92.0%
Total Expenditures	\$ 92,804,154	\$ 1,412,084	\$ 77,442,945	\$ 13,949,125	85.0%	83.4%		\$ 73,935,059	\$ 64,963,510	87.9%

Notes:

- (1) Includes the following components: regular salaries, holiday leave, temporary and seasonal salaries, and separation payout.
- (2) Includes the following components: workers compensation, educational programs, automobile allowance, tuition reimbursement, and employee service awards.



GRANT AND CAPITAL FUNDS

Revenue & Expenditure Reports



CITY OF ALPHARETTA
Financial Management Reports
Grant Funds
Operating Grant Fund Detail (Fund 220; life-to-date for active projects)
As of May 31, 2023

		Project Snapshot: FY2013 - FY2022		FY 2023					
Account #	Project	Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Revenues									
City Administration									
22013230-371000	C2100 MURAL ART PROJECT	15,915	15,915	\$ -	\$ -	\$ -	\$ -		\$ -
	subtotal			\$ -	\$ -	\$ -	\$ -		\$ -
Public Safety									
22031150-331110	C2059 2020 BULLETPROOF VEST (DOJ)	17,159	-	\$ -	\$ 17,159	\$ 17,159	\$ 4,135		\$ 13,024
22031150-331110	C2115 2021 BULLETPROOF VEST (DOJ)	11,624	-	-	11,624	11,624	-		11,624
22031150-331110	C2243 2022 BULLETPROOF VEST (DOJ)	27,408	-	-	27,408	27,408	-		27,408
22031150-371000	C2310 ALPHA BUS. ASSOC. K-9	17,000	-	-	17,000	17,000	17,000		-
23031150-331110	C2311 2022 JUSTICE ASSISTANCE GRANT	10,135	-	-	10,135	10,135	-		10,135
	subtotal			\$ -	\$ 83,326	\$ 83,326	\$ 21,135		\$ 62,191
Recreation, Parks & Cultural Services									
22061150-347509	C2039 WIRE & WOOD (ACVB SPONSOR)	152,000	102,000	\$ -	\$ 50,000	\$ 50,000	\$ 50,000		\$ -
22061150-371000	C2212 PARKING PERMIT - FILM	4,000	4,000	-	-	-	-		-
22061150-336000	C2213 2021 CAMP HAPPY HEARTS	5,000	5,000	-	-	-	-		-
22061150-336000	C2215 FC ARTS & CULTURE	7,800	7,800	-	-	-	-		-
22061150-336001	C2234 ARTS CENTER (CERAMICS)	3,063	2,248	-	815	815	815		0
22061150-347509	C2239 NORTH PARK SOFTBALL TOURNEY	2,397	2,397	-	-	-	-		-
22061150-336000	C2247 2022 CAMP HAPPY HEARTS	5,000	-	-	5,000	5,000	5,000		-
22061150-336000	C2306 FULTON COUNTY ARTS & CULTURE	15,000	-	-	15,000	15,000	15,000		-
22061150-371000	C2308 MUSIC MATCH APPLICATIONS	2,175	-	-	2,175	2,175	2,837		(662)
	subtotal			\$ -	\$ 72,990	\$ 72,990	\$ 73,652		\$ (662)
General Government									
22090200-361000	INTEREST EARNINGS			\$ -	\$ -	\$ -	\$ 3,296		\$ (3,296)
22090200-362000	REALIZED GAIN/LOSS ON INVS			-	-	-	(259)		259
22090200-363000	UNREALIZED GAIN/LOSS			-	-	-	(56)		56
22090200-395000	CARRYFORWARD FUND BALANCE			-	117,013	117,013	-		117,013
	subtotal			\$ -	\$ 117,013	\$ 117,013	\$ 2,981		\$ 114,032
	Total			\$ -	\$ 273,329	\$ 273,329	\$ 97,768		\$ 175,561



CITY OF ALPHARETTA
Financial Management Reports
Grant Funds
Operating Grant Fund Detail (Fund 220; life-to-date for active projects)
As of May 31, 2023

				Project Snapshot: FY2013 - FY2022		FY 2023					
				Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Account #	Project										
Expenditures											
City Administration											
22013230-521200	C2100	MURAL ART PROJECT	17,215	2,800	\$	-	\$ 14,415	\$ 14,415	\$ -	\$ -	\$ 14,415
		subtotal			\$	-	\$ 14,415	\$ 14,415	\$ -	\$ -	\$ 14,415
Public Safety											
22031150-542100	C2059	2020 BULLETPROOF VEST (DOJ)	30,694	4,646	\$	-	\$ 26,048	\$ 26,048	\$ 24,346	\$ -	\$ 1,702
22031150-542100	C2115	2021 BULLETPROOF VEST (DOJ)	23,248	-		-	23,248	23,248	15,268	-	7,980
22031150-542100	C2243	2022 BULLETPROOF VEST (DOJ)				-	54,816	54,816	-	-	54,816
22031150-521200	C2310	ALPHA BUS. ASSOC K-9	17,000	-		-	17,000	17,000	-	-	17,000
223031150-531600	C2311	2022 JUSTICE ASSISTANCE GRANT				-	10,135	10,135	5,680	-	4,455
		subtotal			\$	-	\$ 131,247	\$ 131,247	\$ 45,294	\$ -	\$ 85,953
Recreation, Parks & Cultural Services											
22061159-521200	C2039	WIRE & WOOD (ACVB SPONSOR)	100,000	50,000	\$	-	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -
22061150-531100	C2101	SPECIAL NEEDS EXPO / EVENT	1,018	-		-	1,018	1,018	-	-	1,018
22061150-531100	C2102	FULTON GOLDEN GAMES	3,630	-		-	3,630	3,630	-	-	3,630
22061150-531100	C2212	PARKING PERMIT - FILM	4,000	3,750		-	250	250	-	-	250
22061150-531100	C2213	2020 CAMP HAPPY HEARTS	5,000	2,671		-	2,329	2,329	2,329	-	-
22061150-531100	C2215	FC ARTS & CULTURE	7,800	6,056		-	1,744	1,744	1,744	-	-
22061150-531100	C2234	ARTS CENTER (CERAMICS)	3,064	1,604		-	1,460	1,460	1,166	-	294
22061150-531100	C2237	PARTNERED EVENTS	5,000	-		-	5,000	5,000	4,305	635	60
22061150-523300	C2239	NORTH PARK SOFTBALL TOURNEY	2,397	-		-	2,397	2,397	2,397	-	-
22061150-531100	C2247	2022 CAMP HAPPY HEARTS	5,000	-		-	5,000	5,000	-	4,095	905
22061150-521200	C2306	FULTON COUNTY ARTS & CULTURE	15,000	-		-	15,000	15,000	9,765	450	4,785
22061150-521200	C2308	MUSIC MATCH APPLICATIONS	2,175	-		-	2,175	2,175	2,175	-	-
		subtotal			\$	-	\$ 90,003	\$ 90,003	\$ 73,881	\$ 5,180	\$ 10,942
Non-Allocated											
22090200-579000		CONTINGENCY			\$	-	\$ 37,664	\$ 37,664	\$ -	\$ -	\$ 37,664
		subtotal			\$	-	\$ 37,664	\$ 37,664	\$ -	\$ -	\$ 37,664
		Total			\$	-	\$ 273,329	\$ 273,329	\$ 119,175	\$ 5,180	\$ 148,974



CITY OF ALPHARETTA
 Financial Management Reports
 Grant Funds
Capital Grant Fund Detail (Fund 340: life-to-date for active projects)
 As of May 31, 2023

Account #Project			Project Snapshot: FY2013 - FY2022		FY 2023					Available Budget
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	
Revenue										
Public Safety										
34034450-331150	C2244	2020 HOMELAND SECURITY GRANT	45,900	-	\$ -	\$ 45,900	\$ 45,900	\$ 44,100		\$ 1,800
34031150-331150	C2246	2021 HOMELAND SECURITY GRANT	22,500	-	-	22,500	22,500	-		22,500
subtotal					\$ -	\$ 68,400	\$ 68,400	\$ 44,100		\$ 24,300
Public Works										
34041100-334310	C1219	MILLING AND RESURFACING (LMIG)	5,879,265	5,234,146	\$ -	\$ 645,119	\$ 645,119	\$ 645,118		\$ 1
34041100-334350	C1927	WINDWARD TRIPLE LEFTS	1,207,200	-	-	1,207,200	1,207,200	1,207,200		-
34041100-331150	C2242	NORTHPOINT ALPHALINK (ARC/LCI)	1,000,000	-	-	1,000,000	1,000,000	-		1,000,000
34041100-331350	C2249	WILLS PARK BUFFER - EPD GRANT	200,000	-	-	200,000	200,000	-		200,000
34041100-331350	C2305	ALPHALOOP (LANDWATER)	500,000	-	-	500,000	500,000	-		500,000
subtotal					\$ -	\$ 3,552,319	\$ 3,552,319	\$ 1,852,318		\$ 1,700,001
Recreation, Parks & Cultural Services										
34061150-371000	C2248	CITY AGRICULTURE PLAN (FOOD WELL)	75,000	-	\$ -	\$ 75,000	\$ 75,000	\$ 75,000		\$ -
subtotal					\$ -	\$ 75,000	\$ 75,000	\$ 75,000		\$ -
Community Development										
34074150-331350	C2107	NORTH POINT PKWY IMP	1,667,000	663,593	\$ -	\$ 1,003,407	\$ 1,003,407	\$ 244,916		\$ 758,491
34074150-331150	C2114	S MAIN ST ARC STUDY	160,000	34,800	-	125,200	125,200	125,200		-
subtotal					\$ -	\$ 1,128,607	\$ 1,128,607	\$ 370,116		\$ 758,491
General Government										
34090200-361000		INTEREST EARNINGS			\$ -	\$ -	\$ -	(2,276)		\$ 2,276
34090200-362000		REALIZED GAIN/LOSS ON INVS			-	-	-	(829)		829
34090200-363000		UNREALIZED GAIN/LOSS			-	-	-	(9,560)		9,560
34090200-395000		CARRYFORWARD FUND BALANCE			-	148,441	148,441	-		148,441
subtotal					\$ -	\$ 148,441	\$ 148,441	\$ (12,664)		\$ 161,105
Total					\$ -	\$ 4,972,767	\$ 4,972,767	\$ 2,328,870		\$ 2,643,897



CITY OF ALPHARETTA
Financial Management Reports
Grant Funds

Capital Grant Fund Detail (Fund 340: life-to-date for active projects)
As of May 31, 2023

			Project Snapshot: FY2013 - FY2022		FY 2023					
Account #	Project		Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Expenditures										
Public Safety										
34031150-542100	C2244	HOMELAND SECURITY GRANT	45,900	-	\$ -	\$ 45,900	\$ 45,900	\$ 44,100	\$ -	\$ 1,800
34031150-542100	C2246	HOMELAND SECURITY GRANT	22,500	-	-	22,500	22,500	22,259	-	241
subtotal					\$ -	\$ 68,400	\$ 68,400	\$ 66,359	\$ -	\$ 2,041
Public Works										
34041100-541410	C1219	MILLING AND RESURFACING (LMIG)	5,879,265	5,234,146	\$ -	\$ 645,119	\$ 645,119	\$ 645,119	\$ -	\$ -
34041100-541410	C1927	WINDWARD TRIPLE LEFTS	1,207,200	-	-	1,207,200	1,207,200	1,207,200	-	-
34041100-521200	C2242	NORTHPOINT ALPHALINK (ARC/LCI)	1,000,000	-	-	1,000,000	1,000,000	7,621	443,204	549,175
34041100-541430	C2249	WILLS PARK BUFFER - EPD GRANT	200,000	-	-	200,000	200,000	125,023	66,675	8,302
34041100-541420	C2305	ALPHALOOP (LANDWATER)	500,000	-	-	500,000	500,000	-	500,000	-
subtotal					\$ -	\$ 3,552,319	\$ 3,552,319	\$ 1,984,963	\$ 1,009,879	\$ 557,477
Recreation, Parks & Cultural Services										
34061150-541500	C2248	CITY AGRICULTURE PLAN (FOOD WELL)	75,000	-	\$ -	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ 75,000
subtotal					\$ -	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ 75,000
Community Development										
34074150-541410	C2107	NORTH POINT PKWY IMP	2,083,750	903,123	\$ -	\$ 1,180,627	\$ 1,180,627	\$ 501,574	\$ 679,052	\$ 1
34074150-521200	C2114	S MAIN ST ARC STUDY	160,000	54,400	-	105,600	105,600	105,600	-	-
subtotal					\$ -	\$ 1,286,227	\$ 1,286,227	\$ 607,174	\$ 679,052	\$ 1
Non-Allocated										
34090200-579000		CONTINGENCY			\$ -	\$ (9,179)	\$ (9,179)	\$ -	\$ -	\$ (9,179)
subtotal					\$ -	\$ (9,179)	\$ (9,179)	\$ -	\$ -	\$ (9,179)
Total					\$ -	\$ 4,972,767	\$ 4,972,767	\$ 2,658,496	\$ 1,688,931	\$ 625,340



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
General Capital Project Fund Detail (Fund 301; life-to-date for active projects)
 As of May 31, 2023

Account #			Project Snapshot: FY2013 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Revenue										
30113230-371000	C1618	CONVENTION CENTER (DESIGN)	-	-	\$ -	\$ -	\$ -	\$ 2		\$ (2)
30131150-393500	C1241	CAPITAL LEASE - FIRE TRUCK	2,353,251	-	-	2,353,251	2,353,251	2,353,251		-
30141100-336000	C1410	RUCKER RD WATERLINE	1,562,604	1,459,845	-	102,759	102,759	-		102,759
30141100-336000	C1702	KIMBALL BR RD IMPROVEMENTS	6,146,784	5,544,518	-	602,266	602,266	-		602,266
30141100-336000	C2104	WBR PH 4 (NPP-GREENWAY)	333,925	-	-	333,925	333,925	-		333,925
30141100-371000	C2113	ENCORE GREENWAY GATEWAY	430,000	-	-	430,000	430,000	-		430,000
30141100-336000	C2238	DAVIS DR. WATER (COUNTY)	364,488	-	-	364,488	364,488	268,744		95,744
30141100-371000	C2305	ALPHALOOP (OMP-NORTHWINDS)	110,000	-	-	110,000	110,000	110,000		-
30161150-392400		SALE OF NON CAPITAL ASSETS	400	-	-	400	400	400		-
30161150-371000	C1911	EQUESTRIAN CTR (FOUNDATION)	245,454	-	-	245,454	245,454	245,453		1
30161150-371000	C1926	NORTHSIDE MOU (PARKS)	15,000	-	-	15,000	15,000	15,000		-
30161150-371000	C1929	COMM AG PROGRAM	72,418	50,135	-	22,283	22,283	26,528		(4,245)
30161150-371000	C2010	MEMORIAL-PARK ENHANCEMENTS	38,700	11,100	-	27,600	27,600	27,600		-
30161150-371000	C2309	WACKY WORLD 2.0 (DONATIONS)	639	-	-	639	639	6,657		(6,018)
30174150-337000	C0910	TREE REPLACEMENT FUND (CONTRIBUTION)	467,450	467,450	-	-	-	21,850		(21,850)
30113230-336000	C0924	ECONOMIC DEVELOPMENT PLAN	37,500	-	-	37,500	37,500	-		37,500
		subtotal			\$ -	\$ 4,645,565	\$ 4,645,565	\$ 3,075,485		\$ 1,570,080
Non-Departmental										
30190200-395000		CARRYFORWARD FUND BALANCE			\$ 2,500,000	\$ 6,101,350	\$ 8,601,350	\$ -		\$ 8,601,350
30190200-391100		TRANSFER-IN FROM THE GENERAL FUND			11,439,800	-	11,439,800	10,486,483		953,317
30190200-363000		UNREALIZED GAIN/LOSS INV			-	-	-	26,436		(26,436)
30190200-362000		REALIZED GAIN/LOSS INV			-	-	-	(18,658)		18,658
30190200-361000		INTEREST EARNINGS			155,000	-	155,000	249,907		(94,907)
		subtotal			\$ 14,094,800	\$ 6,101,350	\$ 20,196,150	\$ 10,744,168		\$ 9,451,982
		Total			\$ 14,094,800	\$ 10,746,915	\$ 24,841,715	\$ 13,819,653		\$ 11,022,062



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
General Capital Project Fund Detail (Fund 301; life-to-date for active projects)
 As of May 31, 2023

Account #		Project	Project Snapshot: FY2013 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Expenditures										
Administration										
30113230-542400	C1404	WEBSITE UPGRADE	145,000	-	\$ 145,000	\$ -	\$ 145,000	\$ -	\$ -	\$ 145,000
30113230-544100	C2105	BUSINESS RECOVERY PROGRAM	150,000	50,000	-	100,000	100,000	-	-	100,000
		subtotal			\$ 145,000	\$ 100,000	\$ 245,000	\$ -	\$ -	\$ 245,000
Finance										
30115150-542400	C1141	TYLER ERP SYSTEM	363,044	354,302	\$ -	\$ 8,742	\$ 8,742	\$ 1,977	\$ 3,612	\$ 3,153
		subtotal			\$ -	\$ 8,742	\$ 8,742	\$ 1,977	\$ 3,612	\$ 3,153
Information Technology										
30117400-542400	C0900	CISCO DATA NETWORK	300,002	189,138	\$ -	\$ 110,864	\$ 110,864	\$ 109,264	\$ -	\$ 1,600
30117400-542400	C1000	GIS AERIAL MAPPING	50,001	48,284	-	1,717	1,717	1,344	372	1
30117400-542400	C1103	NETWORK AND VOIP	717,679	154,210	200,000	363,469	563,469	-	246,681	316,788
30117400-542400	C1312	BACKUP DATA STORAGE MGMT.	510,003	488,947	-	21,056	21,056	-	-	21,056
30117400-542400	C1313	TECHNOLOGY REPLACEMENT	3,112,369	2,591,587	250,000	270,782	520,782	424,634	37,585	58,563
30117400-542400	C1615	APP/DESKTOP VIRTUALIZATION	400,145	116,249	-	283,896	283,896	12,500	-	271,396
30117400-542400	C2201	CITY COUNCIL A/V REPLACEMENT	300,001	30,185	-	269,816	269,816	1,698	246,854	21,264
30117400-544200	C2300	BUSINESS CONTINUITY STUDY	50,000	-	50,000	-	50,000	-	-	50,000
		subtotal			\$ 500,000	\$ 1,321,600	\$ 1,821,600	\$ 549,440	\$ 531,492	\$ 740,668
Human Resources										
30118450-542400/20	C1222	RECORDS MANAGEMENT	72,500	-	\$ 72,500	\$ -	\$ 72,500	\$ 20,348	\$ -	\$ 52,152
		subtotal			\$ 72,500	\$ -	\$ 72,500	\$ 20,348	\$ -	\$ 52,152
Municipal Court										
30126550-542400	C1222	RECORDS MANAGEMENT	39,600	32,900	\$ -	\$ 6,700	\$ 6,700	\$ 2,800	\$ 3,900	\$ -
		subtotal			\$ -	\$ 6,700	\$ 6,700	\$ 2,800	\$ 3,900	\$ -



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
General Capital Project Fund Detail (Fund 301; life-to-date for active projects)
 As of May 31, 2023

Account #Project			Project Snapshot: FY2013 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Public Safety										
30131150-542200	C1202	FLEET REPLACEMENT	8,015,845	6,142,656	\$ 1,375,000	\$ 498,189	\$ 1,873,189	\$ 59,322	\$ 1,813,867	\$ 0
30131150-541300	C1229	PS ROOF REPAIR	1,197,111	904,690	300,000	(7,579)	292,421	127,746	144,014	20,661
30131150-542200	C1241	FLEET - FIRE TRUCK	2,353,251	-	-	2,353,251	2,353,251	2,353,251	-	-
30131150-542100	C1401	PS EQUIPMENT REPLACEMENT	1,513,924	1,140,581	263,000	110,343	373,343	203,692	96,519	73,132
30131150-541300	C1706	RAPSTC IMPROVEMENTS	492,531	173,695	-	318,836	318,836	-	-	318,836
30131150-542400	C2052	SECURITY SYSTEM REFRESH	400,059	129,485	220,000	50,574	270,574	178,313	85,690	6,571
30131150-542100	C2055	LICENSE PLATE READER PROGRAM	20,000	-	-	20,000	20,000	9,196	-	10,804
30131150-542100	C2207	LUCAS DEVICES	176,000	169,942	-	6,058	6,058	-	-	6,058
30131150-542100	C2235	CRABAPPLE TRAINING FACILITY	43,870	37,552	-	6,318	6,318	838	-	5,480
30131150-542400	C2301	CAD/RECORDS MANAGEMENT SOFTWARE	2,250,000	-	2,250,000	-	2,250,000	4,579	2,225,421	20,000
30131150-542100	C2302	ALL TERRAIN VEHICLES	11,310	-	11,310	-	11,310	10,772	-	538
30131150-542100	C2303	2023 OP INITIATIVES EQUIPMENT	449,500	-	449,500	-	449,500	17,168	432,332	-
30131150-541300	C2314	FIRE STATION FACILITIES ASSESSMENT	75,000	-	-	75,000	75,000	-	-	75,000
		subtotal			\$ 4,868,810	\$ 3,430,990	\$ 8,299,800	\$ 2,964,878	\$ 4,797,842	\$ 537,080
Public Works										
30141100-541410	C0041	TRAFFIC SIGNAL INTERCONNECT	279,781	275,044	\$ -	\$ 4,737	\$ 4,737	\$ 4,737	\$ -	\$ -
30141100-541200	C0910	TREE REPLACEMENT FUND	1,626,301	1,404,067	-	222,234	222,234	81,310	7,220	133,705
30141100-541200	C1008	CEMETERY AUTHORITY- MAINTENANCE	479,543	207,186	-	272,357	272,357	17,609	15,787	238,961
30141100-541410	C1207	BRIDGE MAINTENANCE	665,212	377,330	200,000	87,882	287,882	29,158	-	258,724
30141100-541410	C1215	STRIPING & SIGNAGE	2,014,664	1,814,664	200,000	-	200,000	153,340	44,278	2,382
30141100-541410	C1217	TRAFFIC CALMING & INTERSECTION IMP	553,584	432,814	100,000	20,770	120,770	65,578	55,193	(1)
30141100-541410	C1218	TRAFFIC SIGNAL SYSTEM MAINTENANCE	804,267	691,872	100,000	12,395	112,395	110,261	2,134	-
30141100-541410	C1219	MILLING AND RESURFACING	24,017,759	21,564,565	1,000,000	1,453,194	2,453,194	841,762	1,611,321	112
30141100-541410	C1220	TRAFFIC CONTROL EQUIPMENT	987,078	887,078	100,000	-	100,000	69,959	28,103	1,939
30141100-541410	C1221	DESIGN SERVICES	943,300	794,459	75,000	73,841	148,841	84,837	32,656	31,348
30141100-542200	C1223	FLEET REPLACEMENT	1,482,222	1,091,468	195,000	195,754	390,754	76,655	303,056	11,043
30141100-541200	C1302	TREE PLANTING & LANDSCAPING IMP	1,222,771	817,220	100,000	305,551	405,551	246,203	75,736	83,612
30141100-542100	C1802	PW EQUIPMENT REPLACEMENT	217,373	173,446	36,000	7,927	43,927	30,347	-	13,580
30141100-541410	C1901	TRAFFIC RESPONSIVE SYSTEM MAINT	450,001	299,856	100,000	50,145	150,145	112,043	38,102	-



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
General Capital Project Fund Detail (Fund 301; life-to-date for active projects)
 As of May 31, 2023

Account #			Project Snapshot: FY2013 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
30141100-541300	C1902	FIRE STATION RENOVATIONS	435,003	419,519	75,000	(59,516)	15,484	-	-	15,484
30141100-541300	C1904	PW HQ RENOVATIONS	178,037	121,982	50,000	6,055	56,055	31,859	3,745	20,451
30141100-541410	C1918	PEDESTRIAN SAFETY STUDY	301,337	296,115	85,000	(79,778)	5,222	-	-	5,222
30141100-541410	C1935	WINDWARD PKWY WEST IMPROVEMENTS	205,517	203,977	-	1,540	1,540	1,540	-	-
30141100-541300	C2003	HVAC REPLACEMENTS	292,002	227,797	62,000	2,205	64,205	63,933	-	272
30141100-541300	C2004	GENERATOR REPLACEMENTS	295,075	187,197	-	107,878	107,878	-	101,830	6,048
30141100-542400	C2026	TCC HARDWARE/SOFTWARE	170,001	77,836	50,000	42,165	92,165	16,060	-	76,105
30141100-541410	C2048	STREETLIGHT MAINTENANCE	269,079	104,108	80,000	84,971	164,971	93,425	18,005	53,541
30141100-541500	C2050	REC FACILITY MAINTENANCE	155,000	46,645	30,000	78,355	108,355	49,946	31,555	26,854
30141100-541300	C2053	PARKING GARAGE MAINTENANCE	145,351	36,582	100,000	8,769	108,769	21,801	12,450	74,518
30141100-541410	C2104	WEBB BR ROAD PH4 (NPP-GREENWAY)	333,925	-	-	333,925	333,925	-	333,925	-
30141100-541410	C2113	ENCORE GREENWAY GATEWAY	430,000	19,456	-	410,544	410,544	104,044	306,500	0
30141100-544200	C2200	CITY TRASH RECEPTACLE SERVICE	100,001	39,159	50,000	10,842	60,842	41,411	3,471	15,959
30141100-541410	C2209	SCRAMBLE INTERSECTION	27,248	-	-	27,248	27,248	27,114	134	1
30141100-541410	C2238	DAVIS DR WATER (COUNTY)	364,488	-	-	364,488	364,488	268,744	95,744	-
30141100-521200	C2242	NORTHPOINT ALPHALINK (ARC/LCI)	365,000	-	-	365,000	365,000	33,217	83,642	248,142
30141100-541420	C2305	ALPHALOOP (OMP - NORTHWINDS)	247,403	-	-	247,403	247,403	84,839	-	162,564
30141100-541410	C2315	LOCAL ROADS SAFETY ACTION PLAN	199,778	-	-	199,778	199,778	108,179	91,599	-
subtotal					\$ 2,788,000	\$ 4,858,659	\$ 7,646,659	\$ 2,869,910	\$ 3,296,184	\$ 1,480,564
Recreation, Parks & Cultural Services										
30161150-541500	C0922	SYNTHETIC TURF REPLACEMENT	1,014,966	464,966	\$ 550,000	\$ -	\$ 550,000	\$ 512,058	\$ 28,405	\$ 9,537
30161150-541200	C1210	TREE REMOVAL			150,000	110,000	260,000	168,640	32,809	58,552
30161150-541500	C1221	DESIGN SERVICES	214,224	186,473	20,000	7,751	27,751	22,924	335	4,492
30161150-541300	C1229	FACILITY ROOF REPAIR	494,741	-	700,000	(205,259)	494,741	485,411	-	9,330
30161150-542200	C1232	FLEET	412,578	72,130	120,000	220,448	340,448	130,532	29,916	180,000
30161150-542100	C1402	RP EQUIPMENT REPLACEMENT	837,218	699,218	100,000	38,000	138,000	54,807	81,577	1,616
30161150-541500	C1424	WILL PARK POOL EXPANSION	59,000	51,200	-	7,800	7,800	4,500	-	3,300
30113230-544200	C1527	VETERANS MEMORIAL	105,667	75,806	-	29,861	29,861	-	-	29,861
30161150-541500	C1614	THE STORIES PROJECT	85,000	31,065	35,000	18,935	53,935	-	-	53,935
30161150-541510	C1636	GREENWAY REPAIR AND MAINTENANCE	579,650	370,594	155,000	54,056	209,056	22,782	3,499	182,776
30161150-541500	C1804	PARK REPAIRS/IMPROVEMENTS	731,553	521,159	300,000	(89,606)	210,394	210,393	-	1
30161150-541500	C1806	PARKS PLAYGROUND EQUIPMENT	490,721	277,238	150,000	63,483	213,483	-	11,402	202,081



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
General Capital Project Fund Detail (Fund 301; life-to-date for active projects)
 As of May 31, 2023

			Project Snapshot: FY2013 - FY2022		FY 2023					
Account #		Project	Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
30161150-544100	C1807	PUBLIC ARTS PROGRAM	231,000	170,000	45,000	16,000	61,000	32,550	13,950	14,500
30161150-541500	C1911	EQUESTRIAN CENTER (FOUNDATION)	245,454	-	-	245,454	245,454	245,453	-	1
30161150-521200	C1926	NORTHSIDE MOU (PARKS)	11,400	-	-	11,400	11,400	4,250	7,150	-
30161150-541500	C1926	NORTHSIDE MOU (PARKS)	149,903	117,657	-	32,246	32,246	708	-	31,538
30161150-541500	C1929	COMMUNITY AGRICULTURE PROGRAM	72,422	35,170	-	37,252	37,252	5,570	11,600	20,082
30161150-541500	C2010	PARK ENHANCEMENTS	626,179	465,437	125,000	35,742	160,742	137,277	8,632	14,833
30161150-541500	C2030	TOWN GREEN IMPROVEMENTS	250,000	-	250,000	-	250,000	19,702	9,798	220,500
30161150-541500	C2031	INNOVATION ACADEMY IGA	249,992	249,638	-	354	354	354	-	-
30161150-541500	C2051	FOUNTAIN MAINTENANCE	36,306	27,309	-	8,997	8,997	-	8,997	-
30161150-541500	C2202	ATHLETIC COURTS RESURFACING	98,433	58,433	40,000	-	40,000	9,935	-	30,065
30161150-541500	C2245	WILL PARK MAINTENANCE FACILITY	215,325	766	-	214,559	214,559	107,665	106,893	2
30161150-541500	C2248	CITY AGRICULTURE PLAN (FOOD WELL)	75,000	-	-	75,000	75,000	-	-	75,000
30161150-541500	C2304	PARK WOOD POLE REPLACEMENT	200,000	-	200,000	-	200,000	-	-	200,000
30161150-541500	C2309	WACKY WORLD 2.0 (DONATIONS)	639	-	-	639	639	-	-	639
30161150-541500	C2316	GREENWAY BOARDWALK REPLACEMENT	327,519	-	-	327,519	327,519	-	327,519	0
		subtotal			\$ 2,940,000	\$ 1,260,631	\$ 4,200,631	\$ 2,175,511	\$ 682,480	\$ 1,342,640
Community Development										
30174150-544100	C0019	DOWNTOWN PARKING FUND	576,749	297,748	\$ -	\$ 279,001	\$ 279,001	\$ -	\$ -	\$ 279,001
30174150-544100	C0924	ECONOMIC DEVELOPMENT PLAN	107,640	62,500	-	45,140	45,140	30,000	15,140	-
30174150-544200	C1300	CITY ECON DEVELOPMENT TOOLKIT	263,260	202,010	-	61,250	61,250	-	-	61,250
30174150-542200	C1433	FLEET REPLACEMENT	60,000	-	60,000	-	60,000	59,932	-	68
30174150-541410	C1603	DESIGN SERVICES	526,003	376,257	40,000	109,746	149,746	88,542	20,320	40,884
30174150-541410	C2107	NORTH POINT PARKWAY IMPROVEMENTS	78,500	52,670	-	25,830	25,830	25,797	-	33
30174150-542400	C2111	COMMUNITY DEVELOPMENT EQUIPMENT	21,000	7,993	-	13,007	13,007	-	-	13,007
30174150-521200	C2114	S MAIN ST ARC STUDY	40,000	13,600	-	26,400	26,400	26,400	-	-
30174150-521200	C2307	WINDWARD-HWY9 MASTER PLAN MOU	60,000	-	-	60,000	60,000	700	-	59,300
		subtotal			\$ 100,000	\$ 620,374	\$ 720,374	\$ 231,371	\$ 35,460	\$ 453,543



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
General Capital Project Fund Detail (Fund 301; life-to-date for active projects)
 As of May 31, 2023

		Project Snapshot: FY2013 - FY2022		FY 2023					
Account #	Project	Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Non-Departmental									
30190200-579000	NON-ALLOCATED			\$ 2,645,490	\$ (825,781)	\$ 1,819,709	\$ -	\$ -	\$ 1,819,709
	subtotal			\$ 2,645,490	\$ (825,781)	\$ 1,819,709	\$ -	\$ -	\$ 1,819,709
	Total			\$ 14,059,800	\$ 10,781,915	\$ 24,841,715	\$ 8,816,235	\$ 9,350,971	6,674,510



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
Stormwater Capital Fund Detail (Fund 302; life-to-date for all projects)
 As of May 31, 2023

		Project Snapshot: FY2017 - FY2022		FY 2023					
		Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Account #	Project								
Revenue									
Public Works									
30241100-371000	DONATION FROM PRIVATE SOURCE			\$ -	\$ 4,496	\$ 4,496	\$ 4,496		\$ 0
	subtotal			\$ -	\$ 4,496	\$ 4,496	\$ 4,496		\$ 0
Non-Departmental									
30290200-361000	INTEREST EARNINGS			\$ -	\$ -	\$ -	\$ 74,618		\$ (74,618)
30290200-362000	REALIZED GAIN/LOSS ON INVS			-	-	-	(5,451)		5,451
30290200-363000	UNREALIZED GAIN/LOSS INV			-	-	-	11,630		(11,630)
30290200-391100	TRANSFER IN/GENERAL FUND MATCH			4,200,000	-	4,200,000	3,850,000		350,000
30290200-395000	CARRYFORWARD FUND BALANCE			-	1,716,691	1,716,691	-		1,716,691
	subtotal			\$ 4,200,000	\$ 1,716,691	\$ 5,916,691	\$ 3,930,797		\$ 1,985,894
	Total			\$ 4,200,000	\$ 1,721,187	\$ 5,921,187	\$ 3,935,293		\$ 1,985,894
Expenditures									
Public Works									
30241100-541430 C1216	SW DRAINAGE MAINTENANCE	1,006,403	629,910	\$ 150,000	\$ 226,493	\$ 376,493	\$ 138,164	\$ 32,826	\$ 205,503
30241100-541430 C1308	SW PIPE & STRUCTURE R&M	11,426,218	6,438,340	3,930,000	1,057,878	4,987,878	787,923	658,366	3,541,589
30241100-541430 C1503	STORMWATER STUDIES	500,001	323,580	-	176,421	176,421	20,200	-	156,221
30241100-541430 C1604	STORMWATER INSPECTIONS	664,055	458,720	120,000	85,335	205,335	83,645	-	121,690
30241100-541430 C2208	MEADOW BROOK HILLS DRAINAGE	252,997	150,800	-	102,197	102,197	75,493	26,700	4
	subtotal			\$ 4,200,000	\$ 1,648,324	\$ 5,848,324	\$ 1,105,425	\$ 717,893	\$ 4,025,007
Non-Departmental									
30290200-579000	NON-ALLOCATED			\$ -	\$ 72,863	\$ 72,863	\$ -	\$ -	\$ 72,863
	subtotal			\$ -	\$ 72,863	\$ 72,863	\$ -	\$ -	\$ 72,863
	Total			\$ 4,200,000	\$ 1,721,187	\$ 5,921,187	\$ 1,105,425	\$ 717,893	\$ 4,097,870



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
American Rescue Act Fund Detail (Fund 303; life-to-date for all projects)
 As of May 31, 2023

		Project Snapshot: FY2017 - FY2022		FY 2023					
		Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Account #	Project								
Revenue									
General Government									
30390200-331350	FEDERAL GRANT	-	2,445,511	\$ -	\$ 4,199,000	\$ 4,199,000	\$ 988,878		\$ 3,210,122
30390200-395000	CARRYFORWARD FUND BALANCE			-	-	-	-		-
	Total			\$ -	\$ 4,199,000	\$ 4,199,000	\$ 988,878		\$ 3,210,122
Expenditures									
Public Works									
30341100-541410 C1219	MILLING & RESURFACING	1,176,000	1,175,955	\$ -	\$ 45	\$ 45	\$ 4	\$ -	\$ 41
30341100-541430 C1308	PIPE/STORM STRUCTURE REPLACEMENT	2,144,510	939,002	-	1,205,508	1,205,508	872,714	332,794	-
30341100-541420 C1801	SIDEWALK MAINTENANCE/REPAIR	1,324,001	269,139	-	1,054,862	1,054,862	225,161	252,929	576,772
	subtotal			\$ -	\$ 2,260,415	\$ 2,260,415	\$ 1,097,880	\$ 585,723	\$ 576,813
Recreation, Parks & Cultural Services									
30361150-541500 C1636	GREENWAY REPAIR/MAINTENANCE	87,518	61,415	\$ -	\$ 26,103	\$ 26,103	\$ 9,104	\$ 17,000	\$ (1)
30361150-541500 C2316	GREENWAY BOARDWALK REPLACEMENT	1,912,482	-	-	1,912,482	1,912,482	-	1,912,481	1
	subtotal			\$ -	\$ 1,938,585	\$ 1,938,585	\$ 9,104	\$ 1,929,481	\$ (0)
	Total			\$ -	\$ 4,199,000	\$ 4,199,000	\$ 1,106,984	\$ 2,515,204	\$ 576,813



CITY OF ALPHARETTA

Financial Management Reports

Capital Project Funds

2016 Parks and Transportation Bond Fund Detail (Fund 317; life-to-date for all projects)

As of May 31, 2023

			Project Snapshot: FY2017 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Account #	Project									
Revenue										
Non-Departmental										
31790200-395000	CARRYFORWARD FUND BALANCE				\$ -	\$ 190,370	\$ 190,370	\$ -		\$ 190,370
31790200-361000	INTEREST EARNINGS				-	-	-	48,660		(48,660)
	subtotal				\$ -	\$ 190,370	\$ 190,370	\$ 48,660		\$ 141,710
	Total				\$ -	\$ 190,370	\$ 190,370	\$ 48,660		\$ 141,710
Expenditures										
31741100-541410	C1410	RUCKER RD CORRIDOR	14,651,644	14,651,644	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31741100-541410	C1631	MCGINNIS RD IGA (FORSYTH)	3,773,587	3,773,587	-	-	-	-	-	-
31741100-541410	C1702	KIMBALL BR RD IMPROVEMENTS	9,872,926	9,872,926	-	-	-	-	-	-
31741100-541420	C1712	ALPHALOOP	449,253	359,043	-	90,210	90,210	86,453	-	3,757
31741100-541420	C1715	BETHANY/MAYFIELD ROUNDABOUT	299,137	299,137	-	-	-	-	-	-
31741100-541420	C1826	SPRUELL CIRCLE SIDEWALK	308,128	308,128	-	-	-	-	-	-
31741100-541420	C1829	PROVIDENCE AREA SIDEWALKS	920,441	920,441	-	-	-	-	-	-
31741100-541420	C1925	MORRISON PARKWAY SIDEWALKS	921,718	921,718	-	-	-	-	-	-
31741100-541420	C2305	ALPHALOOP (OMP - NORTHWINDS)	60,931	-	-	60,931	60,931	65,910	-	(4,979)
31761150-541300	C1708	GREENWAY EXT TO FORSYTH	9,842,189	9,837,210	-	4,979	4,979	4,850	-	129
31761150-541300	C1709	EASTSIDE COMMUNITY CTR	2,553,436	2,519,186	-	34,250	34,250	30,000	-	4,250
31761150-579000	PARKS RESERVE		-	-	-	-	-	-	-	-
	Total				\$ -	\$ 190,370	\$ 190,370	\$ 187,213	\$ -	\$ 3,157



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
2022 Parks Bond Fund Detail (Fund 318; life-to-date for all projects)
 As of May 31, 2023

			Project Snapshot: FY2017 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Account #	Project									
Revenue										
Non-Departmental										
31890200-361000	INTEREST EARNINGS				\$ -	\$ -	\$ -	\$ 967,377		\$ (967,377)
31890200-393400	BOND PREMIUM					28,908,660	28,908,660	-		28,908,660
31890200-395000	CARRYFORWARD FUND BALANCE				-	367,339	367,339	-		367,339
	subtotal				\$ -	\$ 29,275,999	\$ 29,275,999	\$ 967,377		\$ 28,308,622
	Total				\$ -	\$ 29,275,999	\$ 29,275,999	\$ 967,377		\$ 28,308,622
Expenditures										
31841100-541420	C1712	ALPHALOOP	7,500,000	-	\$ -	\$ 7,500,000	\$ 7,500,000	\$ -	\$ -	\$ 7,500,000
31861150-541500	C0922	SYNTHETIC TURF	1,000,000	23,990	-	976,010	976,010	-	-	976,010
31861150-541500	C1911	EQUESTRIAN CENTER (CITY)	5,000,000	11,664	-	4,988,336	4,988,336	268,955	1,184,261	3,535,120
31861150-541500	C2011	WILLS PARK MASTER PLAN IMP	5,671,367	125,098	-	5,546,269	5,546,269	46,336	610,606	4,889,327
31861150-541500	C2216	UNION HILL PARK	3,250,001	25,753	-	3,224,248	3,224,248	287,811	345,075	2,591,362
31861150-541500	C2217	MID-BROADWELL PARK	500,001	47,538	-	452,463	452,463	3,136	-	449,327
31861150-541500	C2218	OLD RUCKER PARK	3,000,000	20,170	-	2,979,830	2,979,830	213,189	176,461	2,590,180
31861150-541500	C2219	FARMHOUSE PARK	2,000,000	16,720	-	1,983,280	1,983,280	13,850	-	1,969,430
31861150-541500	C2220	WATERS ROAD PARK	1,250,001	15,127	-	1,234,874	1,234,874	209,580	1,025,294	1
		WILLS PARK MAINTENANCE FACILITY								
31861150-541500	C2245		328,634	-	-	328,634	328,634	307,283	21,351	-
31890200-579000	PARKS RESERVE		62,055	-	-	62,055	62,055	-	-	62,055
31890200-584000	DEBT ISSUANCE COSTS		368,549	368,549	-	-	-	-	-	-
	Total				\$ -	\$ 29,275,999	\$ 29,275,999	\$ 1,350,140	\$ 3,363,048	\$ 24,562,811



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
TSPLOST I Fund Detail (Fund 335; life-to-date for all projects)
 As of May 31, 2023

Account #Project			Project Snapshot: FY2017 - FY2022		FY 2023					Available Budget
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	
Revenue										
Non-Departmental										
33590200-395000	CARRYFORWARD FUND BALANCE				\$ 4,300,000	\$ 37,289,778	\$ 41,589,778			\$ 41,589,778
33541100-361000	INTEREST EARNINGS				-	-	-	1,333,308	(1,333,308)	
	Total				\$ 4,300,000	\$ 37,289,778	\$ 41,589,778	\$ 1,333,308	\$ 40,256,470	
Expenditures										
33541100-541410	C1219	MILLING AND RESURFACING	2,000,000	-	\$ 2,000,000	\$ -	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -
33541100-541410	C1631	MCGINNIS RD IGA (FORSYTH)	5,026,414	140,756	-	4,885,658	4,885,658	598,243	-	4,287,415
33541100-541410	C1713	KIMBALL BR RD OP IMPROVEMENTS	1,359,742	1,119,002	-	240,740	240,740	-	233,749	6,991
33541100-541410	C1717	OLD MILTON PKWY CAPACITY IMP	5,579,474	1,924,663	-	3,654,811	3,654,811	341,860	1,312,949	2,000,001
33541100-541410	C1800	HAYNES BRIDGE RD IMP	187,598	187,598	-	-	-	-	-	-
33541100-541410	C1933	WEBB BRIDGE RD (DESIGN-PROJ. MGMT., ETC.)	876,389	860,986	-	15,403	15,403	15,402	-	1
33541100-541410	C1934	WINDWARD PKWY EAST IMPROVEMENTS	1,427,990	1,263,692	-	164,298	164,298	164,297	-	1
33541100-541410	C2054	GA 400 BRIDGES (WEBB; KIMBALL)	4,886,001	737,429	-	4,148,572	4,148,572	1,382,857	2,765,714	1
33541100-541410	C2104	WEBB BR RD PHASE 4 (NPP TO GREENWAY)	692,509	676,585	-	15,924	15,924	15,888	36	1
33541100-541410	C2113	ENCORE GREENWAY GATEWAY	2,573,000	230,000	2,300,000	43,000	2,343,000	3,000	43,000	2,297,000
33541100-541410	C2211	WEBB BRIDGE RD PHASE 1 (WESTWIND TO GREENWAY)	725,037	725,037	-	-	-	-	-	-
33541100-541410	C2229	WEBB BRIDGE RD PHASE 2 (ROUNDAABOUT-PARK)	6,000,000	54,157	-	5,945,843	5,945,843	835,203	3,472,739	1,637,901
33541100-541410	C2232	WEBB BRIDGE RD PHASE 3 (GREENWAY-ROUNDAABOUT)	17,000,000	33,550	-	16,966,450	16,966,450	947,880	73,805	15,944,765
33541100-541420	C2305	ALPHALOOP (OMP-NORTHWINDS)	825,000	-	-	825,000	825,000	-	825,000	-
33590200-579000	CONTINGENCY				-	384,079	384,079	-	-	384,079
	Total				\$ 4,300,000	\$ 37,289,778	\$ 41,589,778	\$ 6,304,631	\$ 8,726,992	\$ 26,558,155



CITY OF ALPHARETTA
 Financial Management Reports
 Capital Project Funds
TSPLOST II Fund Detail (Fund 336; life-to-date for all projects)
 As of May 31, 2023

Account #Project			Project Snapshot: FY2017 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Revenue										
Non-Departmental										
33690200-313400	TSPLOST II				\$ -	\$ 48,335,327	\$ 48,335,327	\$ 12,085,787		\$ 36,249,540
33641100-361000	INTEREST EARNINGS				-	-	-	297,042		(297,042)
33690200-395000	CARRYFORWARD FUND BALANCE				-	3,648,408	3,648,408	-		3,648,408
	Total				\$ -	\$ 51,983,735	\$ 51,983,735	\$ 12,382,829		\$ 39,600,906
Expenditures										
33641100-541410	C2040	TRADEWINDS PARKWAY	6,500,000	2,400	\$ -	\$ 6,497,600	\$ 6,497,600	\$ 5,465	\$ -	\$ 6,492,135
33641100-541410	C2104	WEBB BRIDGE ROAD (NPP-GREENWAY)	13,000,000	13,873	-	12,986,127	12,986,127	1,525,412	8,365,398	3,095,318
33641100-541410	C2107	NORTH POINT PARKWAY IMP	10,000,000	-	-	10,000,000	10,000,000	9,795	728,505	9,261,700
33641100-541410	C2221	CROSSWALK (ALPHARETTA ELEM)	113,037	18,537	-	94,500	94,500	89,133	5,367	-
33641100-541410	C2222	CROSSWALK (MANNING OAKS ELEM)	74,263	18,537	-	55,726	55,726	-	-	55,726
33641100-541410	C2223	CROSSING (92 MILTON GARAGE)	212,300	-	-	212,300	212,300	208,128	4,172	-
33641100-541410	C2224	RAISED INTSECTION (MARIETTA ST)	350,001	1,525	-	348,476	348,476	11,371	143,304	193,801
33641100-541410	C2225	CROSSINGS (CITY CTR/CHURCHES)	750,000	1,161	-	748,839	748,839	16,510	101,029	631,300
33641100-541410	C2226	PEDESTRIAN BRIDGES (WW PKWY)	4,000,000	12,349	-	3,987,651	3,987,651	326,046	321,723	3,339,881
33641100-541410	C2227	CROSSWALK (COGBURN PARK)	149,401	-	-	149,401	149,401	129,616	19,785	0
33641100-541410	C2228	CROSWALK (CHARLOTTE DR)	146,000	-	-	146,000	146,000	146,000	-	-
33641100-541410	C2230	CUMMING ST CORRIDOR	4,757,526	-	-	4,757,526	4,757,526	6	-	4,757,520
33641100-541420	C2305	ALPHALOOP (OMP - NORTHWINDS)	12,000,000	411	-	11,999,589	11,999,589	294,892	11,461,171	243,526
	Total				\$ -	\$ 51,983,735	\$ 51,983,735	\$ 2,762,374	\$ 21,150,454	\$ 28,070,907



CITY OF ALPHARETTA
 Financial Management Reports
 Special Revenue Funds
Impact Fee Fund (Fund 270; life-to-date for active projects)
 As of May 31, 2023

			Project Snapshot: FY2013 - FY2022		FY 2023					
			Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Account #	Project									
Revenue										
27074110-341321	IMPACT FEES STREETS & HIGHWAYS				\$ -	\$ 200,000	\$ 200,000	\$ 127,740		\$ 72,260
27074110-341323	IMPACT FEES RECREATION & PARKS				350,000	34,089	384,089	259,823		124,266
27074110-341324	IMPACT FEES PUBLIC SAFETY				-	-	-	12,149		(12,149)
27074110-395000	CARRYFORWARD FUND BALANCE				1,668,690	3,234,586	4,903,276	-		4,903,276
27074110-362000	REALIZED GAIN/LOSS ON INVS				-	-	-	(8,060)		8,060
27074110-363000	UNREALIZED GAIN/LOSS				-	-	-	3,074		(3,074)
27074110-361000	INTEREST EARNINGS				-	-	-	102,353		(102,353)
	Total				\$ 2,018,690	\$ 3,468,675	\$ 5,487,365	\$ 497,078		\$ 4,990,287
Expenditures										
Public Safety										
27031150-544200	C2206	RAPID RESCUE TRUCK	124,600	124,100	\$ -	\$ 500	\$ 500	\$ -		\$ 500
27031150-542100	C2302	ALL TERRAIN VEHICLES	18,690	-	18,690	-	18,690	18,690	-	-
	subtotal				\$ 18,690	\$ 500	\$ 19,190	\$ 18,690	\$ -	\$ 500
Public Works										
27041100-541410	C1410	RUCKER RD CORRIDOR	1,002,553	857,003	\$ -	\$ 145,550	145,550	\$ 134,044	\$ 11,506	\$ 0
27041100-541410	C1723	TEASLEY ST IMPROVEMENTS	38,125	38,125	-	-	-	-	-	-
27041100-541410	C2107	NORTH POINT PARKWAY IMPROVEMENTS	1,250,000	-	-	1,250,000	1,250,000	-	-	1,250,000
27041100-541420	C2305	ALPHALOOP (OMP - NORTHWINDS)	1,540,000	-	-	1,540,000	1,540,000	1,192,703	347,297	-
	subtotal				\$ -	\$ 2,935,550	\$ 2,935,550	\$ 1,326,747	\$ 358,803	\$ 1,250,000
Recreation, Parks & Cultural Services										
27061150-541500	C2011	WILLS PARK MASTER PLAN	328,634	-	\$ -	\$ 328,634	\$ 328,634	\$ 21,930	\$ -	\$ 306,704
27061150-541410	C2113	ENCORE GREENWAY GATEWAY	2,000,000	-	2,000,000	-	2,000,000	27,480	-	1,972,520
	subtotal				\$ 2,000,000	\$ 328,634	\$ 2,328,634	\$ 49,410	\$ -	\$ 2,279,224



CITY OF ALPHARETTA
 Financial Management Reports
 Special Revenue Funds
Impact Fee Fund (Fund 270; life-to-date for active projects)
 As of May 31, 2023

Account #	Project	Project Snapshot: FY2013 - FY2022		FY 2023					Available Budget
		Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	
Non-Departmental									
27074110-521200	PROFESSIONAL SERVICES			\$ -	\$ 66,720	\$ 66,720		\$ 66,720	\$ -
27074110-579001	NON-ALLOCATED STREETS & HIGHWAYS			-	19,816	19,816	-	-	19,816
27074110-579003	NON-ALLOCATED PUBLIC SAFETY			-	117,455	117,455	-	-	117,455
	subtotal			\$ -	\$ 203,991	\$ 203,991	\$ -	\$ 66,720	\$ 137,271
	Total			\$ 2,018,690	\$ 3,468,675	\$ 5,487,365	\$ 1,394,847	\$ 425,523	\$ 3,666,995



CITY OF ALPHARETTA
 Financial Management Reports
 Special Revenue Funds
Hotel/Motel Fund (Fund 275; life-to-date for active projects)
 As of May 31, 2023

		Project Snapshot: FY2013 - FY2022		FY 2023					
Account #	Project	Total Project Authorization	Prior Year Actuals	Original Appropriation	Transfers / Adjustments	Revised Budget	Collections / Expenditures	Encumbrances	Available Budget
Revenue									
27590150-314100	HOTEL/MOTEL TAXES			\$ 7,500,000	\$ -	\$ 7,500,000	\$ 7,640,142		\$ (140,142)
27590150-362000	REALIZED GAIN/LOSS ON INVS			-	-	-	(2,210)		2,210
27590150-363000	UNREALIZED GAIN/LOSS			-	-	-	426		(426)
27590150-361000	INTEREST EARNINGS			-	-	-	29,708		(29,708)
	subtotal			\$ 7,500,000	\$ -	\$ 7,500,000	\$ 7,668,066		\$ (168,066)
Non-Departmental									
27590150-395000	CARRYFORWARD FUND BALANCE			\$ -	\$ 1,143,172	\$ 1,143,172	\$ -		\$ 1,143,172
	subtotal			\$ -	\$ 1,143,172	\$ 1,143,172	\$ -		\$ 1,143,172
	Total			\$ 7,500,000	\$ 1,143,172	\$ 8,643,172	\$ 7,668,066		\$ 975,106
Expenditures									
Alpharetta Convention & Visitors Bureau									
27590150-572002	ALPHA CONV & VISITORS BUREAU DISTRIBUTION	29,944,535	26,663,285	\$ 3,281,250	\$ -	\$ 3,281,250	\$ 3,005,838	\$ -	\$ 275,412
	subtotal			\$ 3,281,250	\$ -	\$ 3,281,250	\$ 3,005,838	\$ -	\$ 275,412
City/Other									
27590150-521200	PROFESSIONAL SERVICES	35,655	30,155	\$ 5,500	\$ -	\$ 5,500	\$ 2,915	\$ -	\$ 2,585
27590150-579006	DEBT SERVICE RESERVE	586,022	-	35,537	550,485	586,022	-	-	586,022
27590150-611100	CITY OF ALPHARETTA DISTRIBUTION	26,063,456	23,250,956	2,812,500	-	2,812,500	2,578,433	-	234,067
	subtotal			\$ 2,853,537	\$ 550,485	\$ 3,404,022	\$ 2,581,348	\$ -	\$ 822,674
Tourism Product Development									
27590150-541500	C1911 EQUESTRIAN CENTER	38,739	38,739	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27590450-541500	C2011 WILLS PARK MASTER PLAN	751,891	468,574	-	283,317	283,317	268,248	-	15,069
27590150-541500	C2245 WILLS PRK MAINTENANCE FACILITY	309,370	-	-	309,370	309,370	309,369	-	1
27590151-581100	D1600 PRINCIPAL (2016 CONF CTR BOND)	2,185,000	1,535,000	650,000	-	650,000	650,000	-	-
27590151-582100	INTEREST PAYMENT (2016 CONF CTR BOND)	5,343,655	4,628,442	715,213	-	715,213	715,213	-	1
	subtotal			\$ 1,365,213	\$ 592,687	\$ 1,957,900	\$ 1,942,829	\$ -	\$ 15,071
	Total			\$ 7,500,000	\$ 1,143,172	\$ 8,643,172	\$ 7,530,016	\$ -	\$ 1,113,156



OTHER REPORTS



CITY OF ALPHARETTA
 Financial Management Reports
Listing of Payments \$5,000 and greater
 for the month ended May 31, 2023

Vendor	Description	Department	\$ Amount
A. B. GYMNASTICS LLC	INSTRUCTORS, CLASSES FOR THE PUBLIC	Rec., Parks & Cultural Services	\$ 13,472.62
ACOMFORT BY DESIGN	HEATING, VENTILATING AND AIR CONDITIONING (HVAC)	Public Works	\$ 11,765.92
ALLIED PAVING	PAVING/RESURFACING, STREET (MAJOR AND RESIDENTIAL)	Public Works	\$ 651,058.28
ALLIED WASTE SERVICE	WASTE SERVICES	Public Safety	\$ 13,159.66
ALLIED WASTE SERVICE	WASTE MANAGEMENT SERVICES	Finance	\$ 423,662.01
ALPHARETTA	HOTEL/MOTEL OCCUPANCY TAX APRIL FY23	General Government	\$ 341,047.00
ALPHARETTA CHAMBER OF COMMERCE	DOWNTOWN ALPHARETTA DISTRICT INITIATIVE PYMT 3 OF 3	Development Authority	\$ 20,000.00
ALTA PLANNING + DESIGN	SAFETY ENGINEERING AND ACCIDENT STUDIES; OSHA STUD	Public Works	\$ 88,243.45
AMERICAN FACILITY	JANITORIAL/CUSTODIAL SERVICES	Various Departments	\$ 9,000.00
ANIMAL CONTROL	ANIMAL TRAPPING SERVICES	Public Works	\$ 16,169.87
AT&T/BELLSOUTH @ 85	TELEPHONE SERVICES, E 911 OPERATIONS	Public Safety	\$ 10,105.21
AT&T/BELLSOUTH @ 85	TELEPHONE SERVICES, LONG DISTANCE AND LOCAL; E 911 OPERATIONS	Public Safety	\$ 19,238.05
ATKINS NORTH AMERICA	CONSTRUCTION MANAGEMENT SERVICES	Public Works	\$ 37,372.29
BEN KEITH SHIRLEY	WEBB BRIDGE RD-PARCEL 33	Public Works	\$ 5,933.00
BENNETT FIRE PRODUCT	FIRE PROTECTION CLOTHING	Public Safety	\$ 10,121.14
BLACKJACK PAVING	INTERGOVERNMENTAL/INTER-AGENCY	Public Works	\$ 1,382,857.14
CITY OF MILTON	LEASE-COURTROOM IGA-MAY 2023	Municipal Court	\$ 6,775.00
COLUMBIA ENGINEERING	DESIGNING SERVICES	Community & Economic Dev.	\$ 65,730.00
COLUMBIA ENGINEERING	DESIGNING SERVICES	Rec., Parks & Cultural Services	\$ 67,173.63
CRABAPPLE TURF	MAINTENANCE CONTRACTS	Rec., Parks & Cultural Services	\$ 6,335.45
CRABAPPLE TURF	ROADSIDE, GROUNDS, RECREATIONAL AND PARK AREA SERVICES	Rec., Parks & Cultural Services	\$ 7,088.70
CRABAPPLE TURF	ROADSIDE, GROUNDS, RECREATIONAL AND PARK AREA SERVICES	Rec., Parks & Cultural Services	\$ 15,732.20
DELL MARKETING LP	MICROCOMPUTERS, DESKTOP OR TOWER BASED	Information Technology	\$ 35,360.02
DELL MARKETING LP	COMPUTERS, DATA PROCESSING EQUIPMENT AND ACCESSORIES	Public Safety	\$ 17,167.53
DELL MARKETING LP	SERVERS, MICROCOMPUTER	Information Technology	\$ 37,445.77
DIX.HITE + PARTNERS	DESIGNING SERVICES	Rec., Parks & Cultural Services	\$ 7,887.50
EXCELLERE CONSTRUCTION	Contract Withholding: 22-007; RETAINAGE PAYABLE	General Government	\$ 31,472.42
FLOOR ONE GEORGIA	PW HQ RENOVATIONS	Public Works	\$ 18,960.00



CITY OF ALPHARETTA
 Financial Management Reports
Listing of Payments \$5,000 and greater
 for the month ended May 31, 2023

Vendor	Description	Department	\$ Amount
FULTON COUNTY BOARD OF COMMISSIONERS	MUNICIPAL COURT FINES	Public Safety	\$ 5,652.62
FULTON COUNTY BOARD OF EDUCATION	FUEL PAYMENTS	Various Departments	\$ 43,282.97
FULTON COUNTY SHERIFFS DEPARTMENT	COURT BONDS	General Government	\$ 6,000.00
FULTON COUNTY SHERIFFS DEPARTMENT	COURT BONDS	General Government	\$ 5,500.00
FULTON COUNTY SUPERIOR COURT	CAFN: 2022CV364011; MCGINNIS RD IGA (FORSYTH)	Public Works	\$ 17,000.00
FULTON COUNTY SUPERIOR COURT	CAFN: 2022CV364094; MCGINNIS RD IGA (FORSYTH)	Public Works	\$ 19,500.00
FULTON COUNTY SUPERIOR COURT	CAFN: 2022CV364860; MCGINNIS RD IGA (FORSYTH)	Public Works	\$ 7,032.00
FULTON COUNTY SUPERIOR COURT	CAFN: 2022CV364091; MCGINNIS RD IGA (FORSYTH)	Public Works	\$ 11,000.00
FULTON COUNTY-DEPT OF FINANCE	WATER AND SEWER UTILITIES	Various Departments	\$ 6,016.64
GARLAND DBS INC	REC & PARK BLDG RE-ROOF	Rec., Parks & Cultural Services	\$ 21,990.60
GEORGIA BRIDGE AND CONCRETE, LLC	CONSTRUCTION, STREET (MAJOR AND RESIDENTIAL)	Public Works	\$ 1,165,928.00
GEORGIA GREEN	GROUNDS MAINTENANCE: MOWING, EDGING, PLANT	Public Works	\$ 23,887.91
GEORGIA POWER CO	ELECTRICITY UTILITIES	Various Departments	\$ 161,394.17
GEORGIA POWER CO	ELECTRICITY UTILITIES	Various Departments	\$ 6,155.97
GEORGIA SUPERIOR COURT	MUNICIPAL COURT FINES	Public Safety	\$ 24,438.27
GESSNER	INSTRUCTORS, CLASSES FOR THE PUBLIC	Rec., Parks & Cultural Services	\$ 10,956.65
GREENTREE BEDDING	BEDDING, ALL TYPES, MAINTENANCE AND REPAIR	Rec., Parks & Cultural Services	\$ 6,034.00
INTEGRATED CONSTRUCTION	CONSTRUCTION, HIKE AND BIKE TRAIL	Public Works	\$ 643,393.05
IPR SOUTHEAST LLC	PIPE AND PIPE FITTINGS MAINTENANCE AND REPAIR	Public Works	\$ 111,980.75
JACOB'S EYE LLC	EVENT PLANNING SERVICES	Rec., Parks & Cultural Services	\$ 28,431.25
JARRARD & DAVIS	LEGAL SERVICES THROUGH 04/30/23	Various Departments	\$ 71,927.86
JONES CONTRACTING	CONSTRUCTION SERVICES, GENERAL (INCL. MAINTENANCE)	Rec., Parks & Cultural Services	\$ 48,850.00
KAIRAT BAYASHEV	COURT BONDS	General Government	\$ 5,500.00
LD GYMNASTICS INC	INSTRUCTORS, CLASSES FOR THE PUBLIC	Rec., Parks & Cultural Services	\$ 32,168.07
LIBERTY MUTUAL INSURANCE	CONDO INSURANCE (GARAGE)	Risk Management	\$ 21,912.00
LONGWOOD ARENAS LLC	PARK AREA CONSTRUCTION/RENOVATION	Rec., Parks & Cultural Services	\$ 434,085.00
MCCI	SOFTWARE MAINTENANCE/SUPPORT	Various Departments	\$ 9,922.51
MEER ELECTRIC	ELECTRICAL SERVICE	Rec., Parks & Cultural Services	\$ 30,369.76



CITY OF ALPHARETTA
 Financial Management Reports
Listing of Payments \$5,000 and greater
 for the month ended May 31, 2023

Vendor	Description	Department	\$ Amount
MEER ELECTRIC	FACILITY REPAIR & MAINTENANCE	Rec., Parks & Cultural Services	\$ 34,587.60
MERIDIAN RAPID DEFENCE	TRAFFIC CONES, LANE MARKERS, AND BARRICADES	Rec., Parks & Cultural Services	\$ 13,400.00
MOFFATT & NICHOL	DESIGNING SERVICES	Various Departments	\$ 53,687.32
MOFFATT & NICHOL	DESIGNING SERVICES	Public Works	\$ 21,017.07
PARMER LAW	PRE-INDICTMENT INVESTIGATION	Legal Services	\$ 10,000.00
PEACE OFFICER'S ANNUITY & BENEFIT FUND GA	MUNICIPAL COURT FINES	Public Safety	\$ 12,047.36
PENGWINDOW FILM	BULLET RESISTANT GLASS	Public Works	\$ 23,679.00
RGC CONSTRUCTION	PW HQ RENOVATIONS	Public Works	\$ 8,900.00
RKG ASSOCIATES, INC	STRATEGIC TECHNOLOGY PLANNING	Community & Economic Dev.	\$ 15,000.00
RUSSELL LANDSCAPE	GROUNDS MAINTENANCE: MOWING, EDGING, PLANT (NOT TR	Public Works	\$ 57,343.66
RUSSELL LANDSCAPE	LANDSCAPING (INCLUDING DESIGN, FERTILIZING, PLANTING)	Public Works	\$ 5,607.59
SAFETY PENN TRAINING	INSTRUCTORS, CLASSES FOR THE PUBLIC	Rec., Parks & Cultural Services	\$ 5,840.63
SAFETY PENN TRAINING	INSTRUCTORS, CLASSES FOR THE PUBLIC	Rec., Parks & Cultural Services	\$ 8,191.88
SAVATREE LLC	GROUNDS REPAIR & MAINTENANCE	Rec., Parks & Cultural Services	\$ 5,270.00
SAVATREE LLC	TREE TRIMMING AND PRUNING SERVICES	Rec., Parks & Cultural Services	\$ 5,580.00
SAWNEE ELECTRIC MEMBERSHIP	ELECTRICITY UTILITIES	Various Departments	\$ 33,435.52
SHI INTERNATIONAL CO	MICROSOFT AZURE CLOUD SERVICES	Various Departments	\$ 23,716.69
SIGNATURE TENNIS COURTS	PARK AREA CONSTRUCTION/RENOVATION	Rec., Parks & Cultural Services	\$ 9,935.00
SLAM MECHANICAL LLC	REC FACILITY MAINT	Public Works	\$ 18,627.12
SOCCER SHOTS NORTH	INSTRUCTORS, CLASSES FOR THE PUBLIC	Rec., Parks & Cultural Services	\$ 5,929.00
SOL CONSTRUCTION LLC	CONSTRUCTION, STREET (MAJOR AND RESIDENTIAL)	Public Works	\$ 216,395.47
SUSTAINABLE WATER	SW PIPE & STRUCTURE R&M	Public Works	\$ 28,429.00
TBB 122	REFUND FOR RELEASE OF TREE & EROSION CONTROL BOND	General Government	\$ 5,000.00
TECH ALPHARETTA	ATC OPERATIONAL FUNDS	Development Authority	\$ 7,916.63
TEMPLE INC	TRAFFIC CONSULTING	Public Works	\$ 10,836.66
TERRAMARK LAND	SURVEYOR SERVICES, LAND	Various Departments	\$ 17,956.08
THE DUMPSTER CO	CLEANING OF AMUSEMENT AREAS, EXPOSITION CENTERS	Rec., Parks & Cultural Services	\$ 17,053.74
THE DUMPSTER CO	CLEANING OF AMUSEMENT AREAS, EXPOSITION CENTERS	Rec., Parks & Cultural Services	\$ 14,869.81



CITY OF ALPHARETTA
Financial Management Reports
Listing of Payments \$5,000 and greater
for the month ended May 31, 2023

Vendor	Description	Department	\$ Amount
THE F. A. BARTLETT T	TREE TRIMMING AND PRUNING SERVICES	Public Works	\$ 15,649.85
THE GORDIAN GROUP	PROJECT MANAGEMENT SERVICES	Rec., Parks & Cultural Services	\$ 16,985.79
THOMAS PARIS STONE	WEBB BRIDGE RD-PARCEL 22	Public Works	\$ 306,868.00
TRUIST BANK	PCARD LIABILITY	General Government	\$ 121,612.37
VERIZON WIRELESS	TELEPHONE SERVICES, CELLULAR	Various Departments	\$ 15,499.27
WARD COMPANIES LLC	WASTE MANAGEMENT SERVICES	Rec., Parks & Cultural Services	\$ 5,155.00



CITY OF ALPHARETTA
 Financial Management Reports
Listing of PO's between \$5,000.01 and \$50,000.00
 for the month ended May 31, 2023

Purchase Order #	Vendor	Department	Purchase Order Amt.	Description
23000766	RELIABLE TRAFFIC DATA SERVICES LLC	PUBLIC WORKS	\$ 10,120.00	TRAFFIC COUNTING AT (46) LOCATIONS THROUGHOUT THE CITY
23000769	RUSSELL LANDSCAPE, LLC	PUBLIC WORKS	\$ 7,676.25	LANDSCAPING AT 3060 KIMBALL BRIDGE RD
23000772	CDK ENTERPRISES INC	PUBLIC WORKS	\$ 47,250.00	(5) SETS OF RECTANGULAR RAPID FLASHING BEACONS
23000773	DIAMOND GLASS CO INC	PUBLIC SAFETY	\$ 18,925.00	FROSTED GLASS INSTALLATION IN RECORDS AREA
23000774	TERRAMARK LAND SURVEYING INC	PUBLIC WORKS	\$ 14,060.00	SURVEYING SERVICES FOR ACADEMY ST FOR ROADWAY PROJECT
23000775	CHICAGO DROPCLOTH & TARPULIN CO INC	REC., PARKS & CULTURAL SVCS	\$ 7,188.94	CURTAINS FOR COMMUNITY THEATER
23000776	MEER ELECTRICAL CONTRACTORS INC	REC., PARKS & CULTURAL SVCS	\$ 33,125.00	ELECTRICAL SERVICES FOR 2023 TASTE OF ALPHARETTA (165) FABRIC PADDED CHAIRS AND (3) CHAIR CARTS FOR COMMUNITY THEATER
23000781	ATLAS COMMERCIAL PRODUCTS	REC., PARKS & CULTURAL SVCS	\$ 6,105.78	
23000784	JOHNSON CONTROLS	PUBLIC WORKS	\$ 21,970.00	HVAC CONTROL AND ANALYTICS SOFTWARE
23000786	SUSTAINABLE WATER PLANNING & ENGINEERING	PUBLIC WORKS	\$ 45,000.00	ADDITIONAL FY23 STORMWATER INSPECTIONS
23000790	SAFETY PENN TRAINING LLC	REC., PARKS & CULTURAL SVCS	\$ 14,032.51	LIFEGUARD CERTIFICATION/RECERTIFICATION COURSES
23000794	DELL MARKETING LP	INFORMATION TECHNOLOGY	\$ 5,680.00	(2) DELL PRECISION 5570I7 LAPTOPS FOR IT STAFF
23000802	CALLOWAY TITLE AND ESCROW, LLC	PUBLIC WORKS	\$ 8,465.00	RIGHT OF WAY AND EASEMENT WORK ASSOCIATED WITH WEBB BRIDGE RD PHASE 3

City of Alpharetta
Balance Sheet
Governmental Funds
May 31, 2023

	Major Governmental Funds							Non-Major	Total
	General	Capital	Capital	2016	2022	T-SPLOST	T-SPLOST II	Governmental	Governmental
	Fund	Project Fund	Grant Fund	Bond Fund	Bond Fund	Capital Fund	Capital Fund	Funds	Funds
ASSETS									
Cash / Cash Equivalents / Investments	\$ 46,616,591	\$ 13,409,854	\$ (144,855)	\$ 59,355	\$ 28,923,799	\$ 36,784,382	\$ 13,327,160	\$ 17,130,087	\$ 156,106,374
Receivables (net of allowance for uncollectibles)									
Taxes Receivable									
Property Taxes	445,156	-	-	-	-	-	-	-	445,156
Other Taxes	276,352	-	-	-	-	-	-	-	276,352
Interest	-	-	-	-	-	-	-	-	-
Accounts	-	-	-	-	-	-	-	56,596	56,596
Due from Other Funds	663	-	-	-	-	-	-	-	663
Intergovernmental Receivable	4,633	30,008	216,146	-	-	-	-	-	250,787
Cash - Restricted	47,007	295,664	-	-	-	-	-	-	342,671
Total Assets	47,390,403	13,735,526	71,291	59,355	28,923,799	36,784,382	13,327,160	17,186,683	157,478,599
LIABILITIES AND FUND BALANCES									
Liabilities									
Current									
Accounts Payable	532,162	4,727	-	-	1,135	37,707	-	3,298	579,029
Retainage Payable	-	68,051	32,256	7,537	29,427	128,219	58,296	142,013	465,800
Intergovernmental Payable	-	-	-	-	-	-	-	-	-
Claims Payable	-	-	-	-	-	-	-	-	-
Payroll Payable	392,714	-	-	-	-	-	-	-	392,714
Due to Other Funds	-	-	-	-	-	-	-	7,736	7,736
Deferred Revenue	696,323	30,008	216,146	-	-	-	-	127,447	1,069,925
Unearned Revenue	653,355	-	-	-	-	-	-	3,118,775	3,772,131
Non-Current									
Unclaimed Property	105,106	-	-	-	-	-	-	-	105,106
Claims Payable	-	-	-	-	-	-	-	-	-
Total Liabilities	2,379,662	102,786	248,402	7,537	30,563	165,925	58,296	3,399,270	6,392,441
Fund Balances:									
Restricted for:									
Capital Projects	-	2,462,062	(1,856,863)	51,818	25,468,134	27,507,385	(7,881,591)	4,794,406	50,545,350
Law Enforcement	-	-	-	-	-	-	-	201,240	201,240
Emergency Telephone Activities	-	-	-	-	-	-	-	1,129,725	1,129,725
Grant Projects	-	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	628,361	628,361
Promotion of Tourism	-	-	-	-	-	-	-	696,974	696,974
Assigned for:									
Grant Projects	-	-	-	-	-	-	-	57,307	57,307
Capital Projects	-	-	-	-	-	-	-	-	-
Emergency Reserve	19,700,000	-	-	-	-	-	-	-	19,700,000
2024 Fiscal Year Capital	10,547,818	-	-	-	-	-	-	-	10,547,818
Encumbrances	1,412,084	9,350,970	1,688,931	-	3,363,048	8,726,992	21,150,454	4,161,137	49,853,615
Remaining 2023 Net Spend	3,259,456	-	-	-	-	-	-	-	3,259,456
Projected Net Surplus/2025 Capital	10,091,383	-	-	-	-	-	-	-	10,091,383
Unallocated	-	1,819,709	(9,179)	-	62,055	384,079	-	2,118,263	4,374,927
Total Fund Balances	45,010,741	13,632,740	(177,111)	51,818	28,893,236	36,618,456	13,268,863	13,787,413	151,086,157
Total Liabilities and Fund Balances	\$ 47,390,403	\$ 13,735,526	\$ 71,291	\$ 59,355	\$ 28,923,799	\$ 36,784,382	\$ 13,327,160	\$ 17,186,683	\$ 157,478,599

City of Alpharetta
Statement of Revenues, Expenditures, and Changes in Fund Balances
Governmental Funds
For the Period Ended May 31, 2023

	Major Governmental Funds							Non-Major	Total
	General Fund	Capital Project Fund	Capital Grant Fund	S2016 Const Bond Fund	S2022 Const Bond Fund	T-SPLOST Capital Fund	T-SPLOST II Capital Fund	Governmental Funds	Governmental Funds
REVENUES									
Taxes:									
Property Tax	\$ 31,044,702	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,794,211	\$ 37,838,913
Local Option Sales Tax	17,933,930	-	-	-	-	-	-	-	17,933,930
Transportation SPLOST	-	-	-	-	-	-	12,085,787	-	12,085,787
Other Taxes	16,243,148	-	-	-	-	-	-	7,640,142	23,883,290
Licenses and permits	3,227,094	-	-	-	-	-	-	-	3,227,094
Intergovernmental	154,721	268,746	2,271,734	-	-	-	-	1,115,468	3,810,670
Charges for services	3,887,021	-	-	-	-	-	-	3,843,214	7,730,235
Impact Fees	-	-	-	-	-	-	-	399,711	399,711
Fines/Forfeitures	3,194,241	-	-	-	-	-	-	69,209	3,263,450
Investment earnings (Loss)	1,108,192	285,656	(13,790)	48,660	967,377	1,333,308	297,042	377,124	4,403,570
Contributions and Donations	96,634	453,088	75,000	-	-	-	-	4,496	629,218
Misc Revenue	53,629	-	-	-	-	-	-	-	53,629
Other	-	-	-	-	-	-	-	-	-
Total revenues	76,943,313	1,007,490	2,332,944	48,660	967,377	1,333,308	12,382,829	20,243,576	115,259,497
EXPENDITURES									
Current:									
Unallocated	-	-	-	-	-	-	-	-	-
General government	9,754,206	574,565	-	-	-	-	-	3,015,603	13,344,374
Public safety	31,186,796	2,964,878	66,359	-	-	-	-	4,373,342	38,591,375
Public works	8,184,260	2,869,910	1,984,963	152,363	-	6,304,631	2,762,374	3,530,051	25,788,551
Economic and community development	3,837,881	231,371	607,174	-	-	-	-	-	4,676,425
Alpharetta Business Community	-	-	-	-	-	-	-	-	-
Culture and recreation	9,834,763	2,175,511	-	34,850	1,350,140	-	-	710,012	14,105,276
Contingency	19,916	-	-	-	-	-	-	-	19,916
Professional Services	-	-	-	-	-	-	-	-	-
Debt service:									
Principal	205,000	-	-	-	-	-	-	3,738,694	3,943,694
Interest	83,640	-	-	-	-	-	-	4,293,752	4,377,392
Other Costs	-	-	-	-	-	-	-	-	-
Bond issuance costs	-	-	-	-	-	-	-	-	-
Capital outlay	-	-	-	-	-	-	-	-	-
Total expenditures	63,106,462	8,816,235	2,658,496	187,213	1,350,140	6,304,631	2,762,374	19,661,454	104,847,004
Excess (deficiency) of revenues over (under) expenditures	13,836,851	(7,808,745)	(325,552)	(138,552)	(382,763)	(4,971,322)	9,620,455	582,122	10,412,494
OTHER FINANCING SOURCES (USES)									
Transfers in	2,578,433	10,486,483	-	-	-	-	-	3,850,000	16,914,916
Transfers out	(14,336,483)	-	-	-	-	-	-	(2,578,433)	(16,914,916)
Loan Proceeds	-	-	-	-	-	-	-	-	-
Capital Leases	-	2,353,251	-	-	-	-	-	-	2,353,251
Sale of capital assets	37,898	-	-	-	-	-	-	-	37,898
Sale of non-capital assets	6,422	400	-	-	-	-	-	-	6,822
Land Sale	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	-	-	-	-
Bond Proceeds	-	-	-	-	-	-	-	-	-
Total other financing sources and (uses)	(11,713,730)	12,840,134	-	-	-	-	-	1,271,567	2,397,971
Net change in fund balances	2,123,121	5,031,390	(325,552)	(138,552)	(382,763)	(4,971,322)	9,620,455	1,853,689	12,810,465
Fund balances - beginning	42,887,620	8,601,351	148,441	190,370	29,275,999	41,589,779	3,648,408	11,933,724	138,275,692
Fund balances - ending	\$ 45,010,741	\$ 13,632,740	\$ (177,111)	\$ 51,818	\$ 28,893,236	\$ 36,618,456	\$ 13,268,863	\$ 13,787,413	\$ 151,086,157

City of Alpharetta
Combining Balance Sheet
Non-Major Governmental Funds
May 31, 2023

	Special Revenue									Total Non-major
	Hotel Motel	Impact Fee	Federal Confiscated Assets	State Confiscated Assets	Grant Operating	E911	American Rescue ACT	Debt Service Fund	Stormwater Capital Fund	Governmental Funds
ASSETS										
Cash / Cash Equivalents / Investments	\$ 1,313,933	\$ 4,073,056	\$ 292,437	\$ 35,160	\$ 100,151	\$ 2,108,421	\$ 3,126,011	\$ 1,504,368	\$ 4,576,550	\$ 17,130,087
Taxes Receivable	-	-	-	-	-	-	-	-	-	-
Pre-Paid Expenditures	-	-	-	-	-	-	-	-	-	-
Accounts Receivable	-	-	-	-	-	-	-	-	-	-
Property Taxes	-	-	-	-	-	-	-	56,596	-	56,596
Intergovernmental Receivable	-	-	-	-	-	-	-	-	-	-
Due From Other Funds	-	-	-	-	-	-	-	-	-	-
Restricted	-	-	-	-	-	-	-	-	-	-
Total Assets	1,313,933	4,073,056	292,437	35,160	100,151	2,108,421	3,126,011	1,560,964	4,576,550	17,186,683
LIABILITIES										
Accounts Payable	-	-	-	-	-	578	1,952	-	768	3,298
Retainage Payable	30,937	59,018	-	-	-	-	32,043	-	20,016	142,013
Intergovernmental Payable	-	-	-	-	-	-	-	-	-	-
Arbitrage Payable	-	-	-	-	-	-	-	-	-	-
Compensated Absences	-	-	-	-	-	-	-	-	-	-
Payroll Liabilities	-	-	-	-	-	7,736	-	-	-	7,736
Due to Other Fund	-	-	-	-	-	-	-	-	-	-
Deferred Revenue	-	-	-	-	-	-	-	127,447	-	127,447
Unearned Revenue	-	-	-	-	-	-	3,092,017	26,759	-	3,118,775
Total Liabilities	30,937	59,018	-	-	-	8,314	3,126,011	154,206	20,784	3,399,270
FUND BALANCES										
Restricted:										
Capital Projects	-	3,451,244	-	-	-	-	(2,515,204)	-	3,858,365	4,794,406
Law Enforcement	-	-	166,080	35,160	-	-	-	-	-	201,240
Promotion of Tourism	696,974	-	-	-	-	-	-	-	-	696,974
Emergency Telephone Activities	-	-	-	-	-	1,129,725	-	-	-	1,129,725
Debt Service	-	-	-	-	-	-	-	628,361	-	628,361
Assigned for: Grant Projects	-	-	-	-	-	-	-	-	-	-
Grant Projects	-	-	-	-	57,307	-	-	-	-	57,307
Encumbrances	-	425,523	-	-	5,180	517,830	2,515,204	-	697,401	4,161,137
Unallocated	586,022	137,271	126,357	-	37,664	452,552	-	778,397	-	2,118,263
Total Fund Balances	1,282,996	4,014,038	292,437	35,160	100,151	2,100,107	-	1,406,758	4,555,766	13,787,413
Total Liabilities and Fund Balances	\$ 1,313,933	\$ 4,073,056	\$ 292,437	\$ 35,160	\$ 100,151	\$ 2,108,421	\$ 3,126,011	\$ 1,560,964	\$ 4,576,550	\$ 17,186,683

City of Alpharetta
Combining Statement of Revenues, Expenditures, and Changes in Fund Balances
Non-major Governmental Funds
For the Period Ended May 31, 2023

	Special Revenue								Total Non-major	
	Hotel Motel	Impact Fee	Federal Confiscated Assets	State Confiscated Assets	Grant Operating	E911 Fund	American Rescue Act	Debt Service Fund	Stormwater Service Fund	Governmental Funds
REVENUES:										
Hotel Motel Tax	\$ 7,640,142	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ 7,640,142
Property tax	-	-	-	-	-	-	-	6,794,211	-	6,794,211
Charges for Service	-	-	-	-	90,652	3,752,563	-	-	-	3,843,214
Impact Fees	-	399,711	-	-	-	-	-	-	-	399,711
Forfeiture Income	-	-	53,647	15,562	-	-	-	-	-	69,209
Intergovernmental	-	-	-	-	8,484	-	1,106,984	-	-	1,115,468
Contributions & Donations	-	-	-	-	-	-	-	-	4,496	4,496
Investment Earnings (Loss)	29,697	105,897	-	-	3,176	34,354	-	113,998	90,003	377,124
Other	-	-	-	-	-	-	-	-	-	-
Total revenues	7,669,839	505,609	53,647	15,562	102,312	3,786,916	1,106,984	6,908,209	94,499	20,243,576
EXPENDITURES:										
Tourism	3,005,838	-	-	-	-	-	-	-	-	3,005,838
Community Development	-	-	-	-	-	-	-	-	-	-
Culture/Recreation	577,617	49,410	-	-	73,881	-	9,104	-	-	710,012
Public Safety	-	18,690	64,120	18,469	45,294	4,226,770	-	-	-	4,373,342
Public Works	-	1,326,747	-	-	-	-	1,097,879.73	-	1,105,425	3,530,051
General Government	2,915	-	-	-	-	-	-	6,850	-	9,765
Debt Service:	-	-	-	-	-	-	-	-	-	-
Principal	650,000	-	-	-	-	73,694	-	3,015,000	-	3,738,694
Interest	715,213	-	-	-	-	3,083	-	3,575,457	-	4,293,752
Bond Issuance Costs	-	-	-	-	-	-	-	-	-	-
Total expenditures	4,951,583	1,394,847	64,120	18,469	119,175	4,303,546	1,106,984	6,597,307	1,105,425	19,661,454
Excess (deficiency) of revenues over expenditures	2,718,256	(889,238)	(10,473)	(2,907)	(16,862)	(516,630)	-	310,902	(1,010,926)	582,122
OTHER FINANCING SOURCES (USES):										
Transfers in / out:										
General fund	(2,578,433)	-	-	-	-	-	-	-	3,850,000	1,271,567
Budgeted Fund Balance:	-	-	-	-	-	-	-	-	-	-
Capital Leases	-	-	-	-	-	-	-	-	-	-
Total other financing sources	(2,578,433)	-	-	-	-	-	-	-	3,850,000	1,271,567
Net change in fund balances	139,823	(889,238)	(10,473)	(2,907)	(16,862)	(516,630)	-	310,902	2,839,074	1,853,689
Fund balances - beginning	1,143,173	4,903,276	302,910	38,067	117,014	2,616,737	-	1,095,856	1,716,692	11,933,724
Fund balances - ending	\$ 1,282,996	\$ 4,014,038	\$ 292,437	\$ 35,160	\$ 100,151	\$ 2,100,107	\$ -	\$ 1,406,758	\$ 4,555,766	\$ 13,787,413

City of Alpharetta
Enterprise Fund -Solid Waste
Statement of Net Position
May 31, 2023

	<u>Solid Waste</u>
ASSETS	
Current Assets:	
Cash and Cash Equivalents & Investments	\$ 957,925
Inventories, at cost	-
Accounts Receivables (net of allowance for uncollectibles)	1,369,641
Prepaid Insurance Expenses	-
Total Current Assets	<u>2,327,567</u>
Noncurrent Assets:	
Restricted Cash, Cash Equivalents, and Investments	-
Total Restricted Assets	<u>-</u>
Other	-
Capital Assets	
Buildings and System	-
Machinery and Equipment	-
Less Accumulated Depreciation	-
Total Capital Assets (net of accumulated depreciation)	<u>-</u>
Total Noncurrent Assets	<u>-</u>
Total Assets	<u>2,327,567</u>
LIABILITIES	
Current Liabilities:	
Accounts Payable	823
Accounts Payable/ Customer Credit Balances	1,131
Accounts Payable/ Customer Pre-Paid Service	-
Payroll Liabilities	-
Accrued Salaries	32
Accrued Interest Payable	-
Compensated Absences Payable	-
Notes Payable - Revenue Bonds	-
Due to Other Funds	-
Total Current Liabilities	<u>1,986</u>
Current Liabilities Payable from Restricted Assets:	
Revenue Bonds Payable	-
Total Current Liabilities Payable from Restricted Assets	<u>-</u>
Noncurrent Liabilities:	
Customer Deposits	-
Compensated Absences less Current Portion	-
Revenue Bonds Payable	-
Total Noncurrent Liabilities	<u>-</u>
Total Liabilities	<u>1,986</u>
NET ASSETS	
Invested in Capital Assets, net of related debt	-
Reserved for Debt Service	-
Reserved for Encumbrances	-
Unreserved	2,325,580
Total Net Assets	<u>2,325,580</u>
Total Liabilities & Net Assets	<u>\$ 2,327,567</u>

City of Alpharetta
Enterprise Fund - Solid Waste
Statement of Revenues, Expenses, and Changes in Net Position
For the Period Ended May 31, 2023

Operating revenues:	
Charges for sales and services:	
Refuse Collection charges	\$ 6,605,832
Misc Revenue	1,405
Total operating revenues	<u>6,607,237</u>
Operating expenses:	
Administration	5,633,649
Non-departmental	-
Total operating expenses	<u>5,633,649</u>
Operating Gain (loss)	973,588
Non-operating revenues (expenses):	
Investment earnings (Loss)	17,139
Total non-operating revenue (expenses)	<u>17,139</u>
Income (loss) before transfers	990,728
Transfers In	-
Transfers Out	<u>-</u>
Change In Net Assets	990,728
Total net assets-beginning	<u>115,976</u>
Total net assets-ending (net of encumbrances)	<u>1,106,703</u>
Adjustments to GAAP basis:	
Encumbrances	1,218,877
Misc adj-Encumbrances Resv/Prior Year	
Total net assets-ending	<u>\$ 2,325,580</u>

DEVELOPMENT AUTHORITY



Revenue & Expenditure Report GAAP Financial Statements



ALPHARETTA DEVELOPMENT AUTHORITY

Financial Management Report - As of May 31, 2023 (unaudited)

Account #	Project	Total Budget	Actuals (Collections/ Expenditures)	Encumbrances	Remaining
Revenues					
99575100-346900	Bond Application Fee	\$ 234,750	\$ 234,750		\$ -
99575100-371000-C1532	ATC Operational Funding (COA)	95,000	95,000		-
(2) 99575100-381000-C1535	Innovation Center Operations (ATC)	23,700	16,550		7,150
	subtotal	\$ 353,450	\$ 346,300		\$ 7,150
(1) 99575100-395000	Carryforward Fund Balance	\$ 214,749	\$ -		\$ 214,749
	subtotal	\$ 214,749	\$ -		\$ 214,749
	Total	\$ 568,199	\$ 346,300		\$ 221,899
Expenditures					
99575100-571000-C1403	Local Job Creation Grant Program	\$ 32,500	\$ -	\$ -	\$ 32,500
99575100-544100-C1532	ATC Operational Funds	95,000	95,000	-	-
99575100-544100-C1601	High Impact Permitting Grant Program (IGA with COA)	20,948	-	-	20,948
99575100-544100-C0924	Economic Development Strategic Plan (split with COA)	37,500	-	-	37,500
99575100-544100-C2210	Downtown Economic Development Initiative	60,000	60,000	-	-
99575100-544100-C2312	AlphaLoop Foundation MOU (website creation)	20,000	20,000	-	-
99575100-544100-C2313	Atl. Urban Land Institute (technical assistance panel)	20,000	10,000	10,000	-
	subtotal	\$ 285,948	\$ 185,000	\$ 10,000	\$ 90,948
(2) 99575100-523860-C1535	Innovation Center Operations (Maintenance Contracts)	\$ 12,000	\$ 7,473	\$ 750	\$ 3,777
(2) 99575100-531200-C1535	Innovation Center Operations (Miscellaneous Utilities)	1,100	870	-	230
(2) 99575100-531210-C1535	Innovation Center Operations (Water/Sewer)	1,200	1,045	-	155
(2) 99575100-531220-C1535	Innovation Center Operations (Natural Gas)	5,000	4,641	-	359
(2) 99575100-531230-C1535	Innovation Center Operations (Electricity)	4,400	3,157	-	1,243
	subtotal	\$ 23,700	\$ 17,185	\$ 750	\$ 5,765
99575100-579000	Reserve	\$ 258,551	\$ -	\$ -	\$ 258,551
	Total	\$ 568,199	\$ 202,185	\$ 10,750	\$ 355,264

- (1) Carryforward Fund Balance represents cash available at the end of the prior fiscal year that is programmed into the current fiscal year budget. As this account represents cash already received, there will not be actual collections.
- (2) Innovation Center utilities are being funded by the Alpharetta Technology commission (ATC) on a reimbursement basis. As such, expenses will outpace budget at month end due to the billing/reimbursement delay.



ALPHARETTA DEVELOPMENT AUTHORITY
Financial Management Report - As of May 31, 2023 (unaudited)



Account #	Project	Total Budget	Actuals (Collections/ Expenditures)	Encumbrances	Remaining
Fund Balance Reconciliation					
Fund Balance (beginning of Fiscal Year)			\$ 214,749		
Revenues collected to date			346,300		
Expenditures incurred to date			(202,185)		
Fund Balance (current)			\$ 358,864		
Forecasted revenue collections			635		
Fund Balance (forecasted)			\$ 359,499		
Fund Balance Allocation (forecasted):					
Non-Spendable (unspent/remaining project allocations)			\$ 100,948		
Spendable (available for investment by the Board)*			258,551		
			\$ 359,499		

* May differ from the Fund Balance figures in the attached Balance Sheet due to forecasted revenue collections that are anticipated, but not yet collected.

City of Alpharetta
Balance Sheet
COMPONENT UNIT-DEVELOPMENT AUTHORITY
May 31, 2023

ASSETS

Current Assets:

Cash and Cash Equivalents	\$ 358,864
Investments	-
Receivables	-
Restricted Cash for Bond Issuance Costs	-

Total Assets 358,864

LIABILITIES

Current Liabilities:

Accounts Payable	-
Deferred Revenue	-
Due to Other Funds	-
Total Current Liabilities	-

Current Liabilities Payable from Restricted Assets:

	-
Total Current Liabilities Payable from Restricted Assets	-

Noncurrent Liabilities:

	-
Total Noncurrent Liabilities	-
Total Liabilities	-

Fund Balance

Restricted	100,948
Unallocated	257,916
Total Fund Balance	<u>358,864</u>

Total Liabilities & Fund Balance \$ 358,864

City of Alpharetta
Statement of Revenues, Expenditures, and Changes in Fund Balance
COMPONENT UNIT-DEVELOPMENT AUTHORITY
For the Period Ended May 31, 2023

	<u>Actual Amounts</u>
Revenues	
Rent/Royalties	\$ 16,550
State Grant	-
Fees	234,750
Contributions & Donations	95,000
Miscellaneous Income-Interest	-
Miscellaneous Revenue	-
Total Revenues	<u><u>346,300</u></u>
Expenditures	
Economic Development	195,000
Maintenance Contracts	8,223
Donation to private source	-
Utilities - Miscellaneous	9,713
Debt Service:	
Principal	-
Interest	-
Total Expenditures	<u><u>212,935</u></u>
Excess (deficiency) of revenues over (under) expenditures	133,365
Other Financing Sources (Uses)	
Sale of capital assets	-
Net Change in Fund Balances	133,365
Fund Balance, Beginning of Year	<u><u>214,749</u></u>
Encumbrances	10,750
Fund Balance, End of Year	<u><u>358,864</u></u>





STAFF REPORT

Department: Community Development

Submitted By: Kathi Cook

Meeting Date: July 17, 2023

AGENDA ITEM: MP-23-03 FULTON SCIENCE ACADEMY

The applicant, Fulton Science Academy, is requesting a master plan amendment in order to expand the school's athletic program, including the construction of four (4) tennis courts, a soccer field, field house and concessions, parking and a 2nd project driveway. A master plan amendment is requested to modify development regulations, including a reduction of the setback along Fanfare Way to accommodate two (2) tennis courts and retaining walls. The subject property is located at 3035 Fanfare Way, at the southwest corner of Maxwell Road and Fanfare Way.

PLANNING COMMISSION RECOMMENDATION:

This item was considered at the June 1, 2023 Planning Commission meeting. There was one (1) public comment in opposition from the Westwood Park townhomes HOA president of the with concerns over lighting, public notification and traffic congestion. After discussion, Planning Commission recommended to approve the item subject to staff's recommended conditions. Vote 7-0

Approve MP-23-03 Fulton Science Academy, subject to the following conditions:

1. Site shall be developed substantially as depicted on the site plan prepared by AEC, dated 4/3/23, with a reduced 10' setback in the area of the tennis courts. The remaining frontage along Fanfare Way shall have a 40' setback.
2. Building, landscape plan and lighting shall be approved by DRB.
3. Landscape strip along Fanfare Way shall be supplemented with evergreen landscape material to create an opaque screen along Fanfare Way, as approved by DRB.
4. All site lighting, including lighting for athletic field/courts, shall comply with the City's Night Sky Ordinance, subject to final approval by DRB. Athletic field/courts lighting shall be turned off after 9:00 PM.
5. Developer shall provide the required decorative pedestrian lighting along the property frontage on Fanfare Way.
6. Developer shall assess site landscaping and replace dead, dying or missing landscape material, as approved by DRB.
7. If the proposed improvements impact areas with previous recompense trees, trees shall be replaced with new trees equal to the inches removed since the trees have grown, as approved by Staff.
8. Developer shall comply with the North Point Overlay EcoDistrict regulations, with final approval by Staff at LDP and/or building permit.
9. Developer shall be responsible for implementing the recommendations of the traffic study prepared by A & R Engineering, dated 6/1/23, with final approval by Staff.
10. Property owner shall dedicate a 20' wide permanent easement to the City through the Georgia 400 buffer for the Alpha Loop project.
11. Property owner shall dedicate a 10' permanent easement to the City along the eastern property line to provide a connection between Maxwell Rd/Fanfare Way sidewalk and the Alpha Loop. Sidewalk connection through the easement will not be constructed until the Alpha Loop has been constructed.
12. All previous master plan regulations and conditions of zoning shall remain in effect.

ITEM DESCRIPTION:

The submitted request, if approved, will allow for an expansion to the Fulton Science Academy's athletic program, including the construction of four (4) tennis courts, a soccer field, field house and concessions, parking and a 2nd project driveway. Fulton Science Academy is a pre-K through 12th grade private school with an enrollment of approximately 935 students. A master plan amendment is requested to modify development regulations, including a reduction of the setback along Fanfare Way to accommodate two (2) tennis courts and retaining walls. The subject property is located at 3035 Fanfare Way, at the southwest corner of Maxwell Road and Fanfare Way.

The 18.5-acre property is zoned CUP (Community Unit Plan) and is subject to the Cousins Westside Master Plan. The property is designated as Pod O, which is approved for 'Education' use at up to 25,000 square feet per acre. Surrounding properties are zoned CUP to the north, east and west and LI (Light Industrial) to the northeast. Creekside at Westwood, Westwood Park and Honda are located to the north, Emblem Alpharetta is located to the west, Georgia 400 is located to the south and undeveloped Cousins Westside Pod P is located to the east.

The 220-acre Cousins Westside Master Plan was approved in 2003 and includes a horizontal mix of uses, including residential, office, retail/restaurant, senior living, education center, and amphitheater. Permitted uses and development regulations are established for each pod within the master plan. Pod O development regulations require a 40' setback along Fanfare Way. The applicant requests a ten-foot (10') setback along Fanfare Parkway to accommodate two (2) tennis courts and retaining walls. The eight-foot (8') retaining walls sit below the grade of Fanfare Way by approximately five and a half feet (5.5') and will not be visible from the street.

SITE PLAN

The submitted site plan depicts a soccer field, four (4) tennis courts, a fieldhouse with observatory, concessions, additional parking, and a new curb cut and driveway to the west and behind the existing school. The proposed setback along Fanfare Way for the tennis courts is ten feet (10'), which includes the required ten-foot (10') landscape strip. The site has significant topography with the tennis courts situated approximately twelve feet (12') below the grade of Fanfare Way and the soccer field situated approximately 27' below the grade of Fanfare Way. Because the site drops off from Fanfare Way, eight-foot (8') retaining walls are proposed along the north side of the two (2) tennis courts closest to Fanfare Way.

The property has been cleared and graded in the area of the proposed expansion. However, there are several smaller trees that will be removed due to conflicts with the proposed improvements. Most of the impacted trees are Pines, but there are a few hardwoods. In addition, some of the impacted trees are recompense trees resulting from previous tree removal. Those trees, if removed, will need to be recompensed else on the property.

The site plan depicts a new full access curb cut on the northwest side of the property which is aligned with an opposing driveway for Emblem Alpharetta. A total of 191 parking spaces are proposed for the school, which includes 41 new parking spaces along the new driveway and near the existing parking lot on the south side of the school. The Unified Development Code (UDC) requires one (1) parking space for each classroom (55) and administrative offices (19), five (5) guest spaces, and one (1) space for every four (4) high school students (145), for a total of 116 parking spaces.

ATHLETIC FIELD LIGHTING

Tennis court light poles are nineteen feet (19') tall with the light fixture located approximately eight feet (8') above the grade of Fanfare Way. Twenty-four (24) light poles are proposed for the four (4) tennis courts. Soccer field light poles are 50' tall with the light fixture located approximately 25' above the grade of Fanfare Way. Four (4) light poles are proposed for the soccer field. According to the applicant, lighting for the tennis courts and soccer field will be used between the hours of 4:00 PM – 8:00 PM and will be turned off no later than 9:00 PM. The City's Night Sky Ordinance requires no more than one (1.0) footcandle as measured at the property line (including rights-of-way) where abutting residential uses. A photometric plan was submitted by the applicant which depicts footcandles less than one (1.0) as measured at the property line along Fanfare Way. There are higher footcandle readings near this property line; however, that is due to the photometric software not reading topography. Given the close proximity of residential uses to the applicant's proposed expansion, athletic field/court lighting should be turned off no later than 9:00 PM.

TRAFFIC

The applicant submitted an updated traffic study which accounts for the proposed athletic field expansion. The trip generation table shows that 1,172 AM Peak Hour trips and 259 PM Peak Hour trips would be generated for the private school which has an overall enrollment of 935 students with high school students comprised of approximately 145 students. In addition, the applicant's letter of intent indicates that the need for four (4) tennis courts is related to a desire to host tournaments. According to the applicant, tennis and soccer matches will occur between 4:00 PM and 8:00 PM on weekdays. Tournaments would typically occur over Friday – Saturday during the timeframe referenced above.

The City's on-call traffic consultant reviewed the applicant's traffic study and agrees with the report's conclusions, which indicate that the applicant's proposal will not significantly impact the area road network and will improve the operation at some intersections due to the additional site driveway. The study includes recommendations related to access configuration at the two (2) site driveways. If approved, the applicant should be responsible for implementing the site access recommendations.

STANDARDS FOR MASTER PLAN AMENDMENTS

The Planning Commission and the City Council shall consider the following standards in considering a rezoning application, giving due weight or priority to those factors particularly appropriate to the circumstances of each application:

a. Whether the zoning proposal will permit a use that is suitable in view of the zoning use and development of adjacent and nearby property.

Response: The zoning proposal represents an expansion of a use that is permitted within the master plan land use designation of the property. The site is situated approximately thirteen and a half feet (13.5') below the grade of Fanfare Way and the landscape strip will help screen the courts from Fanfare Way. If approved, the request to reduce the setback along Fanfare Way should be limited to the area of the two (2) tennis courts and retaining walls.

b. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property.

Response: The proposed development would not adversely affect adjacent and nearby properties. The site's topography helps shield the athletic field lighting from adjacent residential properties and the student population is unchanged with the proposed athletic program expansion.

c. Whether the zoning proposal will adversely affect the natural environment.

Response: Most of the property has been cleared and graded limiting opportunities for tree saves. If approved, impacted areas with previous recompense trees shall be replaced onsite.

d. Whether there are substantial reasons why the property cannot or should not be used as currently zoned.

Response: The subject property could be used as currently zoned but would likely result in the loss of two (2) tennis courts. The master plan amendment would not have significant impacts on surrounding properties due to the subject property being located well below the grade of Fanfare Way. The difference in topography helps screen the athletic field/courts from the public right-of-way and diffuse light from impacting nearby residential uses. If approved, conditions are recommended requiring evergreen screening in the landscape strip along Fanfare Way, as well as time limitations on athletic field/courts lighting.

e. Whether the zoning proposal will result in a use that will or could cause an excessive or burdensome use of public facilities or services, including but not limited to existing streets and transportation facilities, schools, water or sewer utilities, and police or fire protection.

Response: The zoning proposal has no impact on student enrollment; therefore, there should be minimal impact on public facilities and services. Sufficient capacity exists on the area road network to support the additional vehicular trips generated from the athletic program expansion.

f. Whether the zoning proposal is supported by new or changing conditions not anticipated or reflected in the existing zoning on the property.

Response: Not applicable.

g. Whether the zoning proposal reflects a reasonable balance between the promotion of the public health, safety, morality, or general welfare against the right to unrestricted use of property.

Response: The zoning proposal reflects a reasonable balance. The proposal represents an expansion of a use that is permitted within the master plan land use designation of the property and the student enrollment is

unchanged.

h. Whether there are substantial reasons why the property cannot be used in accordance with existing zoning.

Response: The subject property could be used as currently zoned but would likely result in the loss of two (2) tennis courts. The master plan amendment would not have significant impacts on surrounding properties due to the subject property being located well below the grade of Fanfare Way. The difference in topography helps screen the athletic field/courts from the public right-of-way and diffuse light from impacting nearby residential uses. If approved, conditions are recommended requiring evergreen screening in the landscape strip along Fanfare Way, as well as time limitations on athletic field/courts lighting.

i. The extent to which the zoning proposal is consistent with the Comprehensive Plan.

Response: The zoning proposal is consistent with the comprehensive land use plan designation of the subject property, which is 'Mixed Use'.

CONCURRENCES

Staff has reviewed the applicant's proposal against the review criteria for a master plan amendment. The zoning proposal represents an expansion of a use that is already permitted within the master plan and the school enrollment is unchanged. The site's topography helps offset any impacts to surrounding properties. If approved, conditions are recommended limiting the setback reduction to the tennis courts and retaining walls, requiring evergreen screening in the landscape strip along Fanfare Way, and placing time limitations on the use of athletic field/courts lighting.

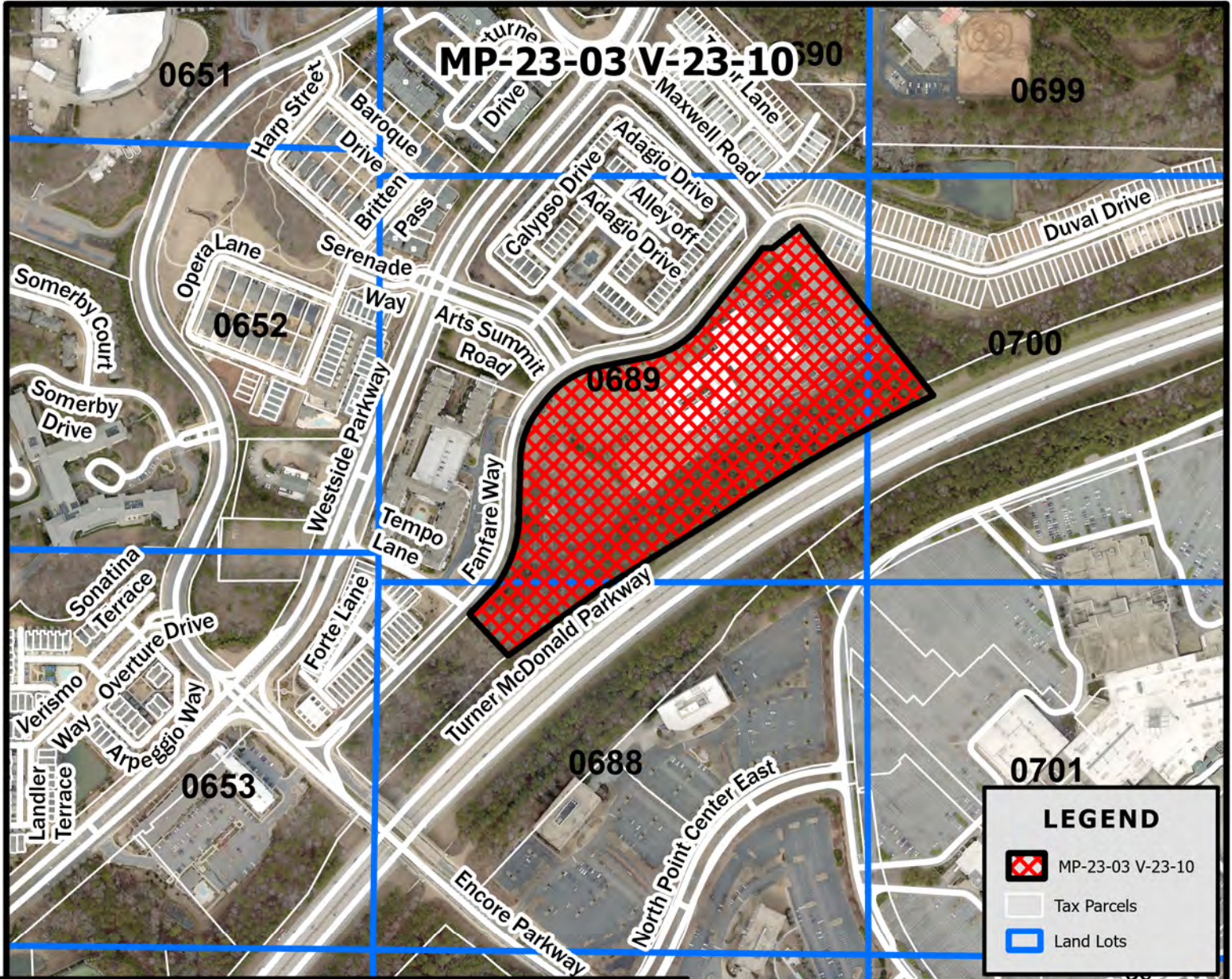
CITIZEN PARTICIPATION PLAN

The report submitted by the applicant states that property owners within 500' were contacted regarding the applicant's intent. The report states that one (1) comment was received from an adjacent resident asking about the tennis courts and requesting pedestrian lighting along Fanfare Way.

COMMUNITY ZONING INFORMATION MEETING

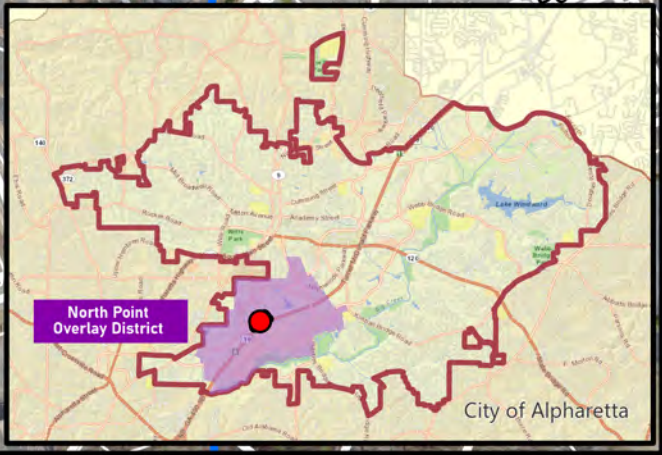
The CZIM was held on May 10, 2023. There were no public comments.

ATTACHMENTS:		
1.	• Aerial Map • Zoning Map • Future Land Use Map • Location Map • Lighting Plan • Traffic Study • CZIM Sign In Sheet • Citizen Part B • Application	



LEGEND

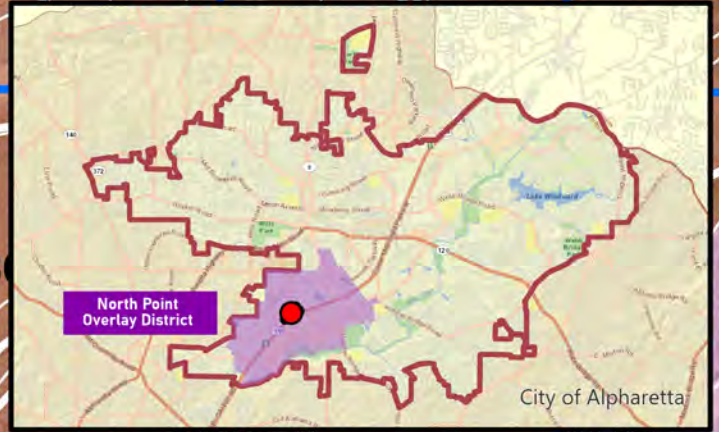
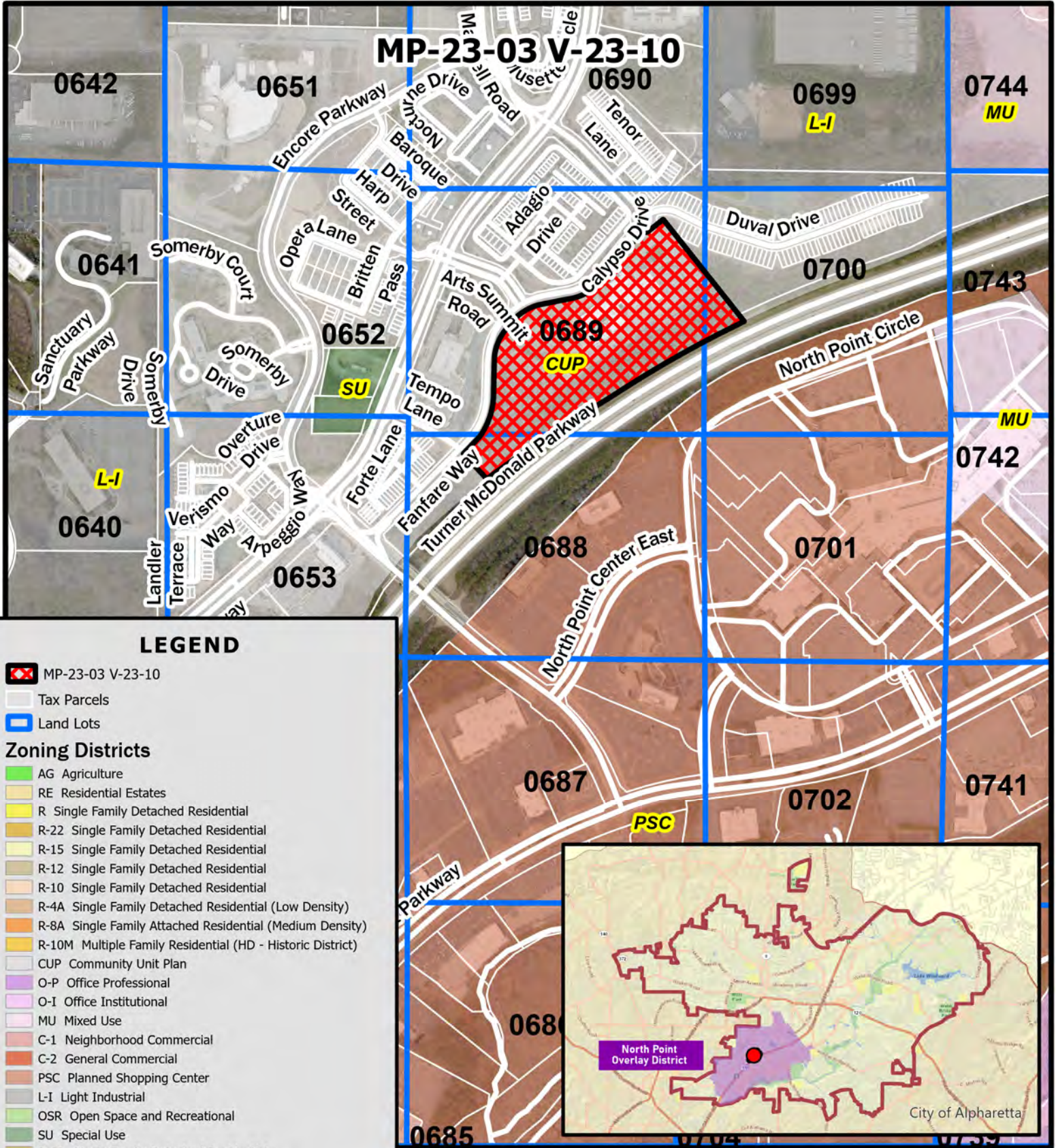
- MP-23-03 V-23-10
- Tax Parcels
- Land Lots



MP-23-03 V-23-10
D/LL: 1/2/688,
689, 700
PC: 6/01/23
CC: 6/26/23



Aerial Map
Fulton Science Academy
3035 Fanfare Way



MP-23-03 V-23-10

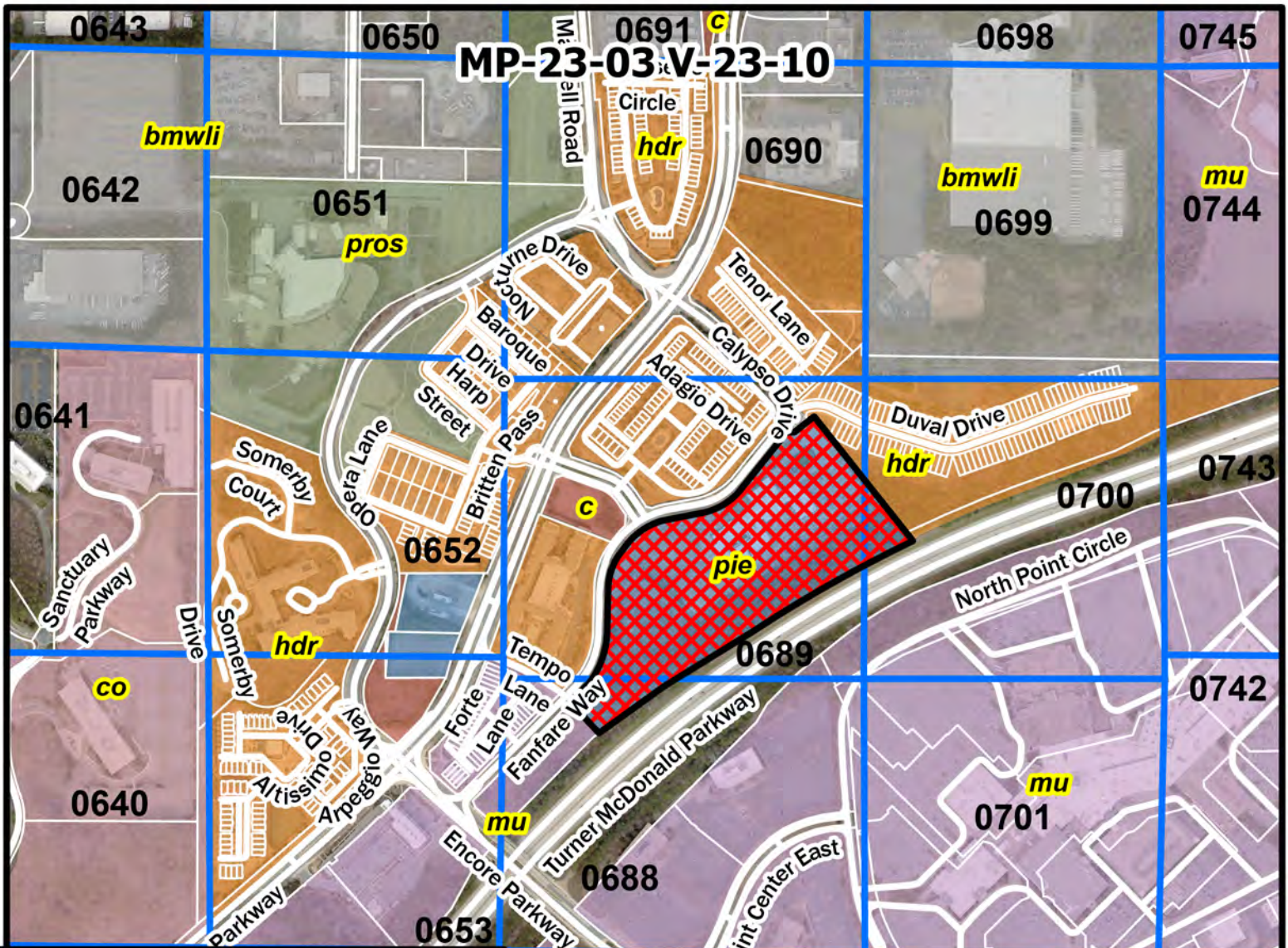
D/LL: 1/2/688,

689, 700

PC: 6/01/23

CC: 6/26/23

Zoning Map
Fulton Science Academy
3035 Fanfare Way



LEGEND

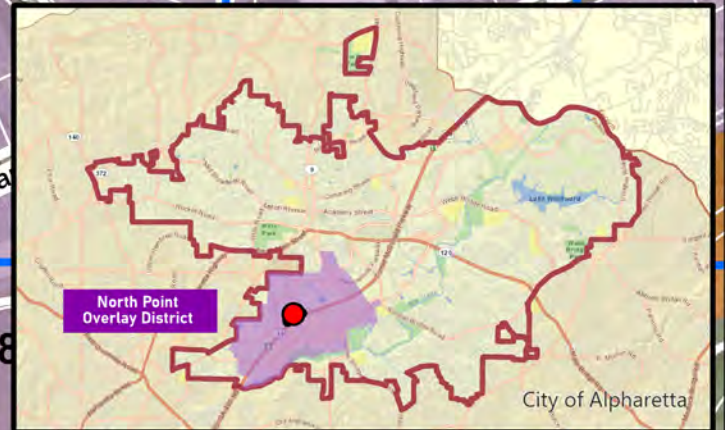
MP-23-03 V-23-10

Tax Parcels

Land Lots

2040 Future Land Use

- Business, Manufacturing, Warehousing, Light Industrial
- Central Business District
- Commercial
- Corporate Office
- Downtown Residential Density
- High Density Residential
- Low Density Residential
- Medium Density Residential
- Mixed Use
- Mixed Use Live Work
- Parks, Recreation, Open Space
- Professional Business Office
- Public, Institutional, Education
- Residential Estate
- Very Low Density Residential



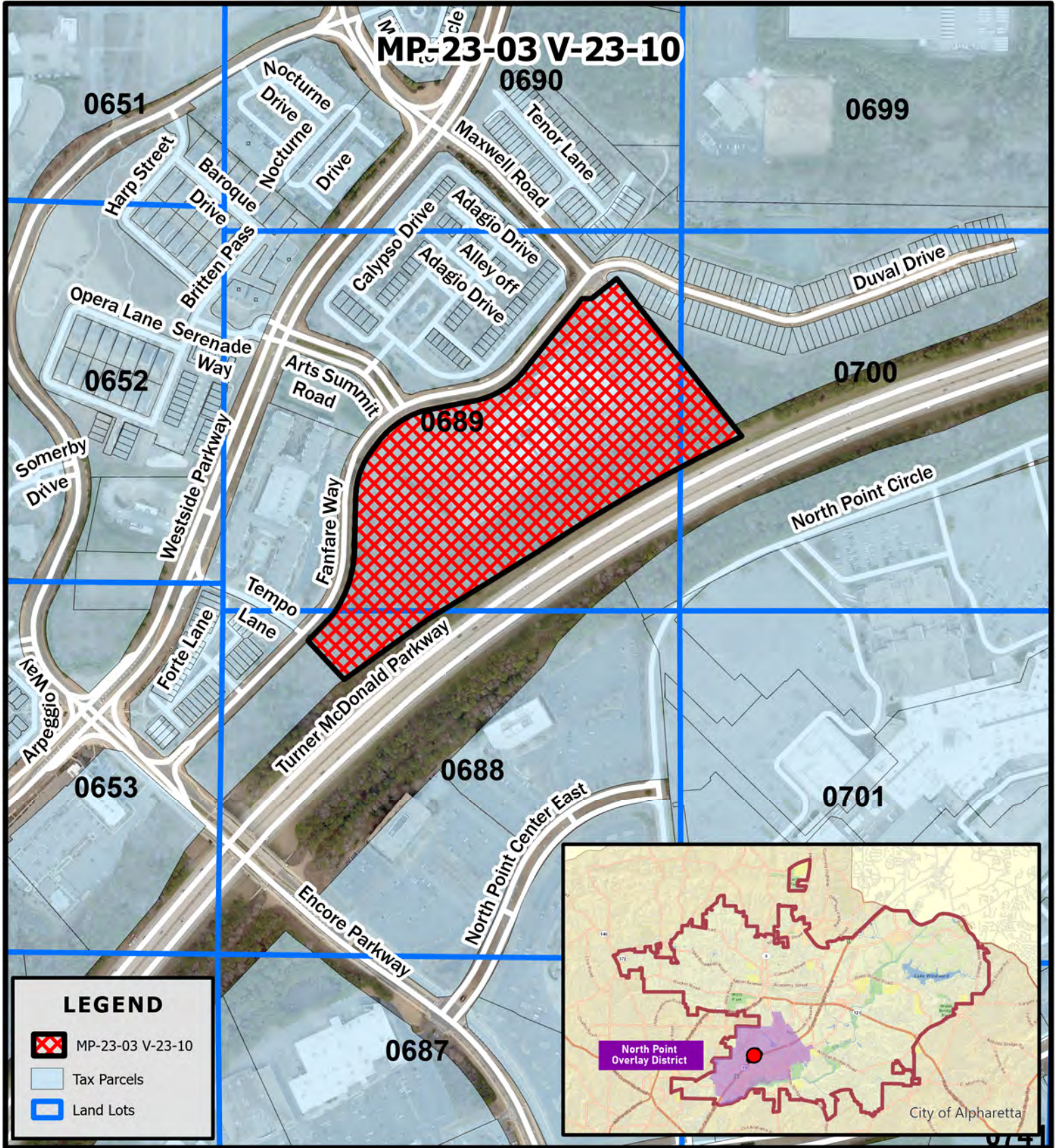
MP-23-03 V-23-10

D/LL: 1/2/688,

689, 700

PC: 6/01/23

CC: 6/26/23



MP-23-03 V-23-10

**D/LL: 1/2/688,
689, 700**

PC: 6/01/23

CC: 6/26/23

Mounting Height: GALN: 19'-0" above court
EPH: 40'-0" AFG

Berms: Blue: 24.11' AFG, Yellow: 20.41 ' AFG
Calculation Height: Spill Light/Street: 0'-0' AFG, Berm: 24.11' AFG (blue)

Luminaire Schedule								
Symbol	Qty	Tag	Label	Arrangement	LLF	Lum Lumens	Description	Total Watts
	4	2S	EPH -2S	SINGLE	0.900	90985	EPH-08-0640L-57-70-2S-HEG	2668
	4	3S	EPH -3S	SINGLE	0.900	89640	EPH-08-0640L-57-70-3S-HEG	2724
	14	4S	EPH -4S	SINGLE	0.900	89596	EPH-08-0640L-57-70-4S-HEG	9534
	6	2S-CV1	EPH-2S-CV1	Single	0.900	72684	EPH-LS-08-0640L-57-70-2S-CV1	4098
	2	3S-CV1	EPH-3S-CV1	Single	0.900	73139	EPH-LS-08-0640L-57-70-3S-CV1	1394
	6	A3	GALN-SA8D-T4FT-HSS	Single	0.900	44982	GALN-SA8D-750-U-T4FT-HSS	2958
	3	A2	GALN-SA8D-T4FT-HSS-2	Back-Back	0.900	44982	GALN-SA8D-750-U-T4FT-HSS-b2b	2958
	12	A1	GALN-SA9D-T4W-HSS	SINGLE	0.900	50733	GALN-SA9D-750-U-T4W-HSS	6624

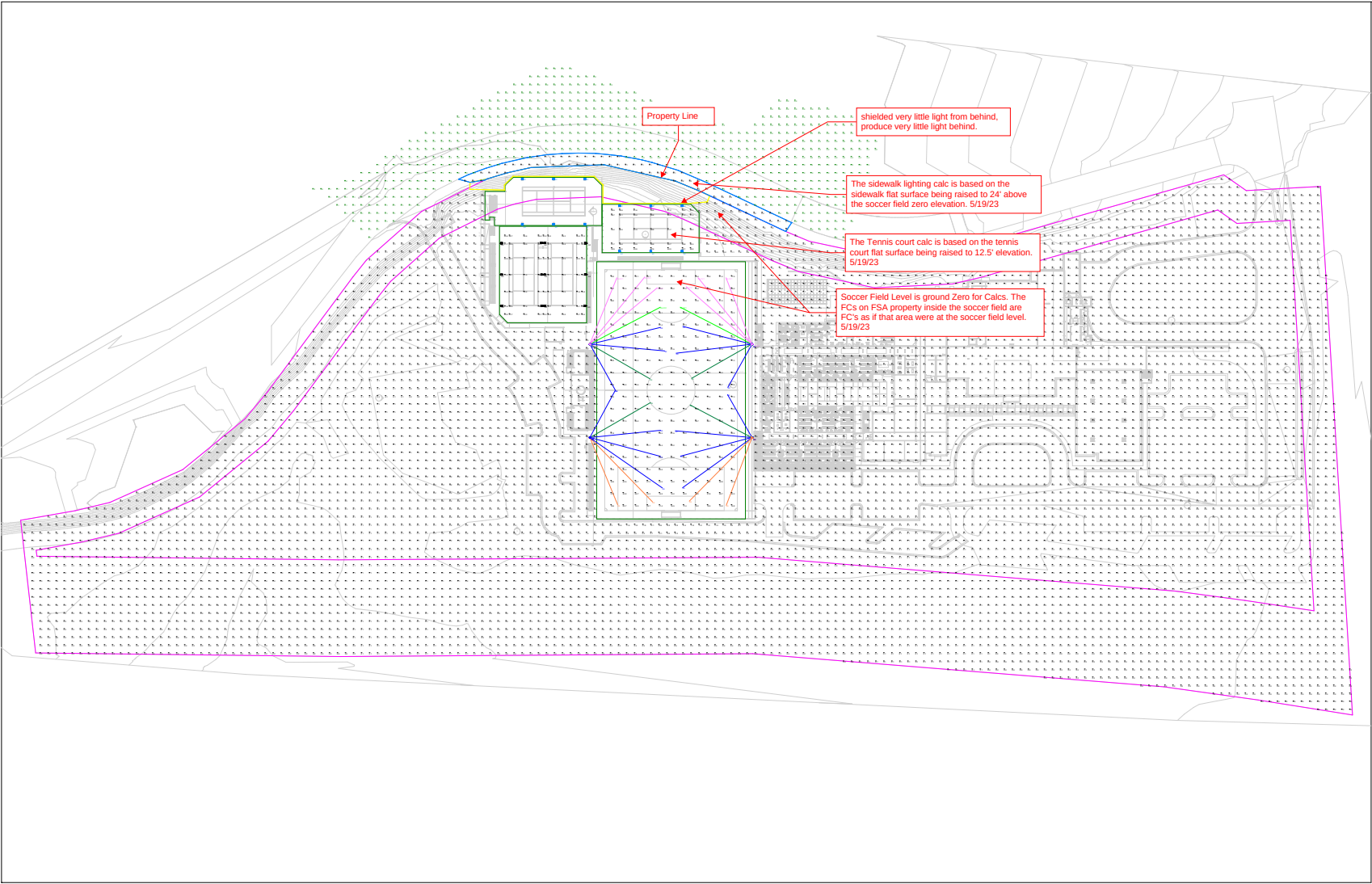
Calculation Summary									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
Blue Berm_Top	Illuminance	Fc	0.12	0.3	0.0	N.A.	N.A.	10	10
Double Tennis Courts_3FT APS	Illuminance	Fc	31.84	47.4	21.6	1.47	2.19	N.A.	N.A.
Single Court_3FT APS	Illuminance	Fc	33.49	44.7	21.3	1.57	2.10	N.A.	N.A.
Soccer_3FT APF	Illuminance	Fc	31.28	48.0	16.0	1.96	3.00	15	15
Spill Light Calcs	Illuminance	Fc	0.47	20.2	0.0	N.A.	N.A.	10	10
Street Plan North_Grade	Illuminance	Fc	0.03	0.6	0.0	N.A.	N.A.	10	10

The calculations provided in this report are predicted lighting levels based on the above described input data and characteristics. All information should be reviewed for accuracy, understanding and agreement with all information. Any discrepancies should be noted and the preparer of this report immediately advised to clarify or change as required.

Actual lighting levels may vary from this report due to a variety of circumstances, such as: reflectances, voltage variations, objects blocking or redirecting light, different mounting heights, installation, lamp and ballast tolerances, etc. Room is considered completely empty unless noted otherwise above. Unless specifically stated otherwise, predicted foot candles are not a recommendation of lighting levels.

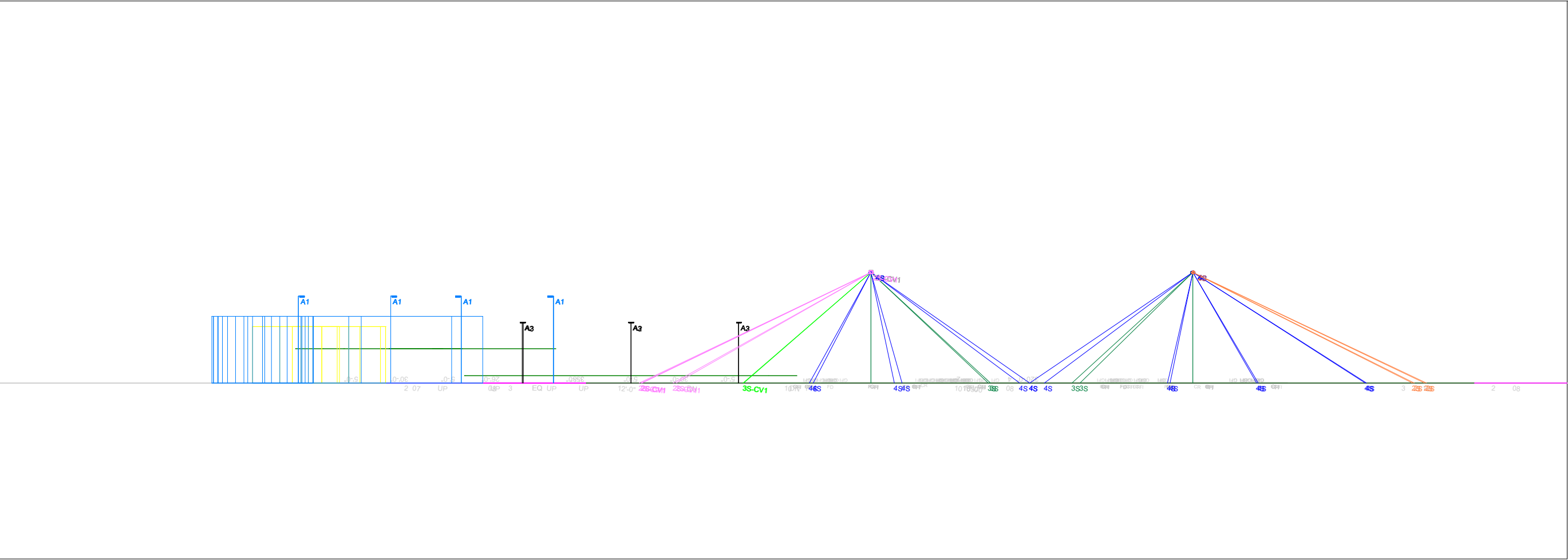
Ardd & Winter, Inc. assumes no responsibility for any such variances and will not be held responsible for lighting levels different from predicted levels in this report. Recipient of this report, or someone designated by recipient, must verify that lighting fixtures will physically fit within the specified location(s). Catalog numbers of lighting fixtures may not be complete as all conditions may not be known.

Where backgrounds are shown, these are typically used for reference purposes only, unless noted otherwise. Additional details available upon request.

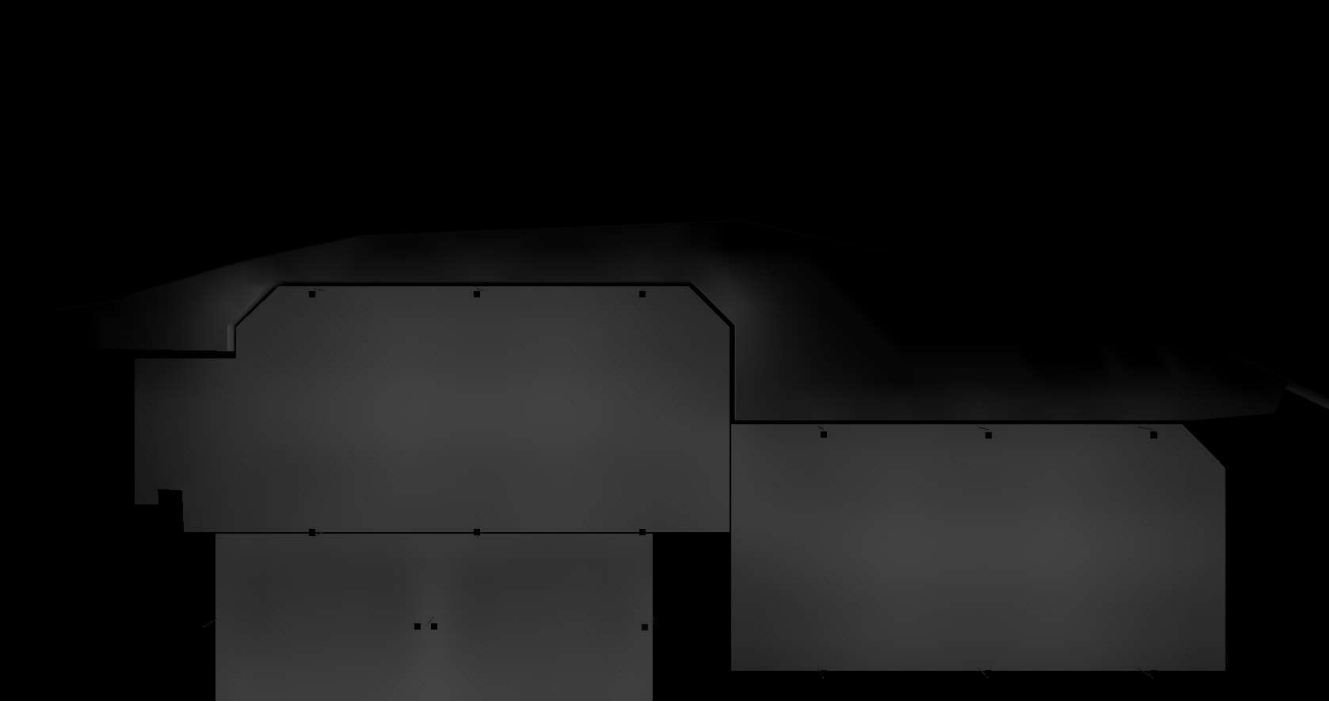
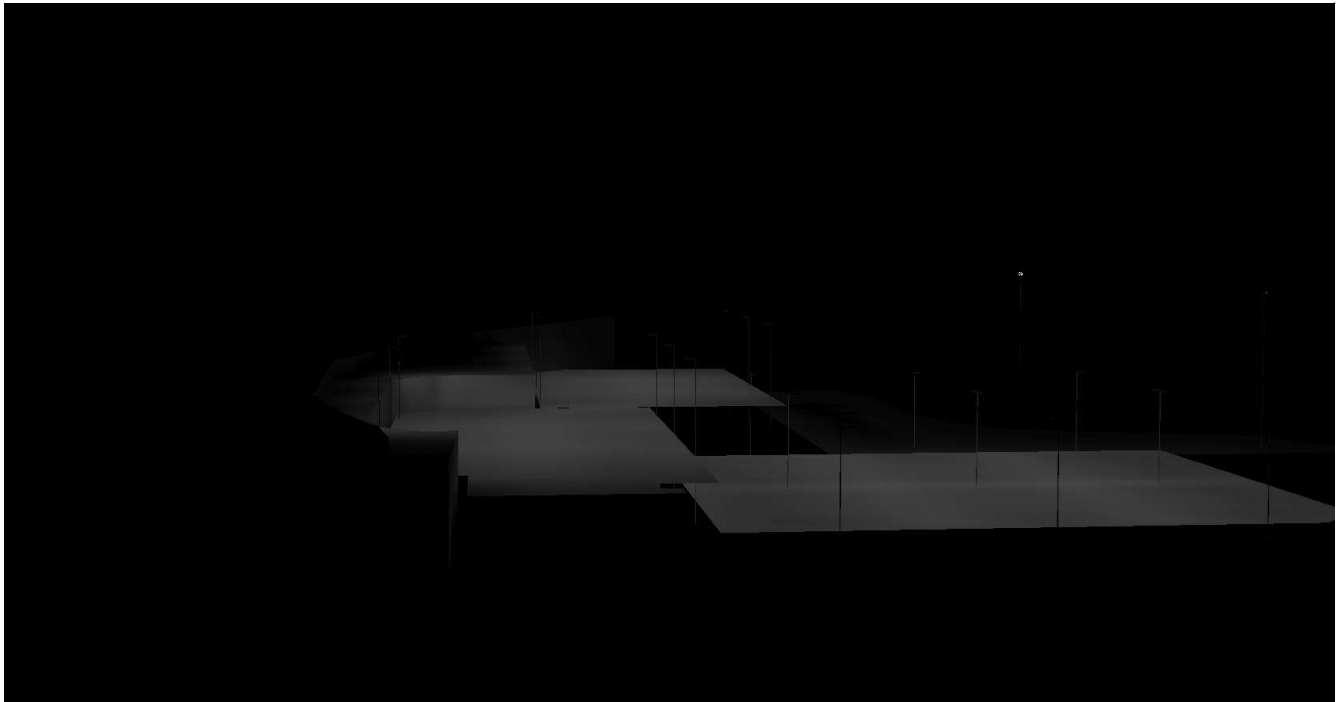


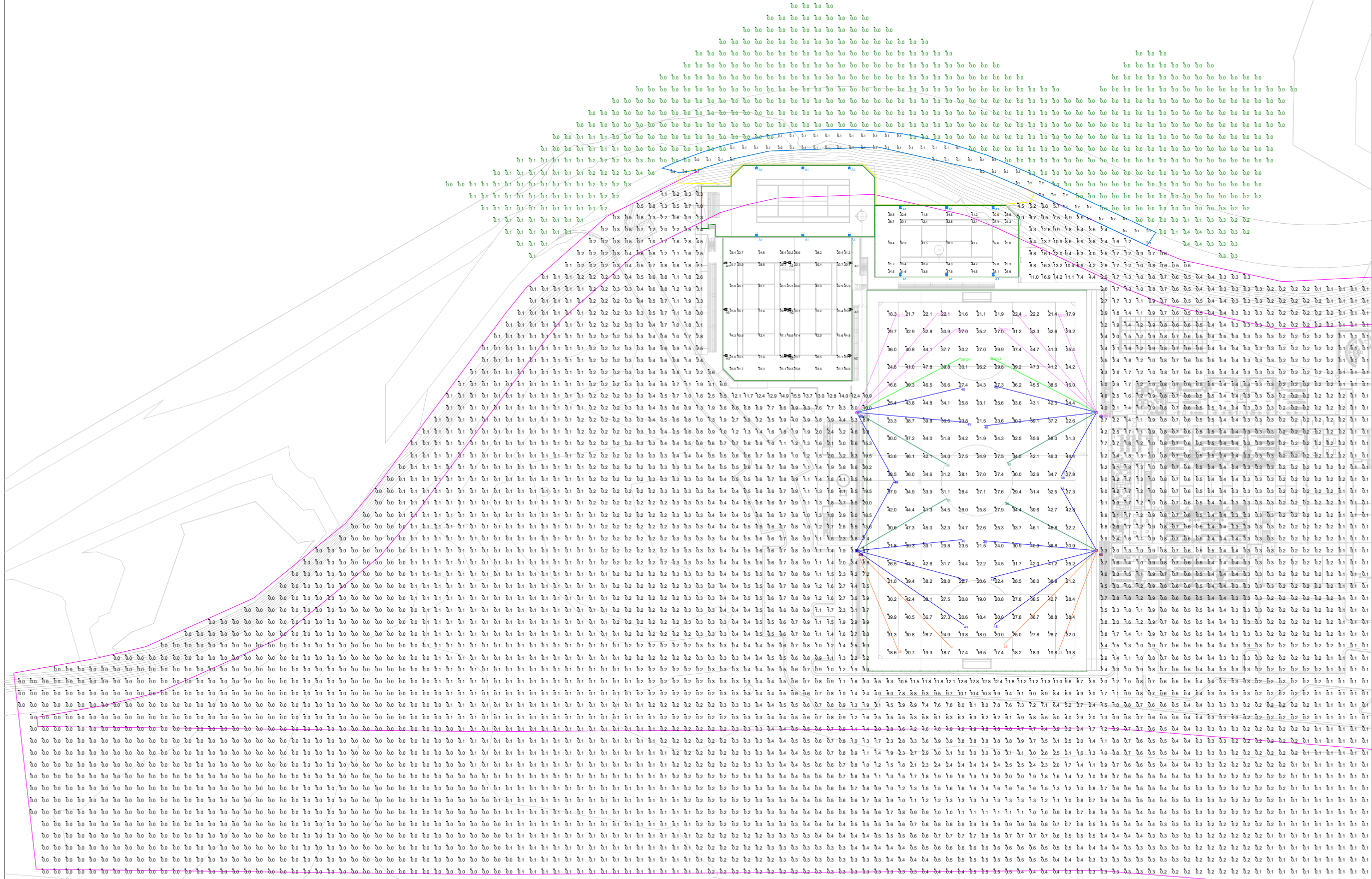
Calculations By: WES
Revised By:
Date:5/18/2023
Scale: Not to Scale

Project Name: FSA Phase 3 Tennis Courts and Soccer Field Spill Light
Revision: P5A



Elevation View - Looking plan east





See Page 1 for A+W Disclaimer.

Project Name: FSA Phase 3 Tennis Courts and Soccer Field Spill Light

Revision: P5A

Calculations By: WES

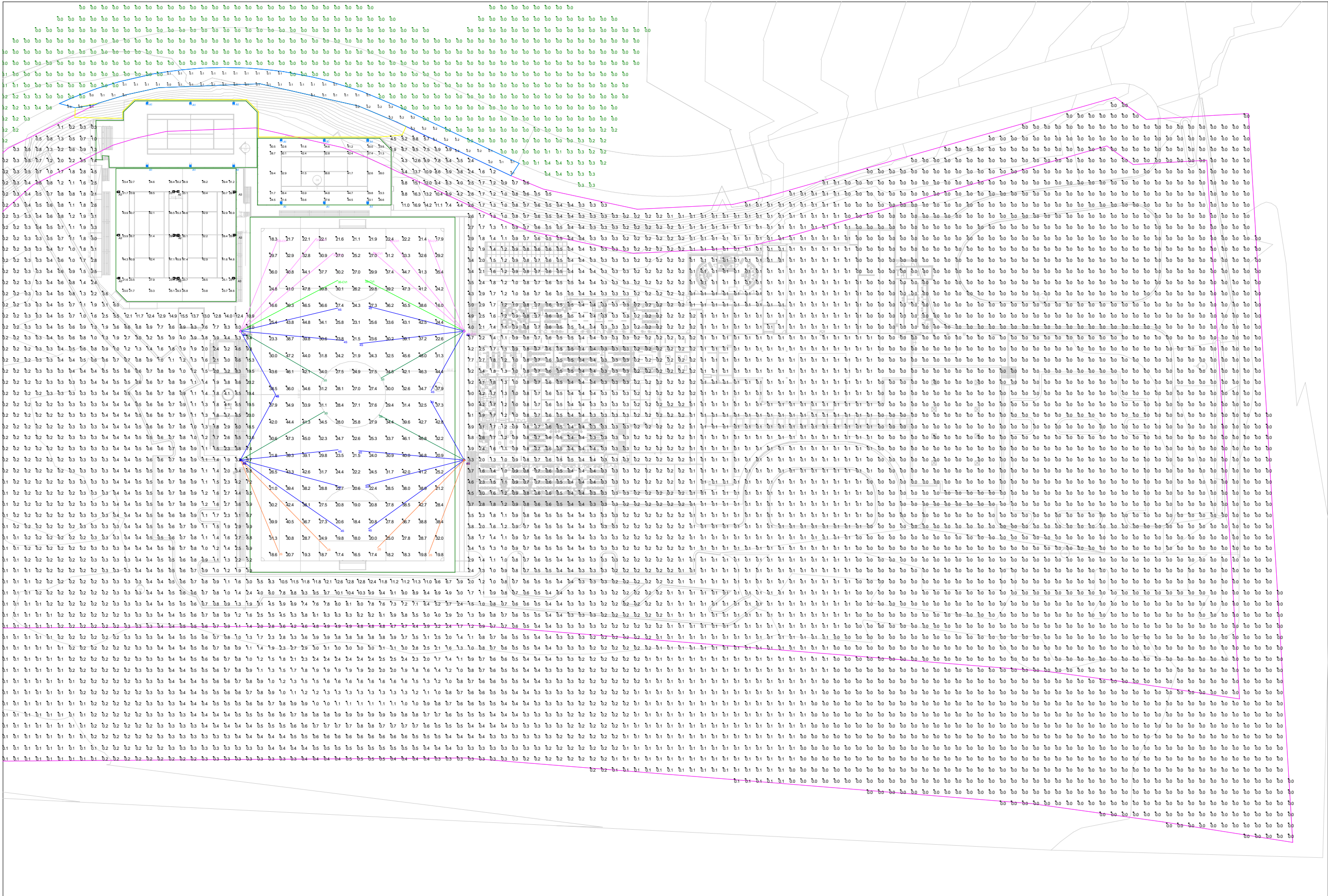
Revised By:

Date:5/18/2023

Scale: Not to Scale



Ardd + Winter
Lighting Manufacturer Representatives



See Page 1 for A+W Disclaimer.

Calculations By: WES
Revised By:
Date:5/18/2023
Scale: Not to Scale

Project Name: FSA Phase 3 Tennis Courts and Soccer Field Spill Light
Revision: P5A



**TRAFFIC IMPACT STUDY
FOR
FULTON SCIENCE ACADEMY EXPANSION

CITY OF ALPHARETTA, GEORGIA**



Prepared for:

***Fulton Science Academy Private School
3035 Fanfare Way
Alpharetta, GA 30009***

Prepared By:



A&R Engineering Inc.

2160 Kingston Court, Suite O
Marietta, GA 30067
Tel: (770) 690-9255 Fax: (770) 690-9210
www.areng.com

June 1, 2023
A & R Project # 23-034

TABLE OF CONTENTS

Item	Page
1.0 Introduction	1
2.0 Existing Facilities / Conditions	5
2.1 Roadway Facilities.....	5
2.1.1 Westside Parkway.....	5
2.1.2 Maxwell Road.....	5
2.1.3 Fanfare Way	5
2.1.4 Arts Summit	5
2.1.5 Duval Drive.....	5
3.0 Study Methodology	6
3.1 Unsignalized Intersections	6
3.2 Signalized Intersections	7
4.0 Existing 2023 Traffic Analysis.....	8
4.1 Existing Traffic Volumes	8
4.2 Existing Traffic Operations	11
5.0 Proposed Development.....	12
5.1 Trip Generation	14
6.0 Future 2025 Traffic Analysis	16
6.1 Future “No-Build” Conditions	16
6.1.1 Annual Traffic Growth.....	16
6.2 Future “Build” Conditions	16
6.3 Auxiliary Lane Analysis	20
6.3.1 Left Turn Lane Analysis	20
6.3.2 Deceleration Turn Lane Analysis.....	21
6.4 Future Traffic Operations.....	22
7.0 Conclusions and Recommendations.....	24
7.1 Recommendations for Site Access Configuration.....	25
Appendix	

LIST OF TABLES

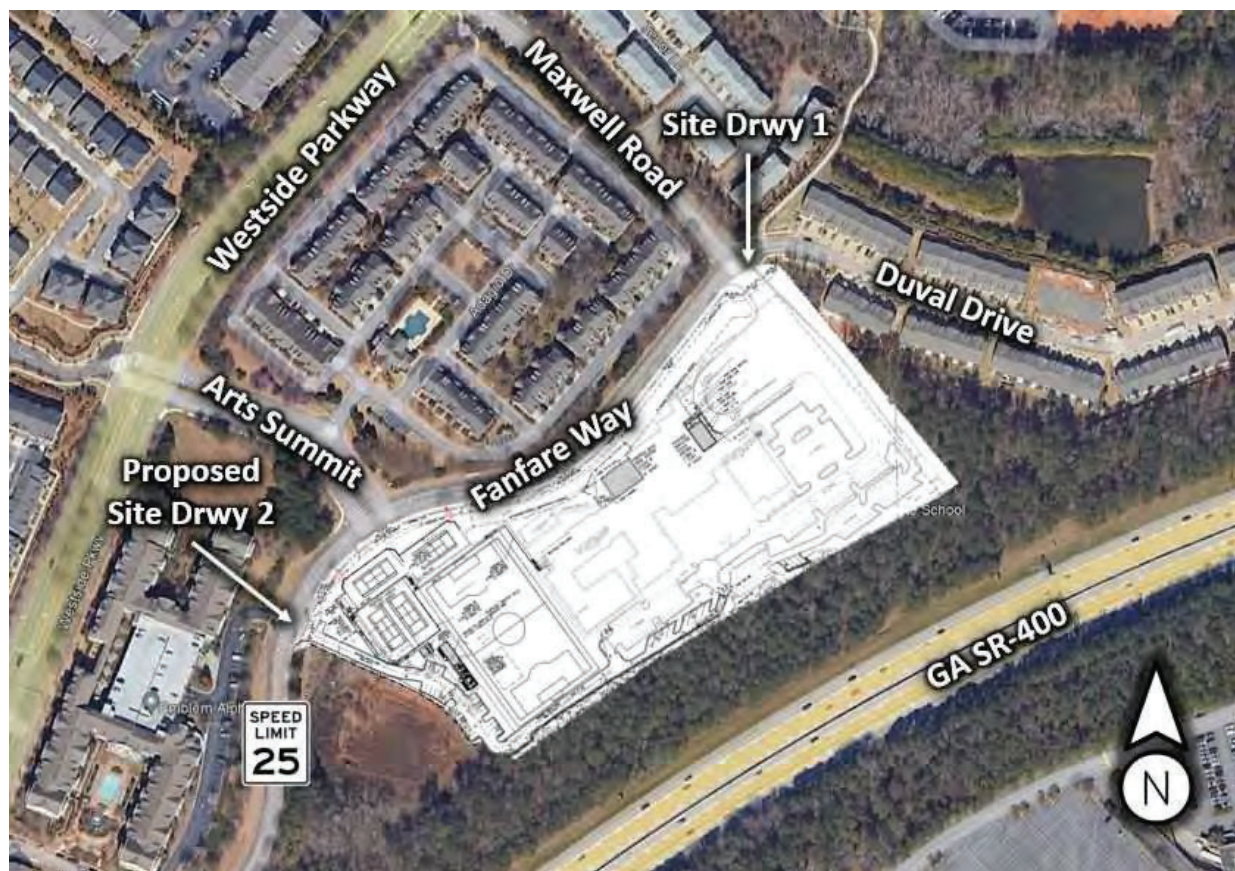
Item	Page
Table 1 – Level-of-service Criteria for Unsignalized Intersections.....	6
Table 2 – Level-of-service Criteria for Signalized Intersections	7
Table 3 – Existing Intersection Operations	11
Table 4 – Trip Generation	14
Table 5 - GDOT Requirements for Left Turn Lanes	20
Table 6 – GDOT Requirements for Deceleration Lanes	21
Table 7 – Future Intersection Operations.....	22

LIST OF FIGURES

Item	Page
Figure 1 – Location Map.....	4
Figure 2 – Existing Weekday Peak Hour Volumes.....	9
Figure 3 – Existing Traffic Control and Lane Geometry	10
Figure 4 – Site Plan.....	13
Figure 5 – Shifted Site Generated Peak Hour Volumes	15
Figure 6 – Future (No-Build) Peak Hour Volumes.....	17
Figure 7 – Removed Existing Traffic Volumes	18
Figure 8 – Future (Build) Peak Hour Volumes.....	19
Figure 9 – Future Traffic Control and Lane Geometry	23

1.0 INTRODUCTION

The purpose of this study is to determine the traffic impact from the planned expansion project for Fulton Science Academy, which is located east of Fanfare Way in Alpharetta, Georgia. The traffic analysis evaluates the current operations and future conditions with the traffic generated by the development.



Fulton Science Academy is a pre-k - 12th grade private school that is planned to undergo a series of improvements to the existing building and surrounding property. The improvements will consist of the addition of a few rooms to the school building, such as an innovation center room and a music room (no classrooms will be added to increase student capacity). Additionally, the project will also consist of a parking lot expansion to allow for 47 more parking spaces, the construction of a new soccer field and four tennis courts on the west side of the property, and the addition of a second access point via a new southern site driveway. This new site driveway will alleviate part of the school peak hour traffic that currently uses the only available entrance on Maxwell Road (Site Driveway 1). The southern site driveway will be made available for high school arrival and dismissal traffic, with the high school enrollment comprising approximately 25% of the overall enrollment of 935 students.

Upon completion of the expansion project, the school will provide access at the following locations:

- Site Driveway 1 (Existing Entrance): Full access northern driveway that consists of the eastern end of Maxwell Drive beyond its intersection with Fanfare Way / Duval Drive
- Site Driveway 2: Proposed full access driveway on Fanfare Way aligned with the Eastern Right-In/Right-Out Driveway to the Emblem Alpharetta residential development

The AM, Afternoon Dismissal, and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

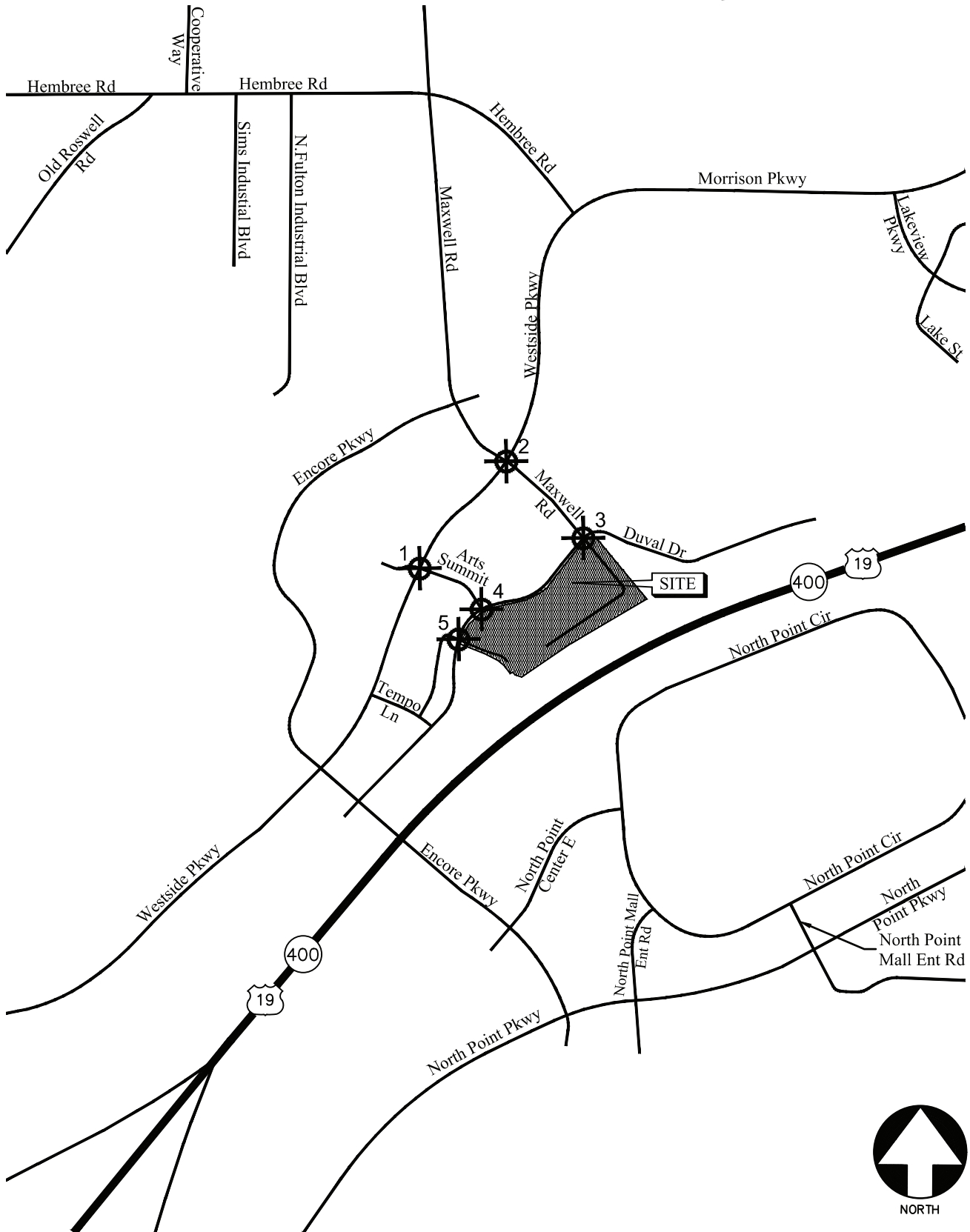
- Westside Parkway at Arts Summit
- Westside Parkway at Maxwell Road
- Maxwell Road at Fanfare Way / Duval Drive
- Fanfare Way at Arts Summit

Note: Although the soccer field and four tennis courts are expected to hold sporting events and tournaments on weekdays and possibly weekends, the potential added traffic from these facilities were not analyzed for the following reasons:

- 1) Fulton Science Academy is a private school and will not offer regular access to the sports facilities to those who are not enrolled students throughout most of the day. Therefore, the majority of those who use these facilities on a consistent basis will be students already on campus who will not be counted as “added trips” to or from the school. However, some students that would otherwise be leaving the school during the dismissal/PM peak hours will now be staying longer to participate in these events. Therefore, it can be assumed that a significant volume of the entering/exiting traffic at the school when these events occur in the afternoon will be offset by the reduction of students being picked up/leaving the school, as many of these same students will stay to take part in these events on the tennis courts/soccer fields.
- 2) The primary exception for when other families or students from outside the school will ever use these facilities will be when Fulton Science Academy hosts scheduled games on either the tennis courts or soccer fields. Any tournaments scheduled to be held at the school will be limited to four tennis matches and/or one soccer game at a time. These events will not occur on a consistent schedule and will likely be held either during the PM peak hour or later in the evening when traffic in the area/from the school has died down. However, due to the dismissal schedule of Fulton Science Academy, more students are let out from 3-4 PM (dismissal peak hour) than during the PM peak hour of 4-5 PM, as shown in Figure 2 on page 9. Therefore, if the traffic operations in the study area around the school operate acceptably during the dismissal peak hour with the added driveway, then the same can be expected for traffic operations during times when events occur during the PM peak hour.
- 3) There are no reliable ITE Land Use categories to use for estimating trip generation by private soccer complex/tennis court facilities. The data collected for ITE trip generation in these categories tend to be collected at public facilities that are open to both children and adults throughout the day, which does not match the circumstances of this planned private school redevelopment.

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding roadway network are shown in Figure 1.

 Study Intersection



LOCATION MAP

FIGURE 1
A&R Engineering Inc.

2.0 EXISTING FACILITIES / CONDITIONS

2.1 Roadway Facilities

The following is a brief description of each of the roadway facilities located in proximity to the site:

2.1.1 *Westside Parkway*

Westside Parkway is a north-south, four-lane, median-divided roadway with a posted speed limit of 40 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 121-0938) indicate that the daily traffic volume on Westside Parkway in 2021 was 9,920 vehicles per day north of Encore Parkway. GDOT classifies Westside Parkway as an urban minor arterial roadway.

2.1.2 *Maxwell Road*

Maxwell Road is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site. Maxwell Road currently serves as the only access point for Fulton Science Academy to the east of Fanfare Way / Duval Drive.

2.1.3 *Fanfare Way*

Fanfare Way is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.4 *Arts Summit*

Arts Summit is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.5 *Duval Drive*

Duval Drive is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

3.1 Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designated as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long total delays.

TABLE 1 — LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS		
Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

3.2 Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio of greater than 1.0 for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersection.

TABLE 2 — LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS		
Control Delay (sec/vehicle) *	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6th edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favorable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual *cycle failures* (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

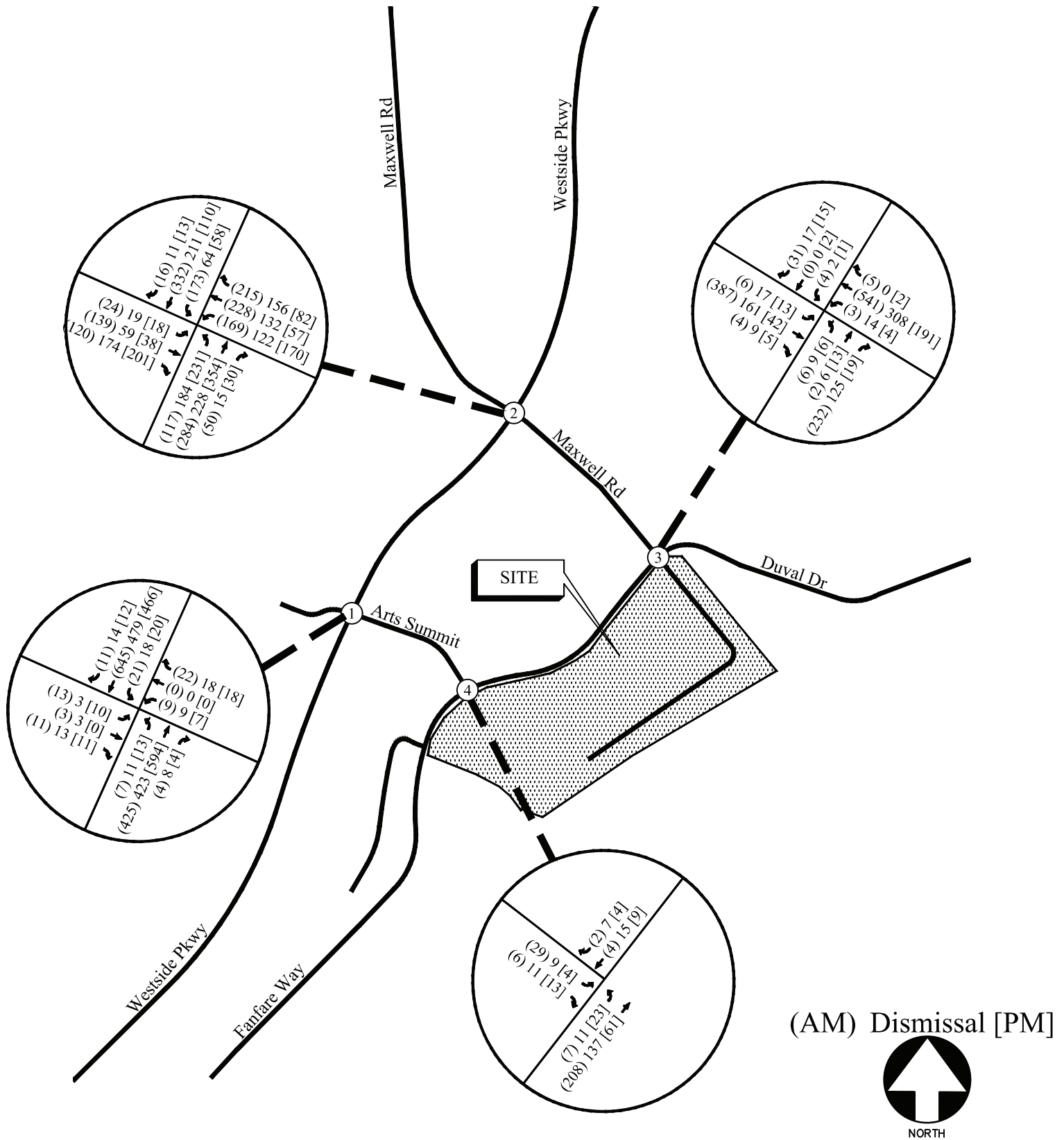
4.0 EXISTING 2023 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

- Westside Parkway at Arts Summit
- Westside Parkway at Maxwell Road
- Maxwell Road at Fanfare Way / Duval Drive
- Fanfare Way at Arts Summit

Turning movement counts were collected on Tuesday, April 25, 2023. All turning movement counts were recorded during the AM, School Dismissal and PM peak hours between 7:00 am to 9:00 am, 2:00 am to 4:00 pm, and 4:00 pm to 6:00 pm, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.

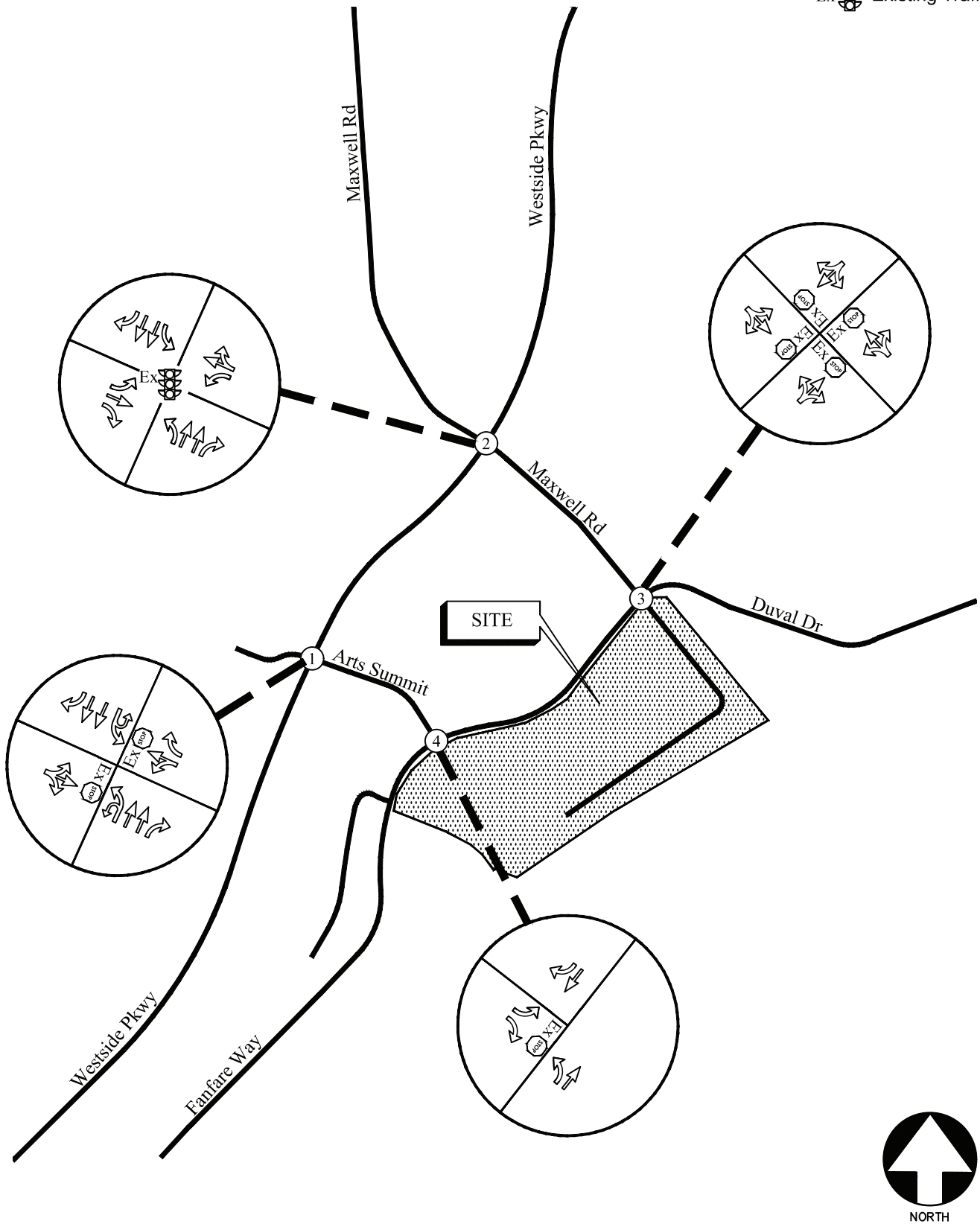


EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2
A&R Engineering Inc.

LEGEND

- Ex  Existing Signed Approach
-  Existing Lane Geometry
- Ex  Existing Traffic Signal



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3
A&R Engineering Inc.

4.2 Existing Traffic Operations

Existing 2023 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analysis are shown in Table 3.

TABLE 3 — EXISTING INTERSECTION OPERATIONS					
Intersection		Traffic Control	LOS (Delay)		
			AM Peak Hour	Dismissal	PM Peak Hour
1	<u>Westside Parkway @ Arts Summit</u>	Stop Controlled on EB and WB Approaches			
	-Eastbound Approach		C (19.1)	B (14.2)	C (16.4)
	-Westbound Approach		B (12.7)	B (13.3)	B (14.5)
	-Northbound Left		A (9.0)	A (8.6)	A (8.5)
	-Southbound Left		A (8.3)	A (8.4)	A (9.0)
2	<u>Westside Parkway @ Maxwell Road</u>	Signalized	<u>C (31.3)</u>	<u>C (27.4)</u>	<u>C (22.8)</u>
	-Eastbound Approach		D (36.8)	D (44.2)	E (56.8)
	-Westbound Approach		D (45.6)	D (48.1)	D (50.2)
	-Northbound Approach		C (21.7)	B (12.6)	A (9.2)
	-Southbound Approach		C (20.6)	B (14.7)	B (10.5)
3	<u>Maxwell Road / Site Driveway @ Fanfare Way / Duval Drive</u>	All-Way Stop Controlled	<u>F (144.1)</u>	<u>B (11.0)</u>	<u>B (12.0)</u>
	-Eastbound Approach		F (87.6)	A (10.0)	A (9.0)
	-Westbound Approach		F (245.4)	B (12.4)	B (13.8)
	-Northbound Approach		C (24.9)	A (9.4)	A (9.0)
	-Southbound Approach		B (13.9)	A (8.4)	A (8.4)
4	<u>Fanfare Way @Arts Summit</u>	Stop Controlled on EB Approach			
	-Eastbound Approach		B (11.1)	A (9.1)	A (8.8)
	-Northbound Left		A (7.3)	A (7.3)	A (7.3)

The results of the existing traffic operations analysis indicate that the signalized intersection of Westside Parkway at Maxwell Road is operating at an overall level of service “C” during the AM, School Dismissal, and PM peak hours. Most of the stop-controlled approaches at the unsignalized study intersections are operating at a level of service “C” or better during all peak hours, except for the eastbound and westbound approaches at the intersection of Maxwell Road at Fanfare Way / Duval Drive, which are operating at a level of service “F” in the AM peak hour. These approaches are primarily used by traffic entering and exiting Fulton Science Academy, with the proposed future western site driveway being intended to alleviate the high traffic volumes that currently rely on this single access point.

5.0 PROPOSED DEVELOPMENT

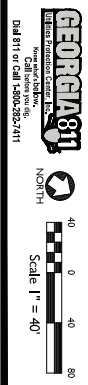
Fulton Science Academy is a pre-k - 12th grade private school that is planned to undergo a series of improvements to the existing building and surrounding property. The improvements will consist of the addition of a few rooms to the school building, such as an innovation center room and a music room (no classrooms will be added to increase student capacity). Additionally, the project will also consist of a parking lot expansion to allow for 47 more parking spaces, the construction of a new soccer field and four tennis courts on the west side of the property, and the addition of a second access point via a new southern site driveway. This new site driveway will alleviate part of the school peak hour traffic that currently uses the only available entrance on Maxwell Road (Site Driveway 1). The southern site driveway will be made available for high school arrival and dismissal traffic, with the high school enrollment comprising approximately 25% of the overall enrollment of 935 students.



Upon completion of the expansion project, the school will provide access at the following locations:

- Site Driveway 1 (Existing Entrance): Full access northern driveway that consists of the eastern end of Maxwell Drive beyond its intersection with Fanfare Way / Duval Drive
- Site Driveway 2: Proposed full access southern driveway on Fanfare Way aligned with the Eastern Right-In/Right-Out Driveway to the Emblem Alpharetta residential development

A site plan is shown in Figure 4.



5.1 Trip Generation

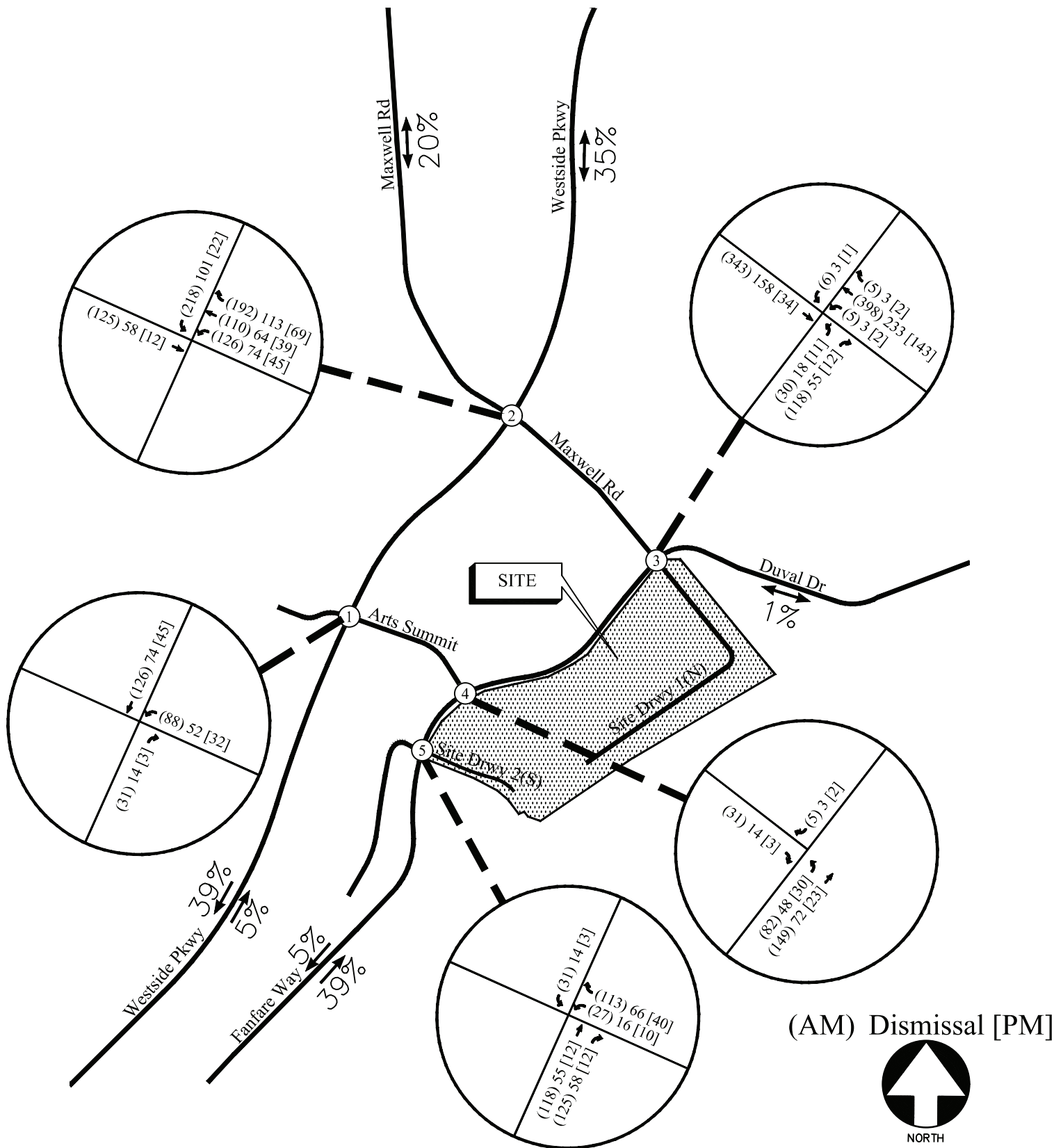
Data collected from counts at the site driveway was used to estimate the trip generation for this project. The school access point (Maxwell Road/Site Driveway) serves as the westbound approach to the intersection of Maxwell Road at Fanfare Way / Duval Drive. Eastbound through traffic was added to southbound left and northbound right turning movements to determine the peak hour volumes for entering traffic, while the counted westbound traffic indicated the volumes of peak hour exiting traffic. The calculated total trip generation for the Fulton Science Academy is shown in Table 4.

TABLE 4 – TRIP GENERATION										
Land Use	Size	AM Peak Hour			Dismissal Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Private School (K-12)	935 Students	623	549	1,172	288	322	610	62	197	259

To conduct an auxiliary lane analysis at the proposed future western site driveway, the 24-hour 2-way traffic volume for the school was estimated per ITE trip generation manual (11th edition) methodology for the land use category 532 – *Private School (K-12)*. According to ITE estimations, the overall combined entering and existing volume for site traffic is 2,319 vehicles per weekday.

Due to the planned addition of a new southern site driveway to provide sperate access for high school traffic, a part of the existing traffic volumes was shifted to the new driveway for the future build conditions analysis. This was done by analyzing the existing traffic volumes and their turning movements to estimate the existing site-generated traffic distribution, then altering these volumes based on the assumed future site traffic distribution (Figure 5) that will be affected by the second site driveway addition. These distribution values were based on a review of the existing travel patterns in the area and the locations of major roadways and highways located in the vicinity of the school.

An example of how site traffic was shifted for the future conditions can be observed at intersection 4 (Fanfare Way at Arts Summit). Based on the heavy peak hour northbound traffic at this intersection (particularly during the AM peak), it is evident that significant volumes enter Fanfare Way at the right-in/right-out only entrance from the south on Encore Parkway. As all this traffic would be approaching the site from the southeast Alpharetta/Johns Creek area, travelling back in the opposite direction on Fanfare Way would not be a practical route to take, as these drivers would be made to travel north on Encore Parkway instead of south. Instead, travelling east on either Arts Summit or Maxwell Road would allow exiting traffic to turn left on Westside Parkway to travel south before turning left again at Encore Parkway to travel east. This explains why the existing counts indicate the significant discrepancy between northbound and southbound traffic on Fanfare Way at intersection 4, and this is also the reason why far more shifted future “Build” condition traffic was projected to turn right on Fanfare Way to travel north rather than go to back south to the right-in/right-out driveway. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution.



SHIFTED SITE-GENERATED PEAK HOUR VOLUMES

FIGURE 5
A&R Engineering Inc.

6.0 FUTURE 2025 TRAFFIC ANALYSIS

The future 2025 traffic operations are analyzed for the “Build” and “No-Build” conditions.

6.1 Future “No-Build” Conditions

The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future “No-Build” volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of through traffic.

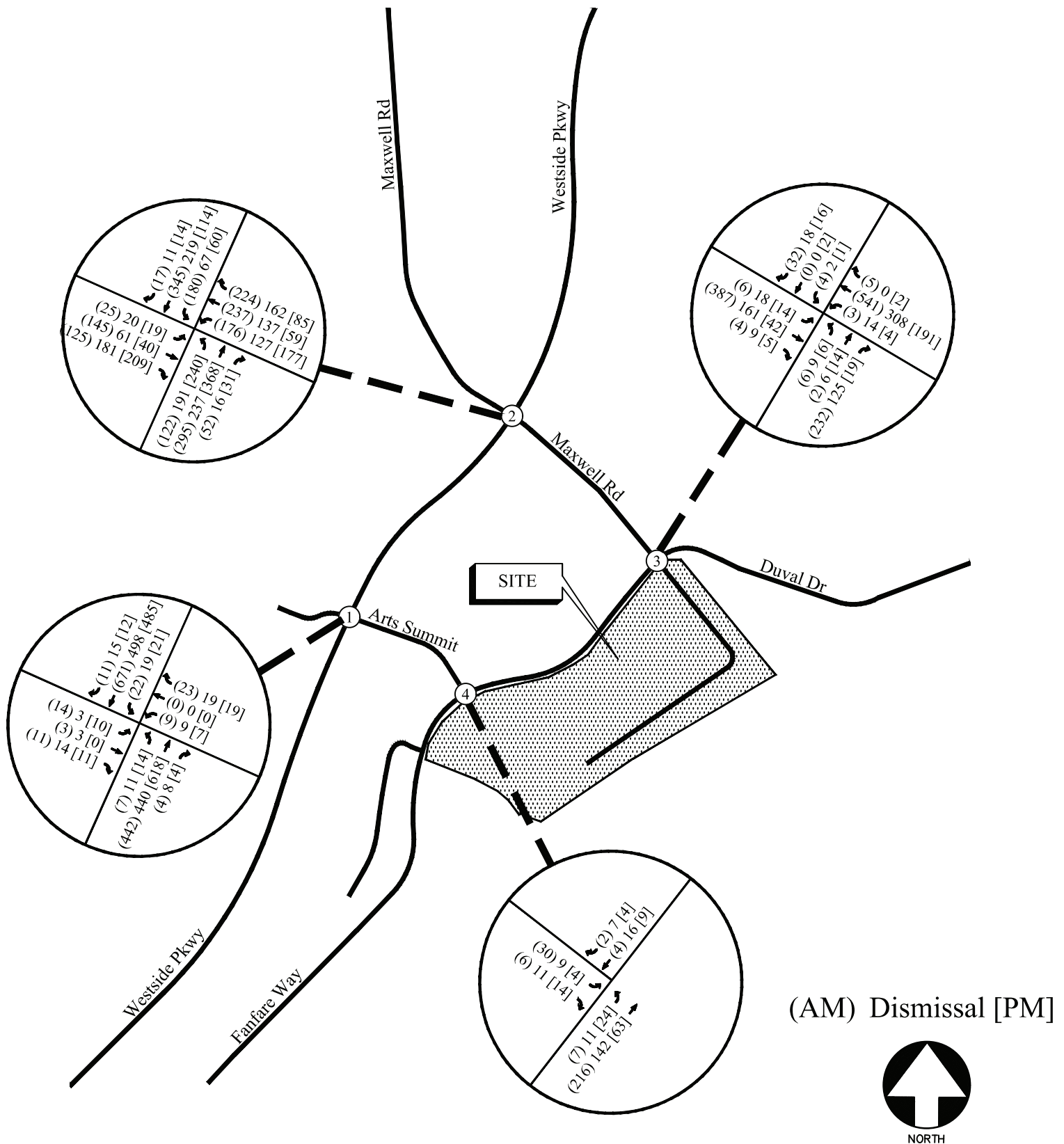
6.1.1 Annual Traffic Growth

To evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last three years revealed growth of approximately 2% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future “No-Build” volumes on the roadway are shown in Figure 6.

6.2 Future “Build” Conditions

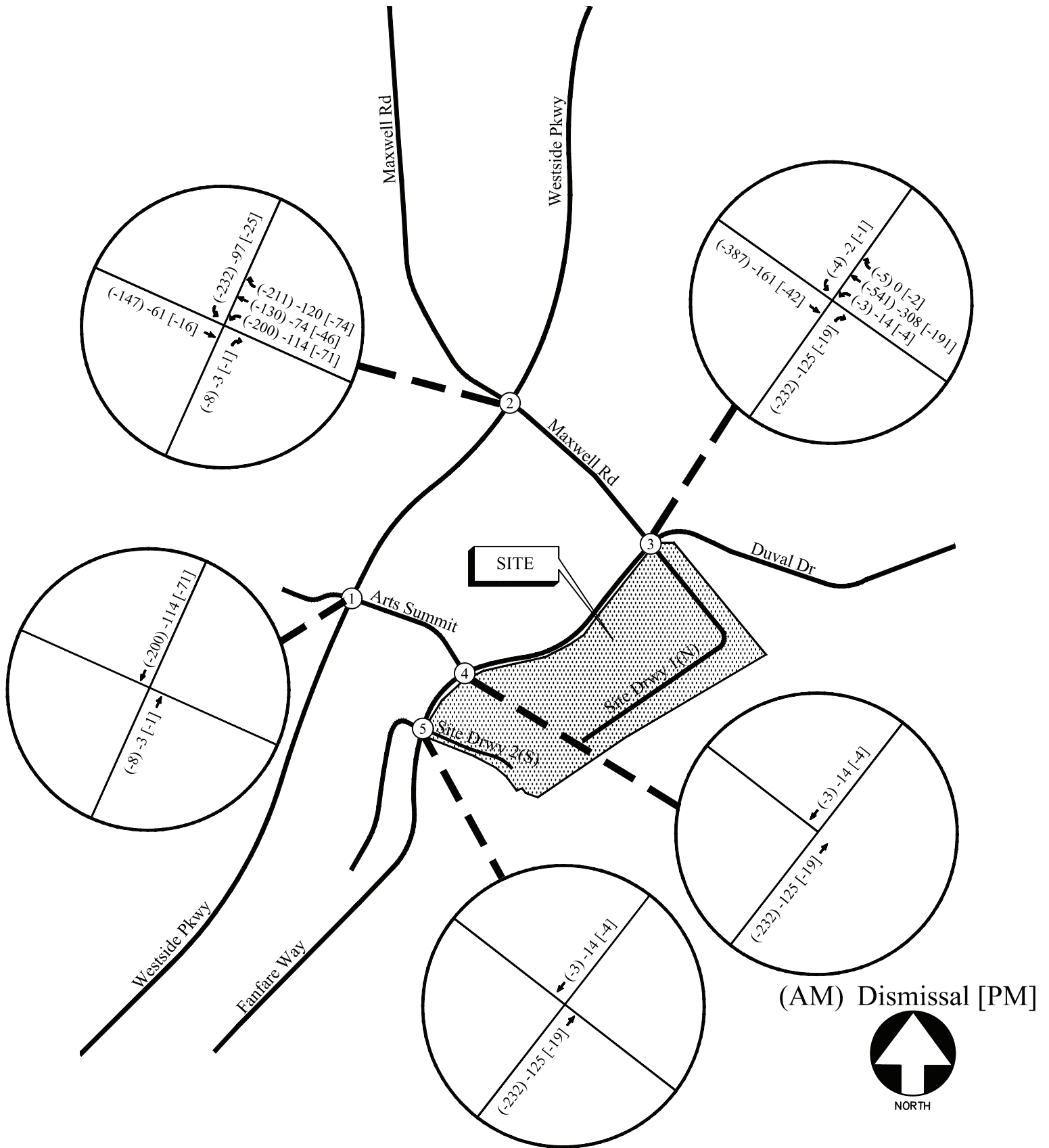
The “Build” or development conditions include the estimated background traffic from the “No-Build” conditions plus the added traffic from the proposed development and removed existing traffic volumes at the site driveways. To evaluate future traffic operations in this area, the shifted traffic volumes (Figure 5) and removed traffic volumes (Figure 7) were added to base traffic volumes (Figure 6) to calculate the future traffic volumes after the expansion of the development. These total future “Build” traffic volumes are shown in Figure 8.

The future “Build” conditions volumes do not only show how the main site driveway traffic at intersection 3 has been affected, but it also shows how the traffic volume at the adjacent intersections have been altered. For example, it had been assumed that most of the southbound traffic volumes at intersection 4 will now prefer to travel east on either Arts Summit or Maxwell Road to avoid the increased traffic to the south generated by the added second driveway. However, some additional traffic volumes exiting site driveway 2 are projected to turn left and travel south on Fanfare Way if they intend to travel west on Encore Parkway, due to their proximity to the right-in/right-out intersection to the south. However, since greater traffic volumes are projected either intend to travel north on Westside Parkway or east on Encore Parkway, most of the exiting traffic at site driveway 2 is shown to turn right to travel north instead.



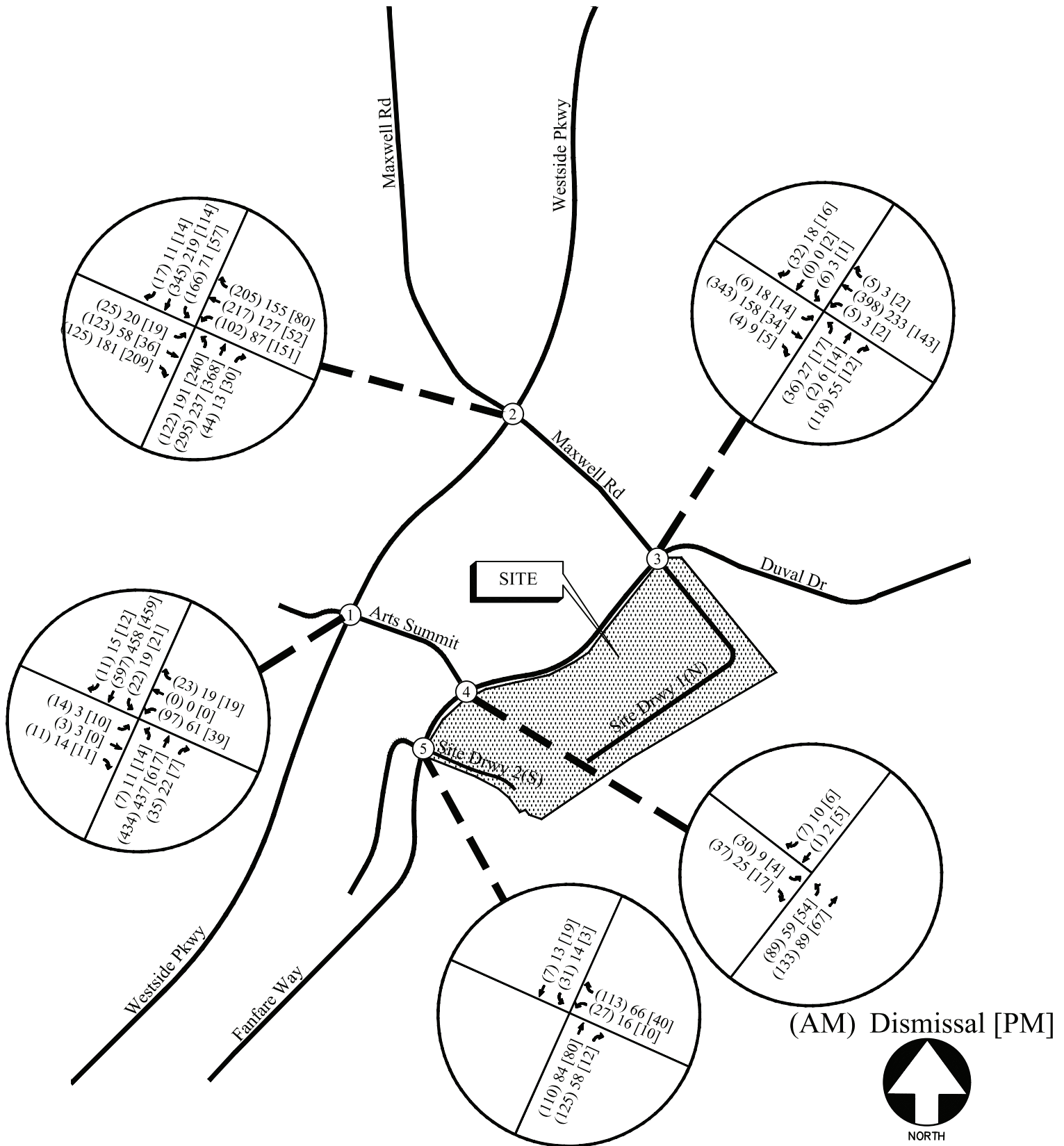
FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 6
A&R Engineering Inc.



REMOVED EXISTING SITE-GENERATED TRIPS

FIGURE 7
A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 8
A&R Engineering Inc.

6.3 Auxiliary Lane Analysis

Included below are analyses for a left turn lane and a right turn lane for the proposed southern site driveway (site driveway 2) per GDOT standards (*Regulations for Driveway & Encroachment Control Section 4.9 – Auxiliary Turn Lanes*). The analyses below are based off the trip distribution included in Section 5.2. The estimated combined overall entering and exiting vehicles at the site is 2,319 vehicles.

6.3.1 Left Turn Lane Analysis

For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 25 mph, the daily site generated traffic left turn movements threshold to warrant a turn lane is 300 left-turning vehicles a day (*GDOT Regulations for Driveway & Encroachment Control Section 4.9.1.2 – Minimum Requirements for Left Turn Lanes*). The projected left turn volume per day at site driveway 2 is included in Table 5.

Intersection	Left Turn Traffic (% total entering)	Left Turn Volume (vehicles/day)	Roadway Speed / # Lanes / ADT	GDOT Threshold (veh/day)	Warrants Met?
Fanfare Way @ Site Driveway 2	5% Southbound	58 (Total Trips) ÷ 2 × 0.05 = (2,319) ÷ 2 × 0.05 = 58	35 mph / 2-Lane / < 6,000	300	No

A left turn lane is not warranted at site driveway 2 per GDOT standards. However, to reduce the chance of queuing for southbound left turning traffic at site driveway 2 (particularly during morning peak hours) it is recommended that the northbound left turn lane on Fanfare Way at Arts Summit be partially re-striped so its southern half will be repurposed as a southbound left turn lane (as shown in Figure 4).



The distance along Fanfare Way between site driveway 2 and Arts Summit is 200 feet, and this should be enough to accommodate both northbound and southbound left-turning traffic with a 50-foot taper between two opposing 75-foot left turn lanes. A 6th edition synchro analysis was performed at the northbound left approach of Fanfare Way at Arts Summit and the same was done for the southbound left turn approach of Fanfare Way at site driveway 2 during the AM peak hour (when the most traffic is entering the school or passing by) to determine if the queues in the left turn lanes will possibly exceed 75 feet. The results of the 95th percentile queuing analysis determined that neither of the queues at these two approaches are at risk of reaching or exceeding 75 feet during the busiest (AM) peak hour, and therefore having left turn lanes at both approaches is considered feasible. The longer of the two estimated queues was for the northbound left approach of Fanfare Way at Arts Summit, with an estimated 95th percentile length of 58 feet. The queuing and blocking report page from the synchro analysis can be found in the Future “Build” Intersection Analysis section of the appendix.

Additionally, it is also recommended that the eastern right-in/right-out driveway for the Emblem Alpharetta apartment complex (across from the proposed full access school driveway) to be converted to full access, and that the approach taper at its intersection with Fanfare Way be re-striped and converted into a left turn lane.

6.3.2 Deceleration Turn Lane Analysis

For two lane roadways with AADT’s less than 6,000 vehicles and a posted speed limit of 25 mph, the daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 200 right-turning vehicles a day (*GDOT Regulations for Driveway & Encroachment Control Section 4.9.1.1 – Minimum Requirements for Right Turn Deceleration Lanes*). The projected right turn volume per day at site driveway 2 is included in Table 6.

TABLE 6 – GDOT REQUIREMENTS FOR DECELERATION LANES					
Intersection	Right Turn Traffic (% total entering)	Right Turn Volume (vehicles/day)	Roadway Speed / # Lanes / ADT	GDOT Threshold (vehicles/ day)	Warrants Met?
Fanfare Way @ Site Driveway 2	20% Northbound	232 $(\text{Total Trips}) \div 2 \times 0.20 =$ $(2,319) \div 2 \times 0.20 = 232$	35 mph / 2-Lane / < 6,000	200	Yes

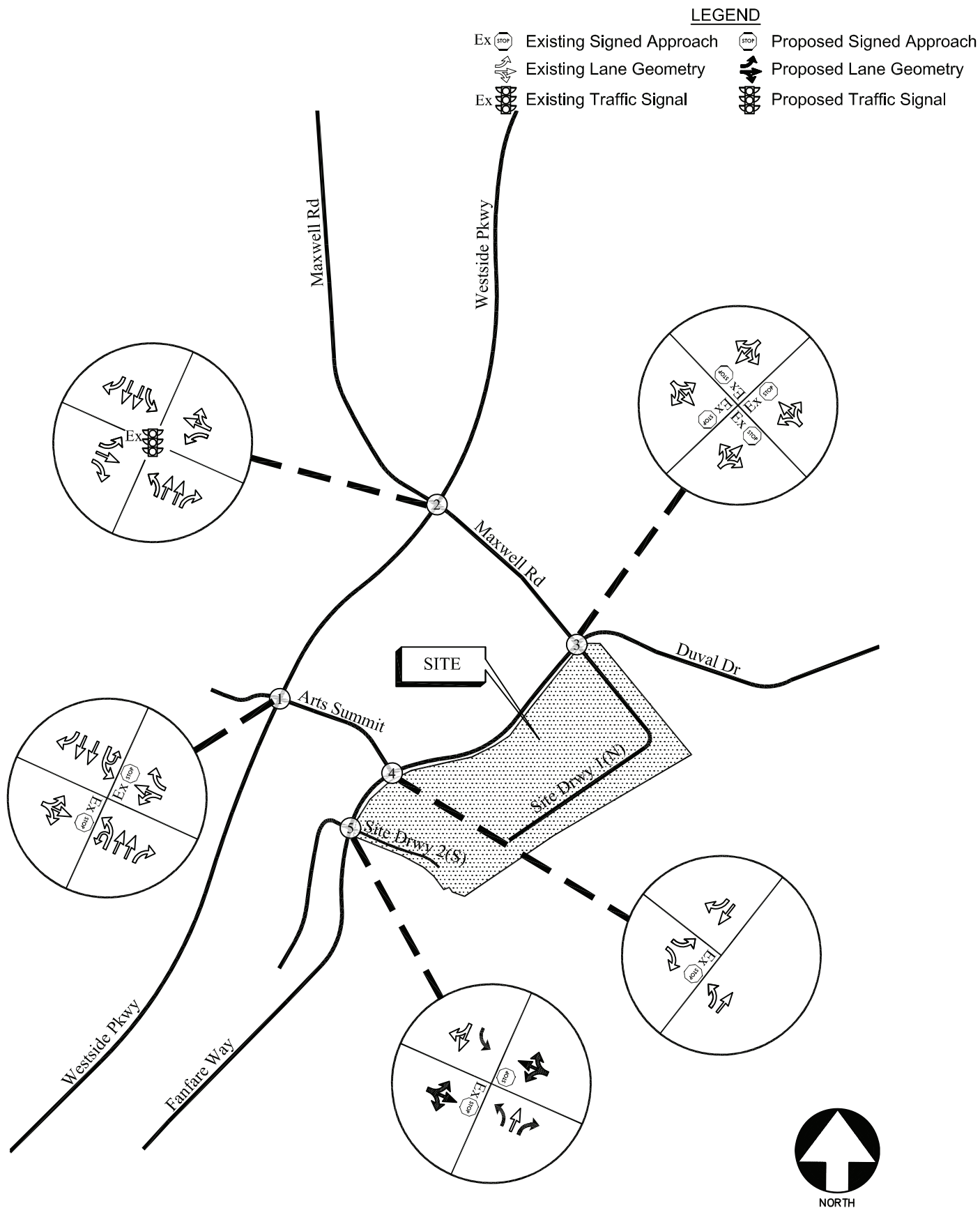
A right turn lane is warranted at site driveway 2 per GDOT standards.

6.4 Future Traffic Operations

The future “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 6 and Figure 8, respectively. The results of the future traffic operations analysis are shown below in Table 7. Recommendations on traffic control and lane geometry are shown graphically in Figure 9.

TABLE 7 — FUTURE INTERSECTION OPERATIONS							
Intersection		LOS (Delay)					
		No Build			Build		
		AM	Dismissal	PM	AM	Dismissal	PM
1	<u>Westside Parkway @ Arts Summit</u>						
	-Eastbound Approach	C (20.4)	B (14.4)	C (17.1)	C (18.5)	B (13.9)	C (16.6)
	-Westbound Approach	B (12.9)	B (13.6)	B (14.9)	C (24.4)	C (22.0)	C (24.3)
	-Northbound Left	A (9.1)	A (8.7)	A (8.6)	A (8.8)	A (8.6)	A (8.5)
	-Southbound Left	A (8.4)	A (8.5)	A (9.1)	A (8.4)	A (8.6)	A (9.1)
2	<u>Westside Parkway @ Maxwell Road</u>	<u>C (32.0)</u>	<u>C (27.8)</u>	<u>C (23.5)</u>	<u>C (30.3)</u>	<u>C (26.5)</u>	<u>C (21.6)</u>
	-Eastbound Approach	D (36.0)	D (43.7)	E (57.1)	D (35.8)	D (42.6)	E (56.5)
	-Westbound Approach	D (46.1)	D (48.6)	D (53.5)	D (47.7)	D (49.4)	D (50.8)
	-Northbound Approach	C (22.9)	B (13.1)	A (8.9)	C (20.5)	B (12.5)	A (8.7)
	-Southbound Approach	C (21.6)	B (15.4)	B (10.2)	B (19.8)	B (14.6)	B (10.1)
3	<u>Maxwell Road / Site Driveway 1 @ Fanfare Way / Duval Drive</u>	<u>F (144.8)</u>	<u>B (11.1)</u>	<u>B (12.0)</u>	<u>E (44.1)</u>	<u>A (9.5)</u>	<u>A (10.0)</u>
	-Eastbound Approach	F (88.3)	B (10.1)	A (9.1)	E (39.5)	A (9.4)	A (8.7)
	-Westbound Approach	F (246.7)	B (12.5)	B (13.9)	F (62.2)	A (10.0)	B (11.0)
	-Northbound Approach	C (25.0)	A (9.4)	A (9.0)	C (15.3)	A (8.6)	A (8.9)
	-Southbound Approach	B (14.0)	A (8.4)	A (8.4)	B (11.7)	A (8.0)	A (8.1)
4	<u>Fanfare Way @Arts Summit</u>						
	-Eastbound Approach	B (11.1)	A (9.1)	A (8.8)	B (10.7)	A (8.9)	A (8.9)
	-Northbound Left	A (7.3)	A (7.3)	A (7.3)	A (8.6)	A (7.3)	A (7.4)
5	<u>Fanfare Way @ Site Driveway 2 (Southern)</u>						
	-Westbound Approach	-	-	-	A (9.9)	A (9.2)	A (9.0)
	-Southbound Left				A (7.8)	A (7.6)	A (7.4)

The results of the future traffic operations analysis indicate that the signalized intersection of Westside Parkway at Maxwell Road will continue to operate at an overall level of service “C” during the AM, School Dismissal and PM peak hours under both “No-Build” and “Build” conditions. The all-way stop controlled intersection 2 (Maxwell Road at Fanfare Way / Duval Drive), which is projected to continue operating at a level of service “F” in the AM peak hour under “No-Build” conditions, will have its overall delay time improved by over 100 seconds under “Build” conditions and operate satisfactorily at an improved level of service “E”. Additionally, the performance of intersection 2 during dismissal and evening traffic peak hours will also improve due to the addition of a second site driveway, with it operating at an overall level of service “A” during those times. The stop-controlled minor approaches at the remaining intersections will continue to operate at an overall level of service “C” during all traffic peak hours.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 9

A&R Engineering Inc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the planned expansion project for Fulton Science Academy, which is located east of Fanfare Way in Alpharetta, Georgia. Fulton Science Academy is a pre-k - 12th grade private school that is planned to undergo a series of improvements to the existing building and surrounding property. The improvements will consist of the addition of a few rooms to the school building, such as an innovation center room and a music room (no classrooms will be added to increase student capacity). Additionally, the project will also consist of a parking lot expansion to allow for 47 more parking spaces, the construction of a new soccer field and four tennis courts on the west side of the property, and the addition of a second access point via a new southern site driveway. This new site driveway will alleviate part of the school peak hour traffic that currently uses the only available entrance on Maxwell Road (Site Driveway 1). The southern site driveway will be made available for high school arrival and dismissal traffic, with the high school enrollment comprising approximately 25% of the overall enrollment of 935 students.

Existing and future operations after completion of the project were analyzed at the intersections of:

- Westside Parkway at Arts Summit
- Westside Parkway at Maxwell Road
- Maxwell Road / Site Driveway 1 at Fanfare Way / Duval Drive
- Fanfare Way at Arts Summit
- Fanfare Way at Site Driveway 2 / Emblem Alpharetta Right-In/Right-Out Eastern Driveway

The analysis included the evaluation of future traffic operations for “No-Build” and “Build” conditions, the differences between “No-Build” and “Build” account for changes in traffic due to the proposed project. The results of the future traffic operations analysis indicate that the signalized intersection of Westside Parkway at Maxwell Road will continue to operate at an overall level of service “C” during the AM, School Dismissal and PM peak hours under both “No-Build” and “Build” conditions. The all-way stop controlled intersection 2 (Maxwell Road at Fanfare Way / Duval Drive), which is projected to continue operating at a level of service “F” in the AM peak hour under “No-Build” conditions, will have its overall delay time improved by over 100 seconds under “Build” conditions and operate satisfactorily at an improved level of service “E”. Additionally, the performance of intersection 2 during dismissal and evening traffic peak hours will also improve due to the addition of a second site driveway, with it operating at an overall level of service “A” during those times. The stop-controlled minor approaches at the remaining intersections will continue to operate at an overall level of service “C” during all traffic peak hours.

The following access configuration is recommended for the site driveway intersections.

- FSA to convert striping to allow full access (It's right-in/right-out now)
for Emblem Alpharetta Apartments



Community Zoning Information Meeting (CZIM)

May 10, 2023

Please sign-in and leave your comments and/or concerns.

MP-23-03/V-23-10 / Fulton Science Academy/Cousins Westside Pod O

NAME	ADDRESS	COMMENTS
	No Comments	

CITIZEN PARTICIPATION FORM - PART B

This form must be completed and submitted to the City of Alpharetta Community Development Department a minimum of twenty (20) working days prior to the scheduled Public Hearing. Failure to do so will result in cancellation of the scheduled hearing.

Public Hearing or Project Name: Fulton Science Academy Tennis Courts and Soccer Field

Contact Name: Jim Winer, Make3 architecture planning design Telephone: 404 876 5510

Please describe comments and concerns provided by any and all individuals contacted as part of the the Citizen Participation Program. If any individuals provided written correspondence, please attach copies of same to this report.

To date, we received one contact from a resident , Carol Fanning, that is attached. Ms. Fanning was supportive of the tennis courts and requested pedestrian lighting improvements along Fanfare Way.

Method by which these individuals were contacted. Please mark all that apply. *Please provide samples of any and all written communications used to provide notification.*

- | | |
|--|--|
| ☒ Letter | ☐ Personal Visits |
| ☐ Telephone | ☐ Group Meeting |
| ☒ Email | ☐ Other <i>(Please Specify)</i> _____ |

Attach a list of people who have been notified of this application and provided information describing the subject proposal. Please note that ALL adjoining property owners MUST be notified.

Please see attached mailing list provided by the City and letter that was sent to everyone on the mailing list.

I, the undersigned, as an authorized representative of the applicant and Public Hearing item identified above, do solemnly swear and attest, subject to criminal penalties for false swearing, that the information provided in this Citizen Participation Form - Part B and in any and all documents provided in support of this report are true and accurate. I further understand that any false statements provided by representatives of the applicant as part of this report may result in penalties up to and including denial of the subject application.

Signature of Authorized Agent: Jim Winer

Digitally signed by Jim Winer
DN: C=US, E=jwiner@make3arch.com, O=Make3
architectura planning design, CN=Jim Winer
Date: 2023.05.17 12:20:41-04'00'

Date: 5/17/23

Print Form

LENNAR GEORGIA INC
1000 HOLCOMB WOODS PKWY BLDG/STE
200/200
ROSWELL GA 30076

ENCORE WALK TOWNHOMES ASSOCIATION
INC
1001 CAMBRIDGE SQ SUITE A
ALPHARETTA GA 30009

BECKFORD JESSICA
10105 WESTSIDE PKWY 235
ALPHARETTA GA 30004

REDDY RUSHY PUTTA & GADDAM SHRIYA
110 DUVAL DR
ALPHARETTA GA 30009

RAUT SANKET SUNIL
1110 HAMMOND DR APT 651
ATLANTA GA 30328

RATTRAY GORDON SCOTT & BELINDA
CRAWFORD
11153 CALYPSO DR
ALPHARETTA GA 30009

MOLINA RENE F
11155 CALYPSO DR
ALPHARETTA GA 30004

BARNES MICHAEL W & DERENDA W
11157 CALYPO DR
ALPHARETTA GA 30009

ZURBRICK CLAUDIA M & WILLIAM W
11159 CALYPSO DR
ALPHARETTA GA 30009

MC FADDEN MICHAEL J & LAURIE A
11161 CALYPSO DR
ALPHARETTA GA 30004

NEPUTE JONATHAN & KYONG H
11163 CALYPSO DR
ALPHARETTA GA 30009-7615

POLYNE MITCHELL
11167 CALYPSO DR
ALPHARETTA GA 30004

JEFFREY W ADAMS TRUST THE
11223 CALYPSO DR
ALPHARETTA GA 30009

WANJIHIA ESTHER W
11225 CALYPSO DR
ALPHARETTA GA 30009

LECOMPTTE CHERYL A
11227 CALYPSO DR
ALPHARETTA GA 30004

PRICE MARK A
11229 CALYPSO DR
ALPHARETTA GA 30009

FANNING MICHAEL S & FANNING CAROL A
11231 CALYPSO DR
ALPHARETTA GA 30009

SEARCY KRISTEN C
11237 CALYPSO DR
ALPHARETTA GA 30004

PEREZ JUAN & LORENA
11239 CALYPSO DR
ALPHARETTA GA 30009

PARK SOO JIN
11241 CALYPSO DR
ALPHARETTA GA 30004

COYLE PATRICIA J
11251 CALYPSO DR
ALPHARETTA GA 30009

AMIN HIRAK
11253 CALYPSO DR
ALPHARETTA GA 30004

ROBERTSON MICHAEL & KELLY
11255 CALYPSO DR
ALPHARETTA GA 30009

SULLIVAN MATTHEW WILLIAM
11259 CALYPSO DR
ALPHARETTA GA 30009

WAHBA MICHAEL D
11271 CALYPSO DR
ALPHARETTA GA 30009

ESCOBAR GIL MIRIAM
11273 CALYPSO DR
ALPHARETTA GA 30009

COBB KIMBERLY & THOMAS
11275 CALYPSO DR
ALPHARETTA GA 30009

WEBBER JASON C & WEBBER KELLY BODINE
11277 CALYPSO DR
ALPHARETTA GA 30009

FERSHTEYN SAMUEL
11279 CALYPSO DR
ALPHARETTA GA 30009

FAURE SONIA S
11281 CALYPSO DR
ALPHARETTA GA 30004

ROWLAND ANNA PAIGE
11283 CALYPSO DR
ALPHARETTA GA 30009

SINGH ANUP V
11653 DAWSON DR
LOS ALTOS CA 94024

DODDS WENDY & KARABIN SCOTT
11970 FOX RD
ALPHARETTA GA 30005

KATTA KRISHNA VENI
120 DUVAL DR
ALPHARETTA GA 30009

VIHAN LLC
12467 WATERSIDE DR
ALPHARETTA GA 30004

HOOKS ROBERT
130 DALRYMPLE RD
ATLANTA GA 30328-1240

GHADGE JEEVAN JAYSINGRAO & SAVITA
JEEFAN
130 DUVAL DR
ALPHARETTA GA 30009

RUDD COURTNEY LYDIA
140 DUVAL DR
ALPHARETTA GA 30009

BOUAMRANI MOHAMMED
140 SPUR LANE
ALPHARETTA GA 30009

CHOE SU JEONG
1550 WINNING COLORS CT
SUWANEE GA 30024

CREEKSIDE HOLBROOKE LLC
16 RIDGEMERE TRCE
ATLANTA GA 30328

PERKINS SHARI TOSHEA & KELLY JESSE LEE II
160 DUVAL DR
ALPHARETTA GA 30009

VAN HOLM LINDA M
165 TRAIL PT
ATLANTA GA 30350-2721

OKORO EBIMOBOERE
180 DUVAL DR
ALPHARETTA GA 30009

BLOEMEKE ERIC JOHN
1800 ADAGIO DR
ALPHARETTA GA 30009

MOORE MICHAEL RYAN
1802 ADAGIO DR
ALPHARETTA GA 30009

BATES VERONICA A & MILLER MICHAEL P
1804 ADAGIO DR
ALPHARETTA GA 30009

MOORE ANTHONY & AMANDA J
1806 ADAGIO DR
ALPHARETTA GA 30009

HOUGHLAND CARL OXFORD
1808 ADAGIO DR
ALPHARETTA GA 30009

MATHERLY KIMBRLE J
1812 ADAGIO DR
ALPHARETTA GA 30004

SUROVETS MAYA
1814 ADAGIO DR
ALPHARETTA GA 30009

GARVER MATTHEW SCOTT & MARY
ELIZABETH
1834 ADAGIO DR
ALPHARETTA GA 30009

DIXON LORENZO
1836 ADAGIO DR
ALPHARETTA GA 30009

COOLEY NATHANIEL
1837 ADAGIO DR
ALPHARETTA GA 30009

DROZYSKI JANE & FOUNTAIN MICHAEL
1838 ADAGIO DR
ALPHARETTA GA 30009

MERLETTI ROBERT LEE & KRISTA OLSEN
1840 ADAGIO DR
ALPHARETTA GA 30009-4816

HENRIQUEZ EDWARD
1842 ADAGIO DR
ALPHARETTA GA 30009

GOMES CYNTHIA L
1843 ADAGIO DR
ALPHARETTA GA 30009

DORCELIEN FOOLZBERG & DALILA
1845 ADAGIO DR
ALPHARETTA GA 30009

ARNER KEVIN H & MARNITA L
1847 ADAGIO DR
ALPHARETTA GA 30009

DUNCAN GEORGE T JR & JENNIFER A
1849 ADAGIO DR
ALPHARETTA GA 30009

PATTEWAR PANKAJ & PATTEWAR ANUYA
1850 ADAGIO DR
ALPHARETTA GA 30009

O NEILL CAREN J
1852 ADAGIO DR
ALPHARETTA GA 30004

ADLER TODD LOUIS
1854 ADAGIO DR
ALPHARETTA GA 30009

COLE PRISCILLA & GALEN
1855 ADAGIO DR UNIT 167
ALPHARETTA GA 30009

ZHANG MEI JIE & QIU AI LIAN
1857 ADAGIO DR
ALPHARETTA GA 30009

HAKIM ALEXANDER & ANDREW
1858 ADAGIO DR
ALPHARETTA GA 30009

MANN ALLISON
1860 ADAGIO DR
ALPHARETTA GA 30009

WILSON MICHAEL G
1871 ADAGIO DR
ALPHARETTA GA 30009

WOLF REVOCABLE TRUST THE
1873 ADAGIO DR
ALPHARETTA GA 30009

BROWN JESSICA MARIE
1875 ADAGIO DR
ALPHARETTA GA 30009

RIBEIRO PEDRO MAIA D & BARATA ANA
CRISTINA MACHADO
1877 ADAGIO DR
ALPHARETTA GA 30009

LIU ZHONGYUN
1879 ADAGIO DR
ALPHARETTA GA 30009

JENKINS MARTIN A & JENKINS SHEILA
1881 ADAGIO DR
ALPHARETTA GA 30009

TOUART KRISTIN BROOKE
190 DUVAL DR
ALPHARETTA GA 30009

HODGES DAWN
1910 FORTE LANE
ALPHARETTA GA 30009

EAPEN DAVID & CHHABRIYA TIVOLI SURESH
1914 FORTE LN
ALPHARETTA GA 30009

WILSON JAMES KEITH
1918 FORTE LANE
ALPHARETTA GA 30009

SASSMAN GREGORY
1922 FORTE LN
ALPHARETTA GA 30009

LOVE TERRY & LOVE ELISA M
1926 FORTE LANE
ALPHARETTA GA 30009

HOLM ERIK R & HOLM AMY
1930 FORTE LN
ALPHARETTA GA 30009

CROSS CLINTON ALLEN & KELLY JAY
1934 FORTE LANE
ALPHARETTA GA 30009

MARY KEEFE GROVE REVOCABLE TRUST THE
1938 FORTE LANE
ALPHARETTA GA 30009

SMITH GWEN
1946 FORTE LANE
ALPHARETTA GA 30009

ADAMS PAULETTE ROSE & BRADHAM
WILLIAM ALEXANDER
1950 FORTE LANE
ALPHARETTA GA 30009

HONG TAO & YANG GRACE XUE
1954 FORTE LANE
ALPHARETTA GA 30009

PEREZ IVANA
1958 FORTE LN
ALPHARETTA GA 30009

BENTLEY ALICE C
1962 FORTE LN
ALPHARETTA GA 30009

GOMEZ WENDY LYNN
1966 FORTE LANE
ALPHARETTA GA 30009

FLOWERS TARA DENEKQUA
1970 FORTE LANE
ALPHARETTA GA 30009

JENKINS PATRICK MICHAEL
1978 FORTE LANE
ALPHARETTA GA 30009

MC KIE GERALD A
1982 FORTE LANE
ALPHARETTA GA 30009

BEASLEY ANGELA D & TIMOTHY
1986 FORTE LANE
ALPHARETTA GA 30009

BUTTS DON CHARLES
1994 FORTE LANE
ALPHARETTA GA 30009

THOMAS KIMONETIA LATISHA
1998 FORTE LANE
ALPHARETTA GA 30009

WALLIS WILLIAM MICHAEL LEE & WALLIS
TIFFANI
200 DUVAL DR
ALPHARETTA GA 30009

GILBERT GIANNI
2002 FORTE LANE
ALPHARETTA GA 30009

QU HONG
2006 FORTE LANE
ALPHARETTA GA 30009

AKEY AARON
2030 FORTE LANE
ALPHARETTA GA 30009

MULLIGAN TIMOTHY JOHN & MULLIGAN
CATHERINE MARIE
2034 FORTE LANE
ALPHARETTA GA 30009

EASON TRACY L
2038 FORTE LN
ALPHARETTA GA 30009

HUGHES KESHA D
2042 FORTE LANE
ALPHARETTA GA 30009

LUCAS CALEIGH
2046 FORTE LANE
ALPHARETTA GA 30009

ANDREW MARK G
2050 FORTE LANE
ALPHARETTA GA 30009

NIZIALEK CAMERON
2058 FORTE LANE
ALPHARETTA GA 30009

THOMAS DON VALENCIA
210 DUVAL DR
ALPHARETTA GA 30009

PRASAD SAPNA
215 DUVAL DR
ALPHARETTA GA 30009

CHOI AREUM SOL & YIM SEUNG B
220 DUVAL DR
ALPHARETTA GA 30009

JAVERI VIPUL S
225 DUVAL DR
ALPHARETTA GA 30009

MASHALY AHMED ELMETWALLY & MOHAMED
AZZA MOUSTAFA
225 DUVAL DR
ALPHARETTA GA 30009

SEWPERSAD ASHVEER
2254 TENOR LANE
ALPHARETTA GA 30009

GUPTA VINEET & NEHA
2256 TENOR LANE
ALPHARETTA GA 30009

STONEY PERNELL & HWASON
2258 TENOR LN
ALPHARETTA GA 30009

CHENG GARY KEN LI & YU ALICE
2279 TENOR LANE
ALPHARETTA GA 30009

CHUN HAE
2289 TENOR LANE
ALPHARETTA GA 30009

RUBIO ANDRES E
230 DUVAL DR
ALPHARETTA GA 30009

GADAMSETTY JUGAL ANVESH
235 DUVAL DR
ALPHARETTA GA 30009

ABBATE JENNIFER LORI
240 DUVAL DR
ALPHARETTA GA 30009

SRIVASTAVA SHOBHIT
2405 TENOR LANE
ALPHARETTA GA 30009

LEE YUN KYUNG & JEONG JAE WON
2407 TENOR LN
ALPHARETTA GA 30009

IODICE EMILY & DIIOIA MICHAEL
2409 TENOR LANE
ALPHARETTA GA 30009

AVIRENENI RAVI TEJA
2419 TENOR LANE
ALPHARETTA GA 30009

CORNWALL EMMA E
2420 TENOR LANE
ALPHARETTA GA 30009

CASCANTE JULIA SALAS
2422 TENOR LN
ALPHARETTA GA 30009

GILLIAND KATHLEEN
2424 TENOR LANE
ALPHARETTA GA 30009

SHEN HANG
2426 TENOR LANE
ALPHARETTA GA 30009

LODGE KARYN J & FRANCIS NOBREGA
JAZMINE M
2428 TENOR LANE
ALPHARETTA GA 30009

GOSWAMI PRASAD & MUELLER ASTRID
2430 TENOR LANE
ALPHARETTA GA 30009

GAURAV FNU KUMAR & AGRAWAL SANGEETA
2432 TENOR LANE
ALPHARETTA GA 30009

KHAWARE MRITUNJAY & SHALINI SHWETA
2434 TENOR LANE
ALPHARETTA GA 30009

GLASS ELENA S
2438 TENOR LANE
ALPHARETTA GA 30009

NGUYEN NIXON & CHEN HUIJUAN
2440 TENOR LANE
ALPHARETTA GA 30009

MUNDRA MANISH & MUNDRA JYOTI
2442 TENOR LANE
ALPHARETTA GA 30009

OLONI WINIFRED I
2444 TENOR LANE
ALPHARETTA GA 30009

MAKINENI CHANDANA
2446 TENOR LANE
ALPHARETTA GA 30009

WHITENER TIFFANY LASHA & MICHAEL LEE JR
245 DUVAL DR
ALPHARETTA GA 30009

MELENDEZ ELIJAH JOEL & EVE LUTRELL
250 DUVAL DR
ALPHARETTA GA 30009

BENTLEY RUDOLPH & PEREZ SAILY
265 DUVAL DR
ALPHARETTA GA 30009

ARTISAN TOWNHOME ASSOCIATION INC
2675 PACES FERRY RD SE SUITE 125
ATLANTA GA 30339

ADATRAO LAKSHMI KANTHI
275 DUVAL DR
ALPHARETTA GA 30009

CHAURASIA MANISH KAILASH & CHAURASIA
RAINA MANISH
285 BRAEDEN WAY
ALPHARETTA GA 30009-3002

YALAMATI MANASA SREE
285 DUVAL DR
ALPHARETTA GA 30009

HEDGE HAMSANATH & JAIN SUPRIYA
295 DUVAL DR
ALPHARETTA GA 30009

FULTON SCIENCE ACADEMY PRIVATE SCHOOL
INC
3035 FANFARE WAY
ALPHARETTA GA 30009

KHAN FIONA SOFANA ARMIN & EAD WESAM
ADAM
305 DUVAL DR
ALPHARETTA GA 30009

MALYALA DIVYA & ANNACHEDU RAJENDAR
REDDY
315 DUVAL DR
ALPHARETTA GA 30009

SUMANTH SUKHAVASI & MALLIMOGGALA
PADMINI
325 DUVAL DR
ALPHARETTA GA 30009

I&G ALPHARETTA LLC
333 W WACKER DR STE 2300
CHICAGO IL 60606

LENNAR GEORGIA INC
345 DUVAL DR
ALPHARETTA GA 30009

PATTERSON MICHAEL WAYNE & PATTERSON
MICHELLE KEHOE
350 DUVAL DR
ALPHARETTA GA 30009

LEAL CARLOS ANTONIO PORRAS & LEAL
CLARET MARYNELLY PORRAS
360 DUVAL DR
ALPHARETTA GA 30009

LEFKOVITS ADRIANA RAQUEL BUSTILLOS
370 DUVAL DR
ALPHARETTA GA 30009

INTELLSIV HOLDINGS LLC
402 SPYGLASS HILL CT
DULUTH GA 30097

VILLARROEL ZABALA ARISTIDES
4200 IVY RUN CIR
DULUTH GA 30096

CAROLE R WEIL REVOCABLE TRUST THE
4361 E BROOKHAVEN DR
ATLANTA GA 30319

WESTWOOD PARK NEIGHBORHOOD
ASSOCIATION,
500 SUGAR MILL RD STE 200B
SANDY SPRINGS GA 30350

EQUITY TRUST CO FBO THOMAS ASSET
MGMT 401K E11700 & EQUITY TR CO FBO
THOMAS
5010 HARRINGTON RD
ALPHARETTA GA 30022

RABINOVICH ILYA ET AL
502 CYPRESS PT
WOODSTOCK GA 30189

REEP RTL NPM GA LLC
51 MADISON AVE
NEW YORK NY 10010

SECKINER AKGUN M & ZEYNEP MUGE
5260 NASSER AVE
ALPHARETTA GA 30005

GEORGIA DEPARTMENT OF TRANSPORTATION
600 W PEACHTREE NW STE 1400
ATLANTA GA 30308

FELIX SCHOOLS LLC THE
6435 WESTBAY TER
CUMMING GA 30040

SFN ENTERPRISES LLC
800 CRAPPAPPLE HL
ALPHARETTA GA 30004

NALLAMOTHU RAVI
802 LIVEOAK TRL
DOTHAN AL 36305

ASHTAROLNAKHAI SHADI
8230 HABERSHAM WATERS RD
SANDY SPRINGS GA 30350

FEN ENTERPRISES LLC
880 CRABAPPLE HL
ALPHARETTA GA 30004

ADVANCE EDUCATION INC
9115 WESTSIDE PKWY
ALPHARETTA GA 30009-8000

CITY OF ALPHARETTA
9115 WESTSIDE PKWY
ALPHARETTA GA 30009-8000

LIU JEFFREY
9908 MILL RUN DR
GREAT FALLS VA 22066

BRI 1870 NORTH POINT LLC
P O BOX 1368
CARLSBAD CA 92018

AMERICAN HONDA MOTOR CO INC
P.O. BOX 239
GREENSBORO GA 30642

April 17, 2023

Jim Winer, Make3
1075 Brady Avenue
Atlanta, Georgia 30318

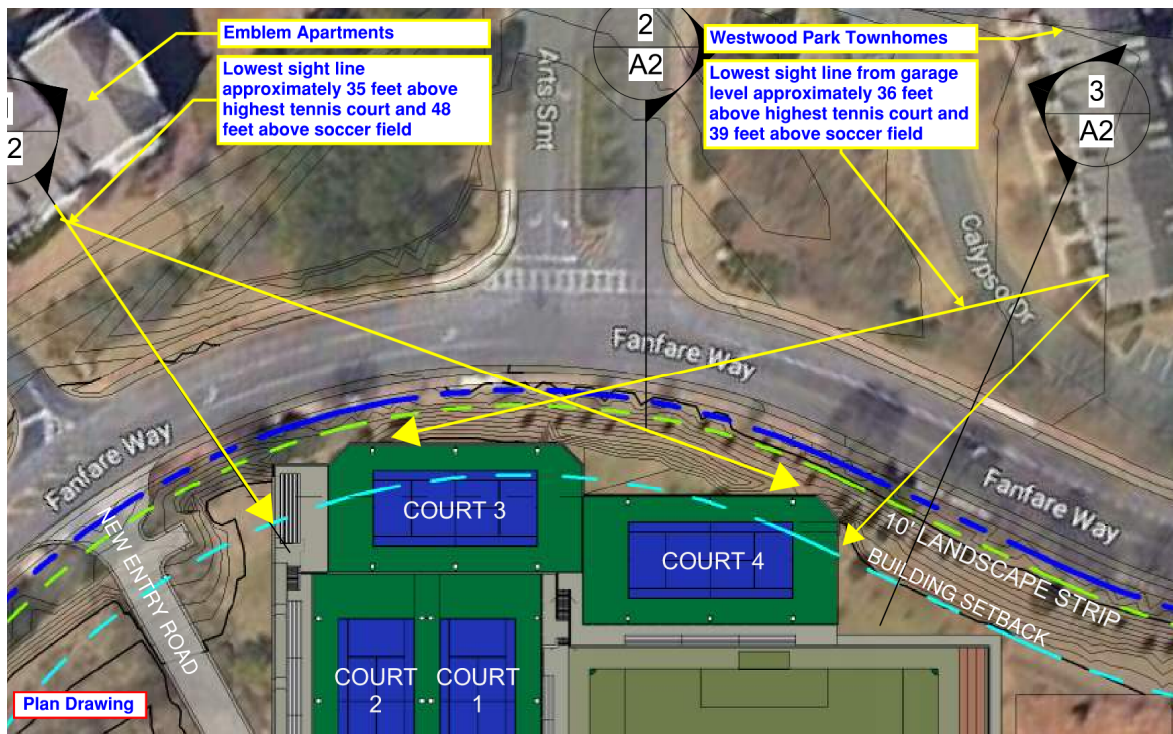
RE: Fulton Science Academy Athletic Improvements MP-23-03 / V-23-10

Dear Property Owner:

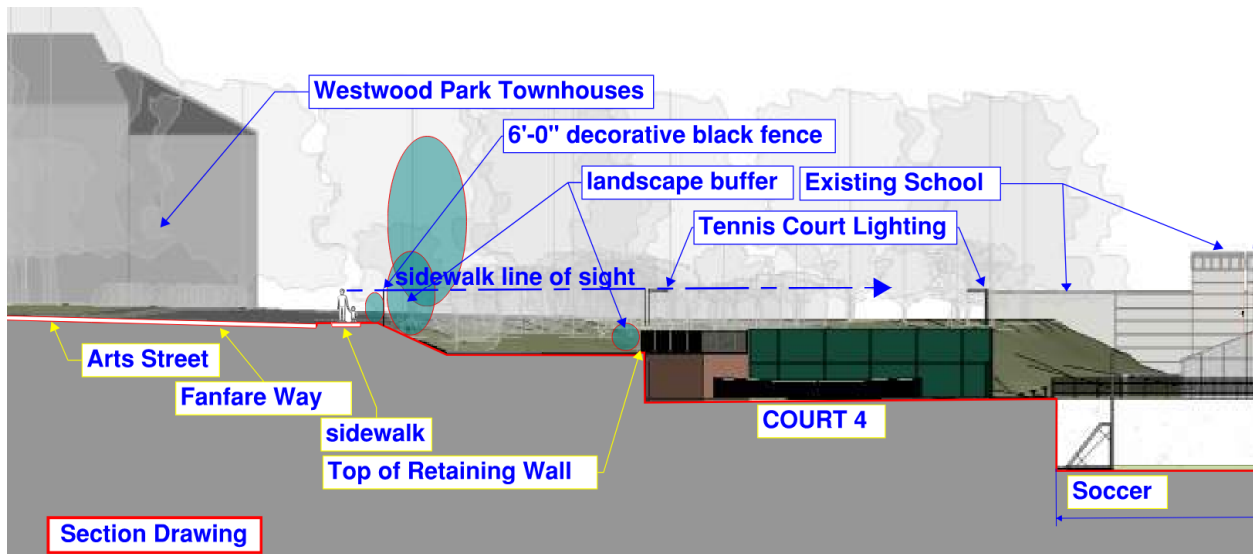
Please allow this letter to serve as public notice for a setback variance request at 3035 Fanfare Way, Alpharetta, GA 30009 for the purpose of constructing two tennis courts (see Plan Drawing below) and associated retaining walls, fencing, and court lighting partially within the 40' building setback.

The two courts are part of a project to improve the Fulton Science Academy's athletic offerings by adding a total of 4 tennis courts, a soccer field, a field house, some additional parking, and the addition of a second vehicular entry to improve traffic circulation.

The tennis courts are purposely designed to be visually unobtrusive. The site conditions allow the two tennis courts that require the setback variance to be approximately 9 to 12 feet below the adjacent sidewalk and street (see Section Drawing below). The living levels of the across the street apartments and townhomes are elevated well above the sidewalk and have views over and beyond the courts. The tall side of the retaining walls face inward toward the school property. From the street, the view toward the courts will have the appearance of a low fence hidden in a densely planted landscape buffer. Light studies included in this application show minimal off-site light bleed.



April 17, 2023



The Community Zoning Information Meeting (CZIM) for this request will be held on **Wednesday, May 10, 2023, at 6:00 PM** in the Multipurpose Room in Alpharetta City Hall across from the Council Chambers. Alpharetta City Hall is Located at 2 Park Plaza, Alpharetta, GA 30009. This is an informal meeting to allow the public to view public hearing requests, ask questions, and provide feedback.

This item will be considered by the Planning Commission on **Thursday, June 1, 2023, at 6:30 PM** and City Council on Monday, **June 26, 2023, at 6:30 PM**. The meeting(s) will be held in the Council Chambers at City Hall, 2 Park Plaza, Alpharetta, GA 30009.

If you have any questions regarding the request, please feel free to contact me at your convenience. I can be reached at jwiner@make3arch.com or 404 876 5510.

Sincerely,

Jim Winer, Principal, AIA, LEED AP

Copy

Michael Woodman, Planning + Development Services Manager, City of Alpharetta
Dr. Kenan Sener, Principal, Fulton Science Academy

END

5/8/23

Case Type: Public Hearing Application

Permit/Case Number: PHA230010

Project Name: Fulton Science Academy

Location: 3035 Fanfare Way

Citizen Participation: Citizen Responses to 4/17/23 Public Notification Letter

From: Woodman, Michael <mwoodman@alpharetta.ga.us>

Sent: Friday, April 21, 2023 1:15 PM

To: Carol Fanning <carol.fanning@bhhsgeorgia.com>; Jim Winer <jwiner@make3arch.com>

Subject: RE: Lighting along Fanfare Way: RE: Question regarding tennis courts at Fulton Science Academy

The City's Public Works Dept does not have any plans to add streetlights along Fanfare Way. However, City staff will recommend a condition with the current public hearing request at Fulton Science Academy that pedestrian streetlights be added along Fanfare Way.

From: Woodman, Michael

Sent: Friday, April 21, 2023 10:59 AM

To: Carol Fanning <carol.fanning@bhhsgeorgia.com>; Jim Winer <jwiner@make3arch.com>

Subject: RE: Lighting along Fanfare Way: RE: Question regarding tennis courts at Fulton Science Academy

I also forwarded your email to our Public Works Dept to see if they have any plans to install streetlights along that stretch. I'll let you know once I receive a response.

From: Carol Fanning <carol.fanning@bhhsgeorgia.com>

Sent: Friday, April 21, 2023 10:40 AM

To: Woodman, Michael <mwoodman@alpharetta.ga.us>; Jim Winer <jwiner@make3arch.com>

Subject: Lighting along Fanfare Way: RE: Question regarding tennis courts at Fulton Science Academy

Thank you all so much for your quick responses to my concerns this morning regarding lighting along Fanfare Way. This information is extremely welcome (by me and the entire Westwood Park community!). I know it will be a while longer, but just knowing there will eventually be lights along Fanfare is such a relief.

From: Woodman, Michael <mwoodman@alpharetta.ga.us>

Sent: Friday, April 21, 2023 9:53 AM

To: Jim Winer <jwiner@make3arch.com>

Subject: RE: Question regarding tennis courts at Fulton Science Academy

As a heads up we expect that the traffic study, which is required with the public hearing request, addresses the new curb cut on Fanfare Way. Also, the North Point Overlay streetscape standards will require the school add pedestrian lighting along Fanfare Way.

From: Jim Winer <jwiner@make3arch.com>

Sent: Friday, April 21, 2023 9:29 AM

To: Woodman, Michael <mwoodman@alpharetta.ga.us>

Subject: FW: Question regarding tennis courts at Fulton Science Academy

FYI from a resident below and my response.

From: Jim Winer

Sent: Friday, April 21, 2023 9:28 AM

To: Carol Fanning <carol.fanning@bhhsgeorgia.com>

Subject: RE: Question regarding tennis courts at Fulton Science Academy

Good morning and thank you for contacting me. I'm pleased you're supportive of the courts, and I'm glad you've raised safety as an issue.

Because this is a variance request to construct a retaining wall needed to place the tennis courts within the building setback, the plans are not fully developed and engineered or permit ready. FSA will need to meet the City requirements for traffic, detention, etc. Here is where we are on the issue that you raised:

Street Lighting: There is no lighting proposed along Fanfare Way. The City ordinance prohibits lighting coming from the school to be above one foot candle outside of the school property (1 foot candle is approximately the amount of light that a candle produces on a surface 1 foot away). We have been

5/8/23

Case Type: Public Hearing Application

Permit/Case Number: PHA230010

Project Name: Fulton Science Academy

Location: 3035 Fanfare Way

Citizen Participation: Citizen Responses to 4/17/23 Public Notification Letter

working on a lighting design that meets those requirements. I don't know what the City policy is concerning street lighting or pedestrian lighting along streets and sidewalks, but I was wondering about that as we were working on the lighting for the courts and soccer field. .

Traffic Engineering: At this juncture, the new drive entry has not been engineered as it is not part of the variance request. It will need to be fully engineered prior to permitting, so currently, it doesn't show striping, signage, or signaling. The Fulton Science Academy has commissioned a traffic study as a first step, which is a city requirement. I emailed the engineering company yesterday to get an ETA on their report. Once completed and given to the City, the City Traffic Engineering Department will review the study and provide requirements. Preliminarily, the City has discussed striping and turn lanes, but a traffic signal has not been mentioned.

Our primary point of contact for the variance request is Michael Woodman. It is a good time to share your concerns with the City through him.

Please contact me anytime.

From: Carol Fanning <carol.fanning@bhhsgeorgia.com>

Sent: Friday, April 21, 2023 8:44 AM

To: Jim Winer <jwiner@make3arch.com>

Subject: Question regarding tennis courts at Fulton Science Academy

Good morning Jim. I live in the Westwood Park community and my townhome faces Fanfare Way. I am a fan of the tennis courts being built on the Fulton Science Academy property, but I do have a concern. Will there be any type of street lighting along Fanfare near the new entry road onto the school property (off Fanfare)? That stretch of curves at the intersection of Arts Summit and Fanfare are dangerous – especially at night.

If there aren't additional street lights proposed by your firm, do you know who I could contact to express my concern?

CITY OF ALPHARETTA

PUBLIC HEARING APPLICATION

FOR OFFICE USE ONLY

Case #: _____

PH #: _____

☐ Property Taxes & Code Violations Verified

☐ Fee Paid Initial: _____

COMMUNITY DEVELOPMENT DEPARTMENT

2 PARK PLAZA

ALPHARETTA, GA 30009

1. This page should be the first page in each of your completed application packets.
2. It is preferred that all responses be typed. Illegible applications will not be accepted.
3. Prior to signing and submitting your application, please check all information supplied on the following pages to ensure that all responses are complete and accurate. Incomplete applications will not be accepted.
4. Payment of all applicable fees must be made at the time of application. Payment may be made via cash, credit card (American Express, Master Card or Visa), or check made payable to "City of Alpharetta." Please note that a 3% convenience fee will be added to all credit card transactions.
5. Applications will be accepted on the designated submittal dates between the hours of 8:30 AM and 3:30 PM.
6. If you have any questions regarding this form, please contact the Community Development Department by calling 678-297-6070.

Contact Information:

Contact Name: Jim Winer Telephone: 404 876 5510

Address: 1075 Brady Avenue Suite: NA

City: Atlanta State: GA Zip: 30318 Fax: NA

Mobile Tel: 6787780795 Email: jwiner@make3arch.com

Subject Property Information:

Address: 3035 Fanfare Way Current Zoning: CUP

District: 1st Section: 2nd Land Lot: 688,689,700 Parcel ID: Pod 0

Proposed Zoning: CUP Current Use: Educational: Private K-12 STEAM School

This Application For (Check All That Apply):

- | | | |
|--|---|---|
| ☐ Conditional Use | ☒ Master Plan Amendment | ☐ Comprehensive Plan Amendment |
| ☐ Rezoning | ☐ Master Plan Review | |
| ☒ Variance | ☐ Public Hearing | |
| ☐ Exception | ☐ Other (Specify): _____ | |

APPLICANT REQUEST AND INTENT

What is the proposed use(s) of the property?

The property is currently used as a, educational facility, K-12 STEAM school. There is no proposed change in use.

Applicant's Request (Please itemize the proposal):

Due to the unique shape, topographic, and detention constraints of the site, the Fulton Science Academy is requesting a zoning variance for:

1. Site Retaining Walls and associated fencing within the 40' building setback.
2. Two tennis courts within the 40' building setback.
3. Tennis Court and Soccer Field Lighting (photometric included)
4. Allow the relocation of the previously approved 6' tall ornamental security metal fences to to be located on the line landscape buffer.

Applicant's Intent *(Please describe what the proposal would facilitate).*

In support of the Fulton Science Academy athletic program and related to this variance request, the applicant would like to add the following to their campus:

1. Add Four Tennis Courts: This is the minimum required for the school to host tennis tournaments. The school currently has no tennis courts.
2. Add One Soccer Field: The school currently has no playing field.
3. Add a field house with an observatory for use by the FSA astronomy team and a concession stand.
4. Add tennis court and soccer field lighting. The lighting will be designed to minimize off site light bleed.

Separate from this variance request, the applicant will submit an application to the DRB for the addition of an innovation center and a revised music practice area (Note: A music practice area was previously approved by the DRB and permitted. The music practice revisions are minor). These toe small additions will not require a variance.

PROPERTY OWNER AUTHORIZATION

Property Owner Information:

Contact Name: Fulton Science Academy

Telephone: 678 366 2555

Address: 3035 Fanfare Way

Suite: NA

City Alpharetta

State: GA

Zip: 30009

Authorization:

I do solemnly swear and attest, subject to criminal penalties for false swearing, that I am the legal owner, as reflected in the records of Fulton County, Georgia, of the property identified below, which is the subject of the attached Application for Public Hearing before the City of Alpharetta, Georgia.

As the legal owner of record of the subject property, I hereby authorize the individual named below to act as the applicant in the pursuit of the Application for Public Hearing in request of the items indicated below.

- | | |
|---|--|
| ☐ Annexation | ☐ Special Use |
| ☐ Rezoning | ☐ Conditional Use |
| ☒ Variance | ☐ Master Plan |
| ☐ Land Use Application | ☐ Other |

Property Owner's Authorized Applicant (if applicable):

Name of Authorized Applicant: Jim Winer

Telephone: 404 876 5510 ext 1001

Address: _____

Suite: _____

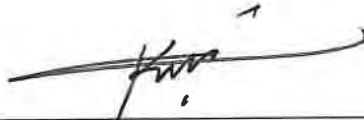
City Atlanta

State: GA

Zip: 30318

So Sworn and Attested:

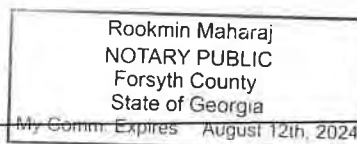
Owner Signature: _____



Date: 3/27/23

Notary:

Notary Signature: _____



Date: 3/27/23

DISCLOSURE FORM

The Official Code of Georgia Annotated requires disclosure of campaign contributions to government officials by an applicant or opponent of a rezoning or public hearing petition (O.C.G.A. 36-67 A-1).

Applicants must file this form with the City of Alpharetta Community Development Department within ten (10) days after filing for rezoning or public hearing. Opponents to a rezoning or public hearing petition must file this form five (5) days prior to the Planning Commission meeting at which the subject rezoning or public hearing petition is scheduled to be heard.

Name of Applicant or Opponent: Jim Winer, Principal, Make3 architecture planning design

Subject Public Hearing Case: _____

Jim Winer has made no contributions to campaigns in Alpharetta.

Campaign Contribution Information:

Please provide the requested information for each contribution with a dollar amount or value of \$250 or more made within the past two (2) years to an Alpharetta Official by the individual identified above. Please use a separate form for each Alpharetta Official to whom such a contribution as been made.

If the individual identified above has made no such contributions to an Alpharetta Official within the past two (2) years, please indicate this by entering "N/A" on the appropriate lines below.

Name of Official: NA Position: NA

Description of Contribution: _____ Value: _____

Description of Contribution: _____ Value: _____

Description of Contribution: _____ Value: _____

Description of Contribution: _____ Value: _____

Description of Contribution: _____ Value: _____

Campaign Contribution Information:

I do solemnly swear and attest, subject to criminal penalties for false swearing, that the information provided in this Disclosure Form is true and accurate and that I have disclosed herein any and all campaign contributions made to an Official of the City of Alpharetta, Georgia in accordance with O.C.G.A. 36-67 A-3.

Signature: _____

Jim Winer

Date: 3/27/23

DISCLOSURE FORM

The Official Code of Georgia Annotated requires disclosure of campaign contributions to government officials by an applicant or opponent of a rezoning or public hearing petition (O.C.G.A. 36-67 A-1).

Applicants must file this form with the City of Alpharetta Community Development Department within ten (10) days after filing for rezoning or public hearing. Opponents to a rezoning or public hearing petition must file this form five (5) days prior to the Planning Commission meeting at which the subject rezoning or public hearing petition is scheduled to be heard.

Name of Applicant or Opponent: Dr. Kenan Sener, CEO, Head of School

Subject Public Hearing Case: Fulton Science Academy Variance Request

Campaign Contribution Information:

Please provide the requested information for each contribution with a dollar amount or value of \$250 or more made within the past two (2) years to an Alpharetta Official by the individual identified above. Please use a separate form for each Alpharetta Official to whom such a contribution as been made.

If the individual identified above has made no such contributions to an Alpharetta Official within the past two (2) years, please indicate this by entering "N/A" on the appropriate lines below.

Name of Official: NA Position: NA

Description of Contribution: NA Value: _____

Description of Contribution: NA Value: _____

Description of Contribution: NA Value: _____

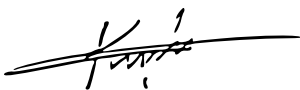
Description of Contribution: NA Value: _____

Description of Contribution: NA Value: _____

Campaign Contribution Information:

I do solemnly swear and attest, subject to criminal penalties for false swearing, that the information provided in this Disclosure Form is true and accurate and that I have disclosed herein any and all campaign contributions made to an Official of the City of Alpharetta, Georgia in accordance with O.C.G.A. 36-67 A-3.

Signature: _____



Date: 3/27/23

ALPHARETTA PLANNING COMMISSION REVIEW CRITERIA

How will this proposal be compatible with surrounding properties?

The existing Fulton Science Academy has been in existing since approximately 2014/15. A classroom addition was constructed in 2019/20 along with the surrounding properties forms an existing compatible context. For the surrounding properties, this proposal is consistent with what exists in use and aesthetics.

How will this proposal affect the use and value of the surrounding properties?

Adjacency to a high performing school has a positive impact on property values. The proposed enhancements will make the school more attractive to prospective families.

Can the property be developed for a reasonable economic use as currently zoned? Please explain why or why not.

We are not seeking a rezoning; however, the variance is requested because the site constraints provide no alternatives for fitting four tennis courts on the property.

What would be the increase to population and traffic if the proposal were approved?

This project enhances athletic offerings and does not increase the student population. The project includes additional parking and a second ingress/egress to improve external and internal traffic flow. The tennis courts and soccer field will allow normal after school competitions. We anticipate the project will enhance traffic flow and not increase trip generation beyond the current peak pick up and drop off trip generation. FSA is commissioning a traffic study update to the A&R Engineering study done in 2011 to include a traffic management plan, a trip generation report.

What would be the impact to schools and utilities if the proposal were approved?

The impact is to enhance the athletic and wellness offerings at an existing school. The necessary utilities are available.

How is the proposal consistent with the Alpharetta Comprehensive Plan; particularly the Future Land Use Map?

The proposal is consistent with the future land use map. The future land use map identifies this property as a Public, Institutional, Education. The site will continue to be used for educational purposes. The Fulton Science Academy as a K through 12 STEAM school.

Are there existing or changing conditions which affect the development of the property and support the proposed request?

Yes, the existing conditions are constrained by the Georgia 400 buffer to the East, a detention facility to the South, the existing school building to the North, and Fanfair Way to the West.

On a separate sheet or sheets, please provide any information or evidence that supports your request and the statements that you have provided in this application.

BOARD OF ZONING APPEALS REVIEW CRITERIA

Please respond to the following ONLY if you are applying for a zoning variance.

Are there extraordinary and exceptional conditions pertaining to the subject property because of its size, shape, or topography? Please describe them.

Yes, as mentioned in the previous bullet point, the existing conditions are constrained by the Georgia 400 buffer to the east, a detention facility to the south, the existing school building to the north, and Fanfair Way to the West.

Would the application of the Zoning Code standards as they relate to the subject property create an unnecessary hardship? Please explain.

Yes, the application of the standards would mean that the Fulton Science Academy could not construct 4 tennis courts required to host school tennis tournaments. Without court and field lighting, the school would not be able to host competitions or practice after daylight hours.

Are there conditions that are peculiar to the subject property? Please describe them in detail.

The constraints have been itemized above. There are topographic conditions that will provide screening of the field and courts.

The two tennis courts that requiring the setback variance are approximately 9 to 12 feet below the adjacent sidewalk and street. The living levels of the across the street apartments and town-homes are elevated well above the sidewalk, looking over and beyond the courts. The tall side of the retaining walls face inward toward the school property. From the street, the retaining walls will screen the nearest courts, and the view will have the appearance of a low fence hidden in a densely planted landscape buffer. The lower elevation of the school property in conjunction with landscaping along the street edge also provides screening for the court and field lighting. The soccer field is 22 to 26 feet lower than the street. Light studies included in this application show minimal off site light bleed.

Would relief, if granted, cause substantial detriment to the public good or impair the purpose and intent of the Zoning Code? Please defend your response.

Allowing the Fulton Science Academy to provide the normal athletic facilities expected of a K through 12 would be an enhancement. Better and more desirable schools are attractive from a real-estate perspective and are generally considered to be a public good.

On a separate sheet or sheets, please provide any information or evidence that supports your request and the statements that you have provided in this application.

CITIZEN PARTICIPATION FORM - PART A

This form must be completed and submitted with the applicant's completed Public Hearing Application. Applications submitted to the City of Alpharetta without a completed Citizen Participation Form - Part A will not be accepted.

Public Hearing or Project Name: Fulton Science Academy Tennis Courts and Soccer Field

Contact Name: Jim Winer, Make3 architecture planning design Telephone: 404 876 5510

The following people will be notified of this application and provided information describing the subject proposal. Please note that ALL adjoining property owners MUST be notified. Use additional pages as needed.

Emblem Alparetta Apartments

Westwood Park Townhouses

Method by which these individuals will be contacted. Please mark all that apply. *If you select "Other," please provide a description of the method of contact that will be used.*

☒

Letter

☐

Personal Visits

☒

Telephone

☐

Group Meeting

☒

Email

☐

Other *(Please Specify)*

Please describe the method(s) by which these individuals will have the opportunity to respond or contact the applicant with questions or concerns about the proposal.

The apartment complex management and town-home neighborhood association will be contacted via telephone and email. The applicants contact information (phone, email, and address) will be available for contact. We will offer to come to their location and do a presentation.



Real Estate

View Bill

As of	4/3/2023
Bill Year	2022
Bill	2206580
Owner	FULTON SCIENCE ACADEMY PRIVATE
Parcel ID	12 -2600-0689-423-7

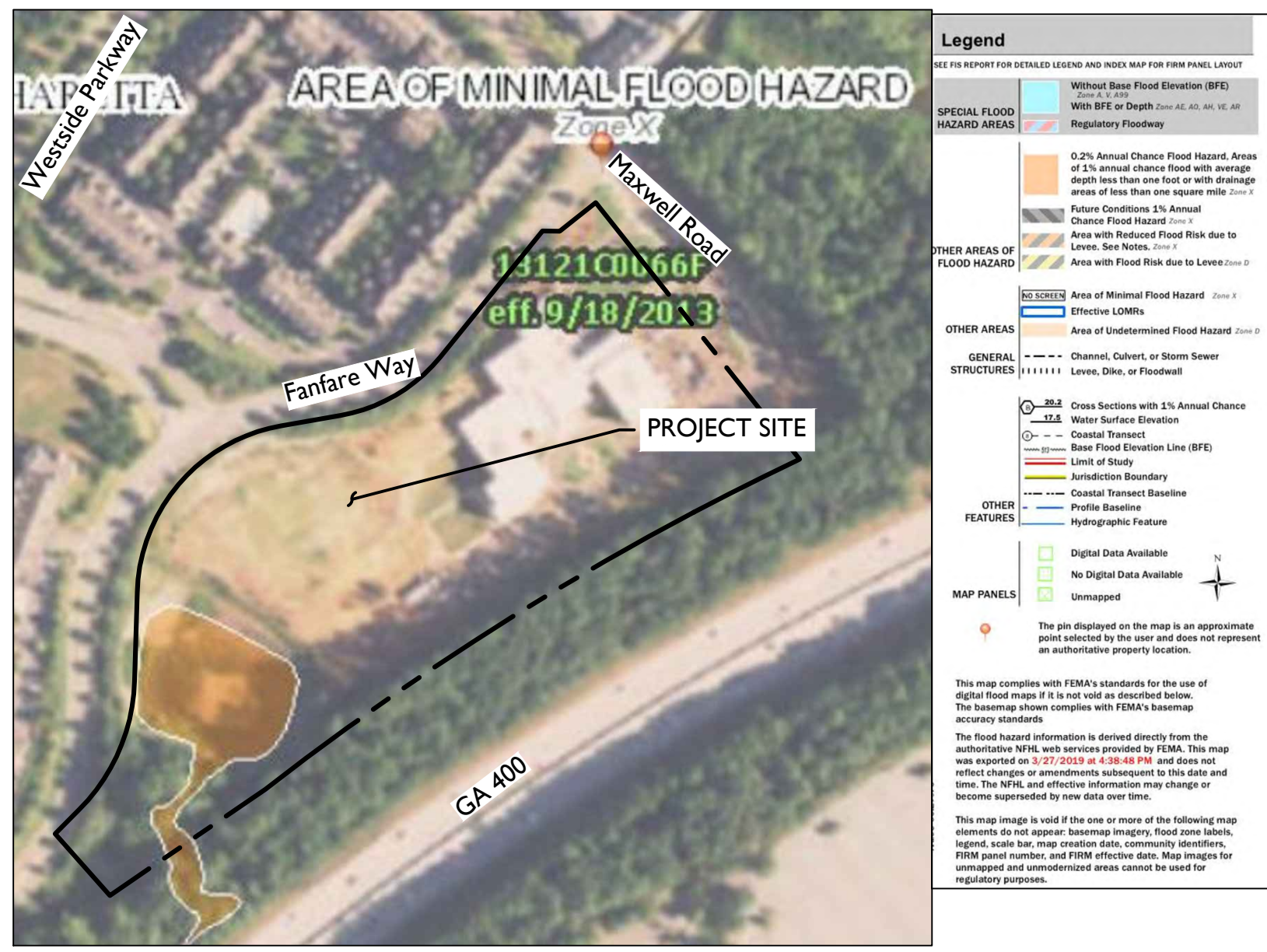
[View payments/adjustments](#)

Installment	Pay By	Amount	Payments/Credits	Balance	Interest	Due
1	12/1/2022	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

©2023 Tyler Technologies, Inc.

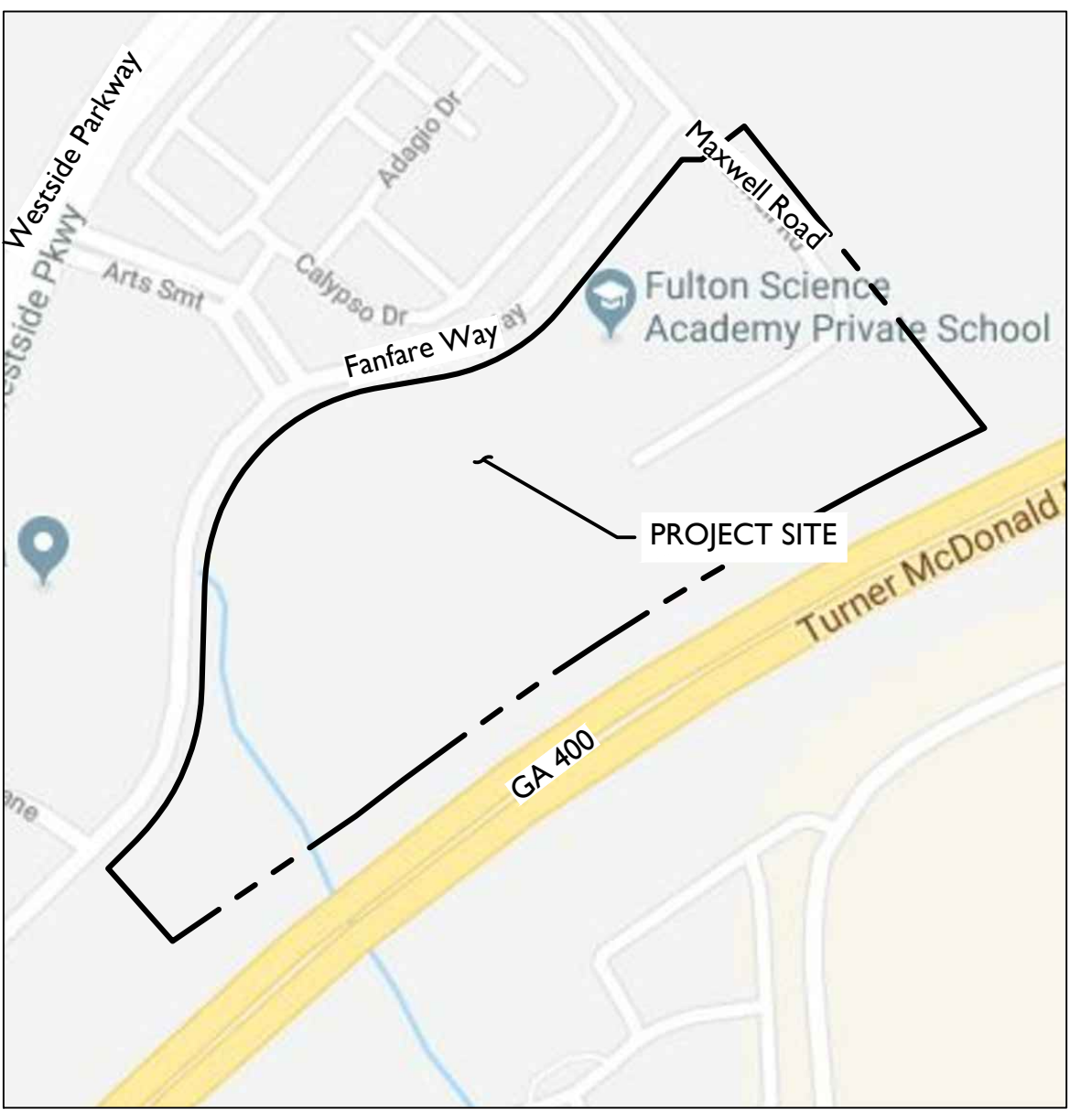
SITE DATA:
SITE AREA: 18.49 ACRES
DISTURBED AREA: 2.9 ACRES
PID: 12 260 006 894 237
ZONING: CUP (COMMUNITY UNIT PLAN) 1ST DISTRICT & 2ND SECTION
USE: PRIVATE SCHOOL
SETBACKS: 40' FRONT
15' WEST SIDE
40' EAST SIDE
120' GA 400 BUFFER
15' REAR (IN ADDITION TO 400 BUFFER)
BUILDING EXISTING: 102,411 SF DENSITY: 3,916 SF/AC EX
BUILDING HEIGHT: 30' (2 STORIES)
REQUIRED PARKING: 1 PER CLASSROOM/OFFICE + 1 PER 4 HIGH SCHOOL STUDENT
105 FACULTY + (145 STUDENTS / 4) = 142 STALLS REQUIRED
EX PHASE 1&II AS-BUILT = 154 PARKING STALLS
PROP PHASE 3 = 154 EXISTING + 37 PROPOSED = 191 STALLS

PAVING LEGEND
BC BACK OF CURB
B.S.L. BUILDING SETBACK LINE
C&G CURB AND GUTTER
CIP CAST IN PLACE
CONC. CONCRETE
FC FACE OF CURB
H/C HANDICAP
L/A LANDSCAPE AREA
L LEVEL/LANDING
R RAMP
S/W SIDEWALK



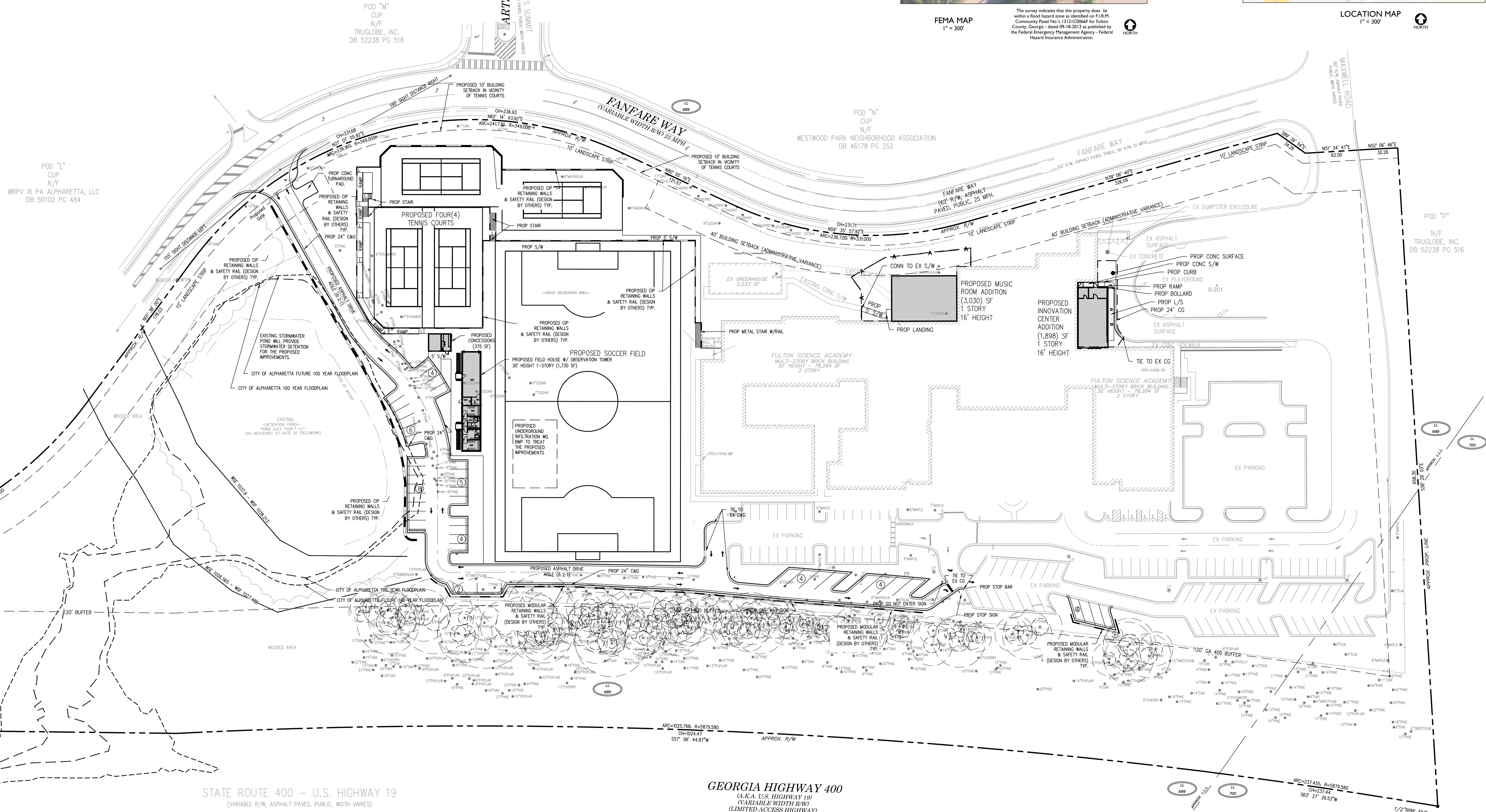
FEMA MAP
1" = 300'

The survey indicates that this property does lie within a flood hazard zone as identified on F.I.R.M. Community Panel No. 13121C0064F for Fulton County, Georgia - dated 09-18-2013 as published by the Federal Emergency Management Agency - Federal Hazard Insurance Administration.



LOCATION MAP
1" = 300'

NORTH



STATE ROUTE 400 - U.S. HIGHWAY 19
(VARIABLE R/W, ASPHALT PAVED, PUBLIC, WIDTH VARIES)

GEORGIA HIGHWAY 400
(A.K.A. U.S. HIGHWAY 19)
(VARIABLE WIDTH R/W)
(LIMITED ACCESS HIGHWAY)

GEORGIA811
Utilities Protection Center, Inc.
Know what's below.
Call before you dig.
Dial 811 or Call 1-800-282-7411

NORTH

Scale 1" = 40'

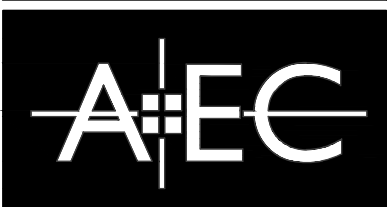
LAYOUT PLAN

FULTON SCIENCE
ACADEMY - PHASE III
ALPHARETTA, FULTON COUNTY, GEORGIA

NO.	REVISIONS	DATE

PROJECT NO: 22-4817
CIVIL DRAWN BY: JLM
CIVIL DESIGNED BY: CF, JLM
LANDSCAPE DRAWN BY: -
LANDSCAPE DESIGNED BY: -
CHECKED BY: CF
DATE: 04-03-2023

SHEET
C4.0



Civil Engineering
Land Planning
Landscape Architecture

Water Resources
Property Services
Arboret Services

50 Warm Springs Circle
Roswell - Georgia - 30075
(770)411-1942 - www.aecad.com

GRADING PLAN

FULTON SCIENCE ACADEMY - PHASE III

ALPHARETTA, FULTON COUNTY, GEORGIA

DATE

REVISIONS

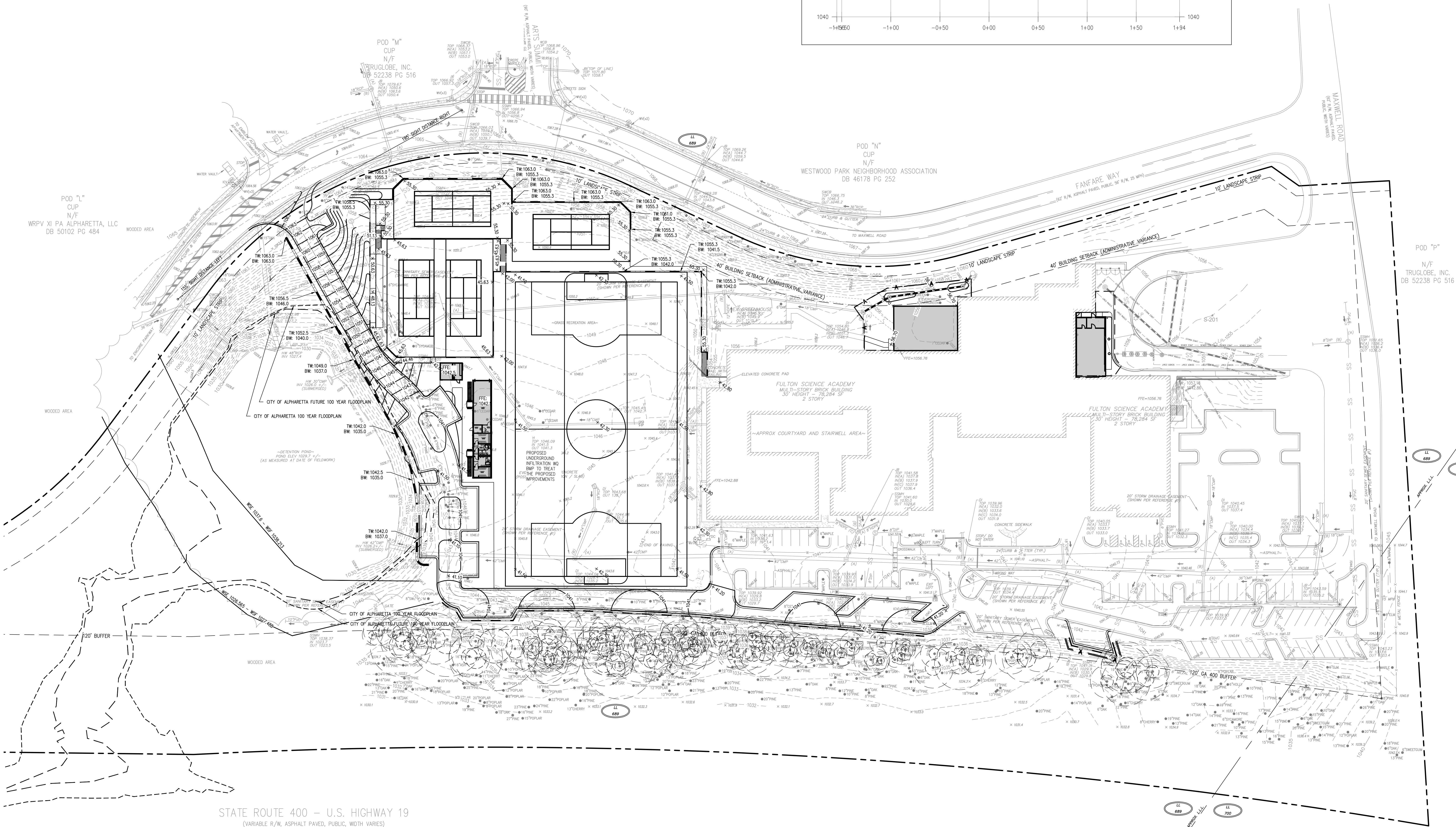
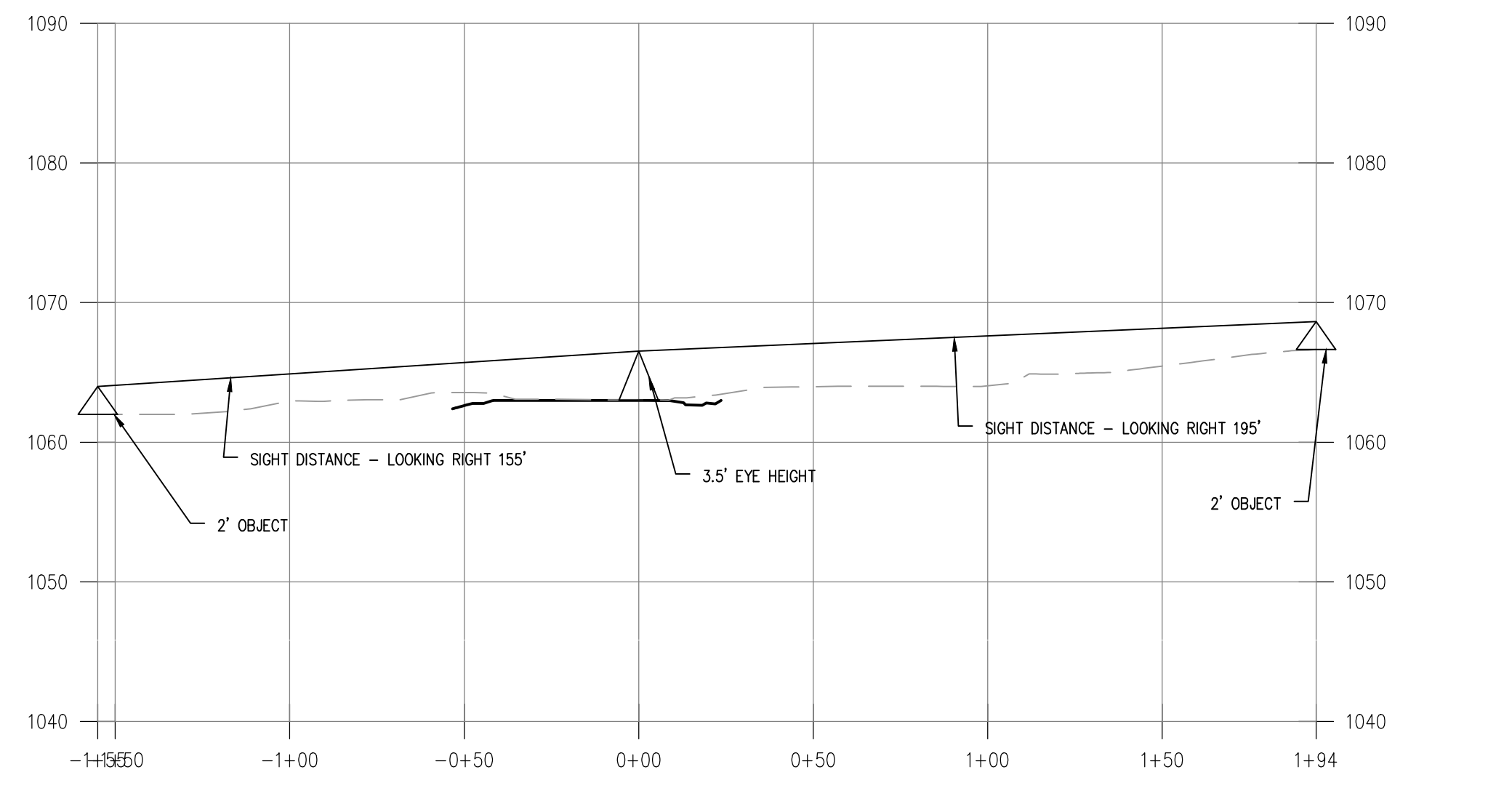
NO.

PROJECT NO: 22-4817
CIVIL DRAWN BY: JLM
CIVIL DESIGNED BY: CF, JLM
LANDSCAPE DRAWN BY: -
LANDSCAPE DESIGNED BY: -
CHECKED BY: CF
DATE: 04-03-2023

SHEET

C6.0

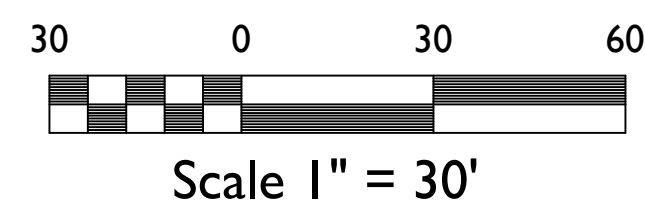
SIGHT DISTANCE - FANFARE WAY - 25 MPH



STATE ROUTE 400 - U.S. HIGHWAY 19
(VARIABLE R/W, ASPHALT PAVED, PUBLIC, WIDTH VARIES)



Utilities Protection Center, Inc.
Know what's below.
Call before you dig.
Dial 811 or Call 1-800-282-7411







FULTON SCIENCE ACADEMY
Phase III
3035 Fanfare Way Alpharetta, GA 30009

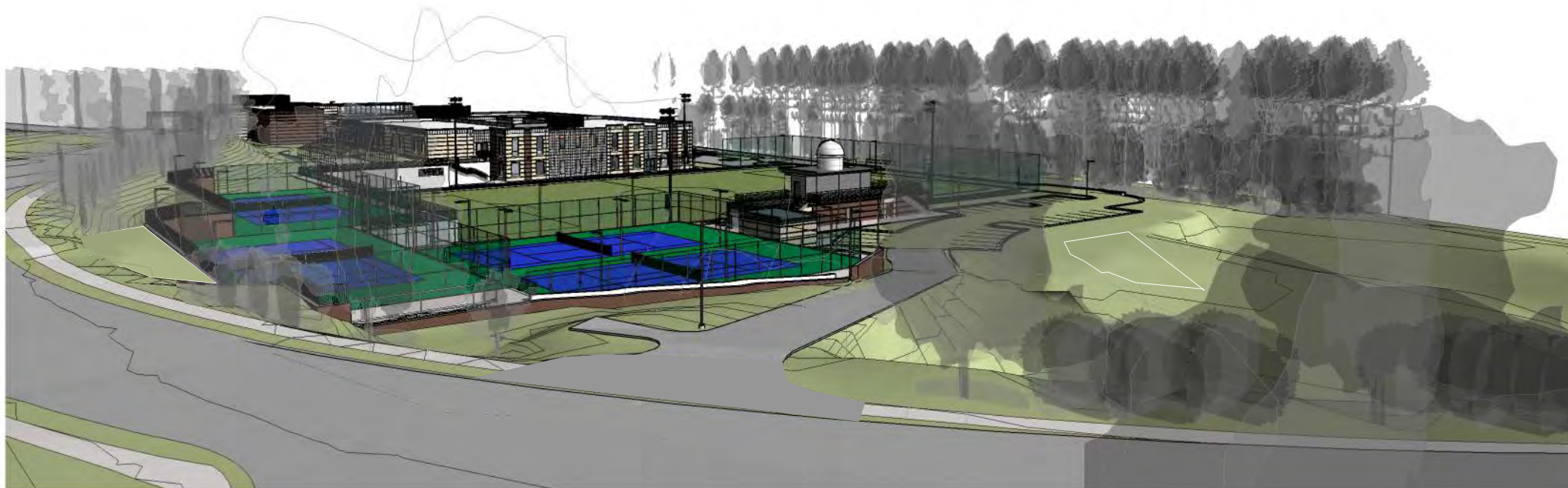
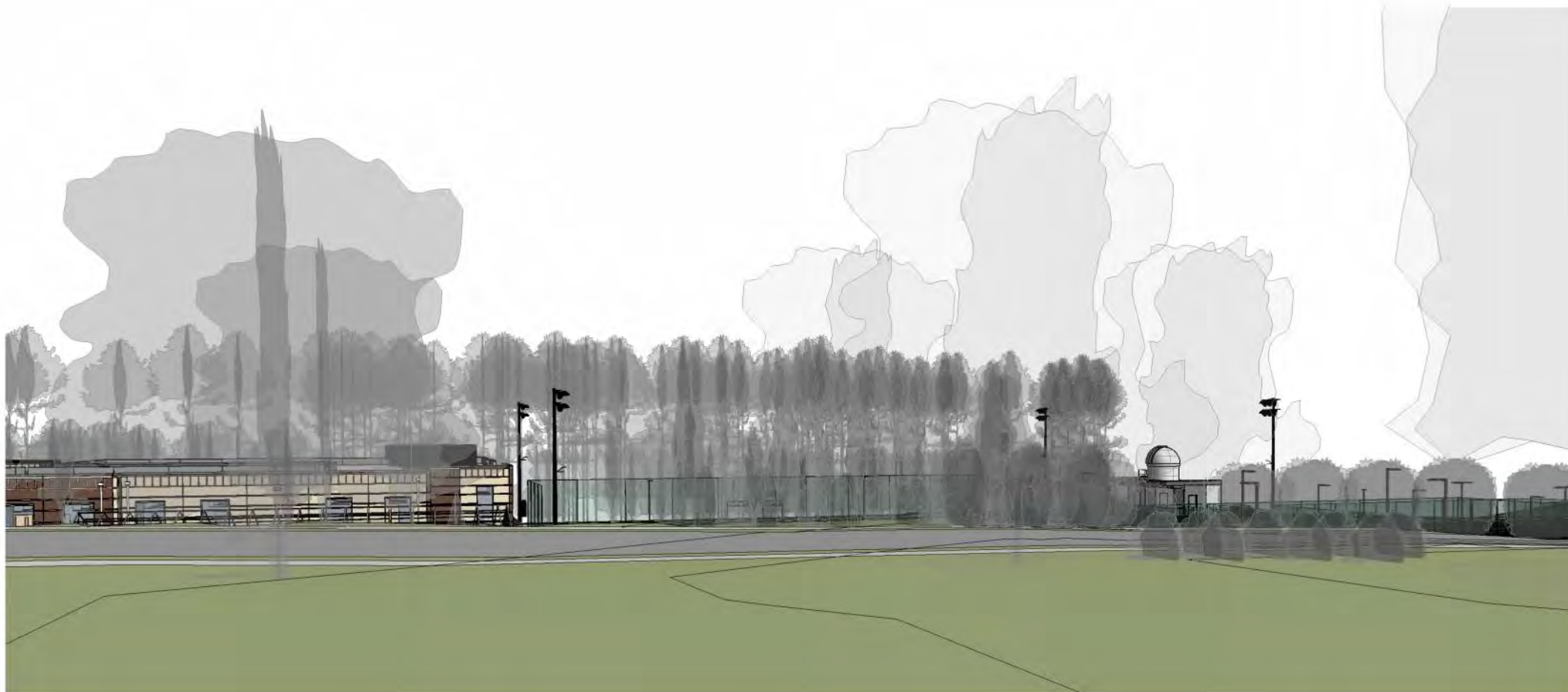
Make3 Project No. 202212

A0 EXISTING AERIAL MAP
04/03/23



Make3
architecture / planning / design

1075 Brady Avenue NW
Atlanta, Georgia 30318
404.876.5510



FULTON SCIENCE ACADEMY
Phase III

3035 Fanfare Way Alpharetta, GA 30009

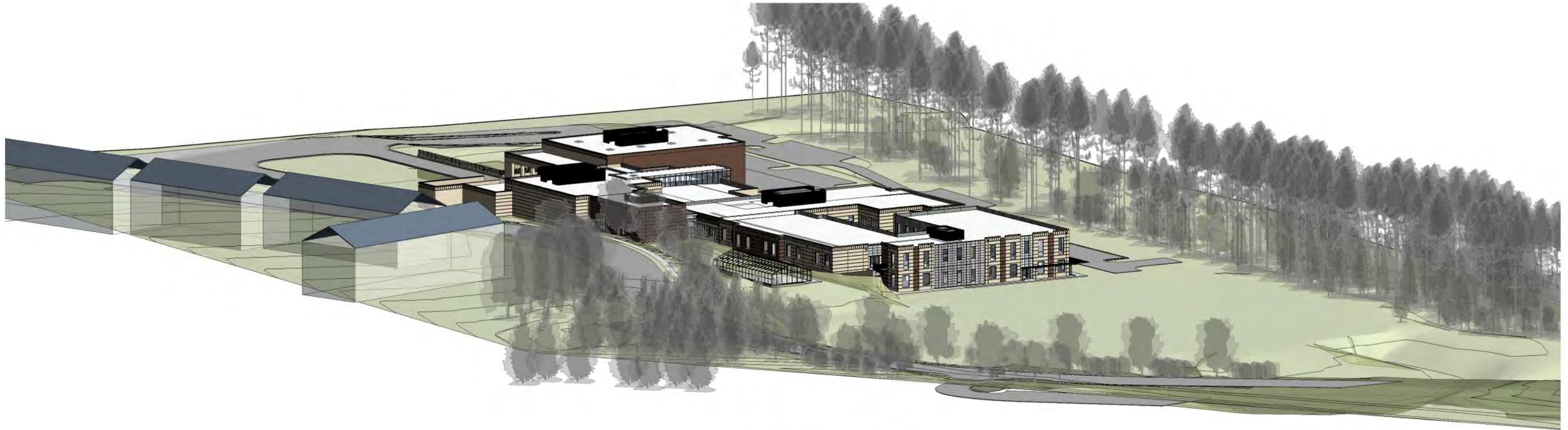
Make3 Project No. 202212

A6 NEIGHBOR'S PERSPECTIVES

04/03/23



1075 Brady Avenue NW
Atlanta, Georgia 30318



FULTON SCIENCE ACADEMY
Phase III

3035 Fanfare Way Alpharetta, GA 30009

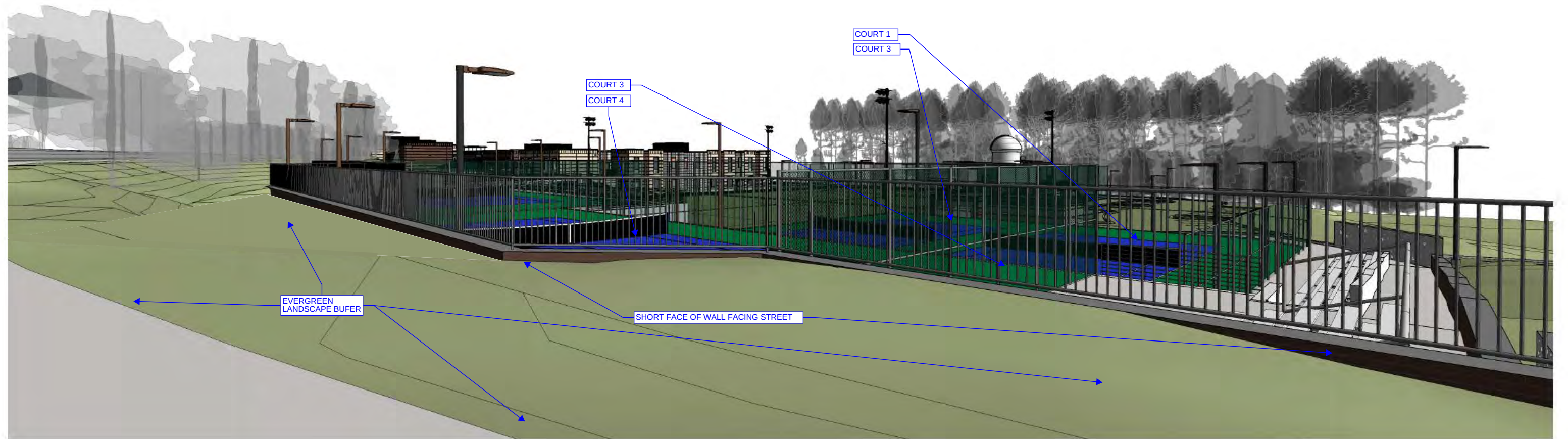
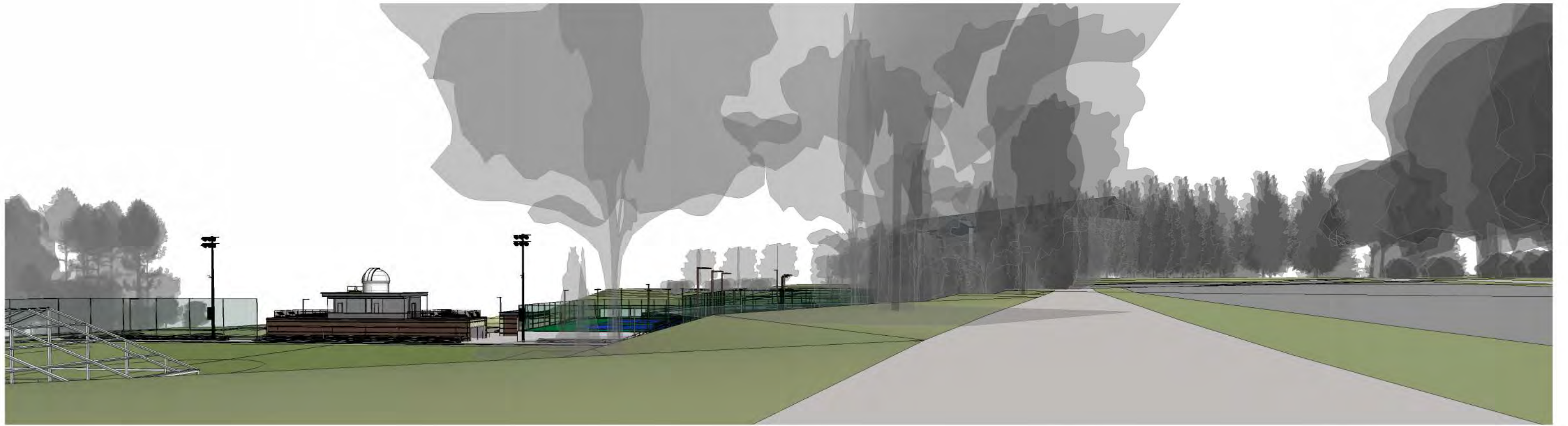
Make3 Project No. 202212

A4 BEFORE AND AFTER PERSPECTIVES

04/03/23



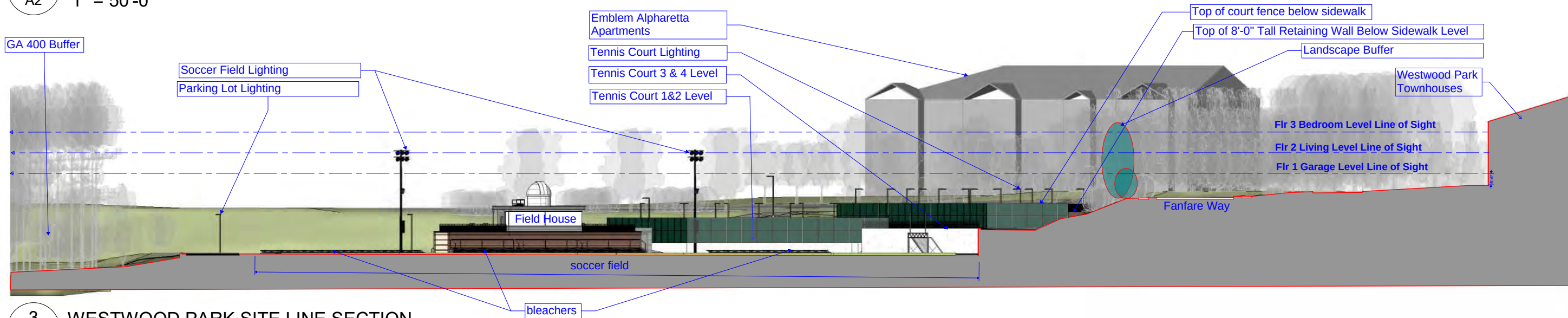
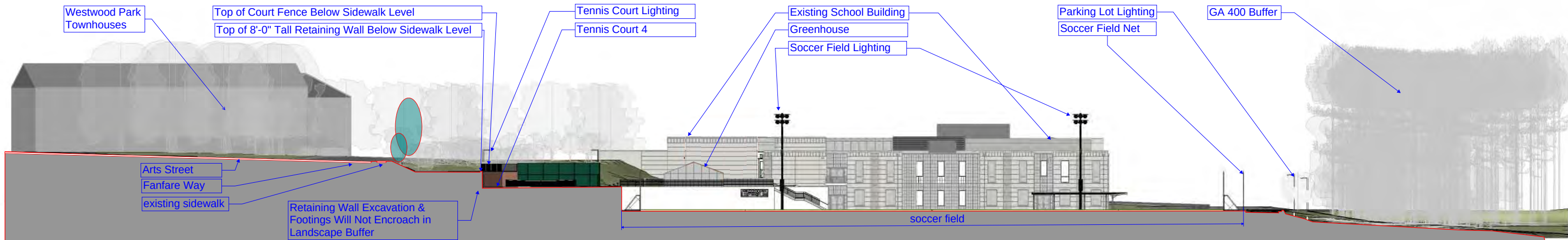
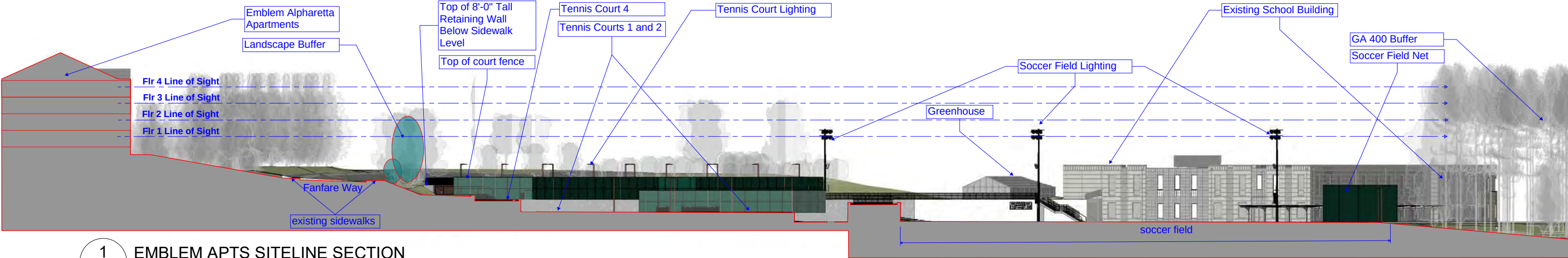
1075 Brady Avenue NW Atlanta, Georgia 30318 404.876.5510



FULTON SCIENCE ACADEMY
Phase III
3035 Fanfare Way Alpharetta, GA 30009
Make3 Project No. 202212

A5 STREET PERSPECTIVES
04/03/23





FULTON SCIENCE ACADEMY
Phase III
3035 Fanfare Way Alpharetta, GA 30009

A2 SITE SECTIONS - SIGHT LINES

04/03/23

BUILDLINE
GENERAL CONTRACTORS

Make3
architecture / planning / design

1075 Brady Avenue NW Atlanta, Georgia 30318 404.876.5510

RESERVED FOR PLAT FILING

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

LEGEND - ABBREVIATIONS

IPS IRON PIN SET
RFB IRON PIN FOUND (1/2" REBAR)
CMP CONCRETE MONUMENT FOUND
RFB REBAR
CTP OPEN TOP PIPE
CTP CRIMPED TOP PIPE
POB POINT OF BEGINNING
RW RIGHT OF WAY
LL LAND LOT
DBP DEED BOOKPAGE
PND FOUND
DIST DISTURBED
CL CENTERLINE
PL PROPERTY LINE
VCC UNDERGROUND CABLE TV LINE
DI DROP INLET
JB JUNCTION BOX
CB CATCH BASIN
HWS HEADWALL
OCS OUTLET CONTROL STRUCTURE
CMP CORRUGATED METAL PIPE
RCP REINFORCED CONCRETE PIPE
PVC POLYVINYL CHLORIDE PIPE
DQ DUCTILE IRON PIPE
SSMH SANITARY SEWER MANHOLE
CO CLEAN OUT
FH FIRE HYDRANT
FDC FIRE DEPARTMENT CONNECTION
WM WATER METER
GV GAS VALVE
GLM GAS LINE MARKER
ELEC ELECTRIC
ELEC ELECTRIC METER
PP POWER POLE
LP LIGHT POLE
GW GUY WIRE
TELE TELEPHONE
CONC CONCRETE
TYP TYPICAL
W/ WITH
BSL BUILDING SETBACK LINE

LEGEND - LINE TYPE

ADJOINING PROPERTY LINE
PROPERTY LINE
EASEMENT LINE
RIGHT-OF-WAY LINE
METAL FENCE
WOOD FENCE
WIRE FENCE
GUARDRAIL
OVERHEAD ELECTRIC LINE
UNDERGROUND ELECTRIC LINE
UNDERGROUND NATURAL GAS LINE
UNDERGROUND SANITARY SEWER LINE
UNDERGROUND STORM SEWER LINE
UNDERGROUND COMMUNICATION LINE
UNDERGROUND WATER LINE
UNDERGROUND CABLE TV LINE
FLOOD ZONE LINE

LEGEND - SYMBOLS

DROP INLET
STORM DRAINAGE MANHOLE
SINGLE WING CATCH BASIN
DOUBLE WING CATCH BASIN
SANITARY SEWER MANHOLE
CLEAN OUT
FIRE HYDRANT
FIRE DEPARTMENT CONNECTION
WATER METER
GAS METER
GAS VALVE
ELECTRIC BOX
ELECTRIC METER
POWER POLE
LIGHT POLE
GUY WIRE
TELEPHONE
CONCRETE
TYPICAL
WITH
BUILDING SETBACK LINE

50 0 50 100 150
GRAPHIC SCALE - 1" = 50 FEET

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

NOW OR FORMERLY
NORTHLAND ARTS SUMMIT, LLC
DB 66050, PG. 228
PARCEL NO.: 12 260006903064

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

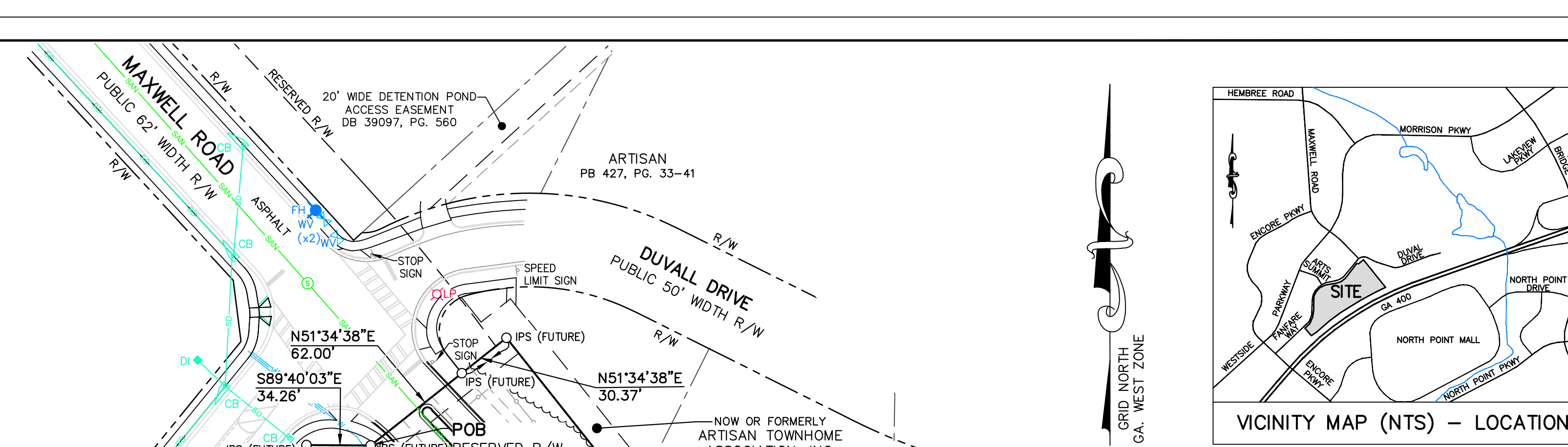
- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.

REFERENCES

- EASEMENTS AS CONTAINED IN THAT CERTAIN LIMITED WARRANTY DEED BY AND BETWEEN COUSINS PROPERTIES INCORPORATED AND ROBERTS PROPERTIES RESIDENTIAL, L.P., DATED 29 DECEMBER 2004, FILED AND RECORDED DECEMBER 30, 2004 IN DEED BOOK 39097, PAGE 560, FULTON COUNTY RECORDS.
- ROAD DEDICATION PLATS AT COUSINS WESTSIDE FOR COUSINS PROPERTIES, INCORPORATED, PREPARED BY LOWE ENGINEERS, DATED NOV 3, 2005, LAST REVISED 03/24/06, FILED AND RECORDED DEC 27, 2006 IN PLAT BOOK 313, PAGE 29-43, FULTON COUNTY, GEORGIA RECORDS.
- ALTA/ACM LAND TITLE SURVEY FOR FULTON SCIENCE ACADEMY, INC., FIRST AMERICAN TITLE INSURANCE COMPANY, COMPASS BANK, AN ALABAMA BANKING CORPORATION, MERCHANT CAPITAL, LLC, AND THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., PREPARED BY LOWE ENGINEERS, DATED DECEMBER 20, 2004, LAST REVISED 07/25/11.
- LAND DEVELOPMENT PLANS FOR FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, PREPARED BY MAMES, DATED 05/10/19, LAST REVISED 09/17/19.
- AS-BUILT SURVEY OF FULTON SCIENCE ACADEMY - PHASE 2, BUILDING AND PARKING LOT ADDITION, FOR MANHATTAN CONSTRUCTION COMPANY, PREPARED BY LOWE ENGINEERS, DATED 12/02/2021.



AREA = 17.457 ACRES
(760,430 SQ. FT.)
INCLUDES 0.465 ACRE (20,260 SQ. FT.) IN RESERVED R/W

SEE SHEET 2 OF 2 FOR
LEGAL DESCRIPTIONS AND
TITLE EXCEPTIONS

REVISIONS

NO.	DATE	BY	CHKD	APP'D
1	01.05.2023	WJ	WJ	WJ
2	01.05.2023	WJ	WJ	WJ
3	01.05.2023	WJ	WJ	WJ
4	01.05.2023	WJ	WJ	WJ
5	01.05.2023	WJ	WJ	WJ
6	01.05.2023	WJ	WJ	WJ
7	01.05.2023	WJ	WJ	WJ

ALTA/NSPS LAND TITLE SURVEY PREPARED FOR:

AMERS BANK, CHICAGO TITLE INSURANCE COMPANY, BLUE SKY TITLE, LLC, BRISKEN, CROSS & SANFORD, LLC, AND FULTON SCIENCE ACADEMY PRIVATE SCHOOL, INC.

LOCATED IN LAND LOTS 686, 689 & 700
IN THE CITY OF ALPHARETTA
FULTON COUNTY, GEORGIA

DATE: 01.05.2023

COPYRIGHT © 2023 BY LOWE ENGINEERS, INC. ALL RIGHTS RESERVED. THIS SURVEY IS THE PROPERTY OF LOWE ENGINEERS, INC. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF LOWE ENGINEERS, INC.

PROJECT NO.: 222-100035
DRAWN BY: WJ
CHECKED BY: WJ
CGL

980 HANOVER DRIVE, SUITE 300
ATLANTA, GEORGIA 30328
TEL: 770-857-8400
WWW.LOWENGINEERS.COM
Land Surveyor Firm License No. LS000656

NOT ISSUED FOR CONSTRUCTION

To: Amers Bank, Chicago Title Insurance Company, Blue Sky Title, LLC, Brisken, Cross & Sanford, LLC, and Fulton Science Academy Private School, Inc.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6a, 7a, 8, 9, 13, 14, 16 and 17 of Table A thereof. The initial fieldwork was completed 2004, 2005, 2010, 2011, with As-Built Survey work completed on October 12, 2021, and a subsequent site visit being performed on January 4, 2023.

Date of Plat or Map: 5 January 2023



SURVEYOR'S CERTIFICATE (STATE OF GEORGIA)

This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated herein. RECORDED OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.

CLOSURE STATEMENT

THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS AN ANGULAR ERROR OF 0 SECONDS PER ANGLE POINT AND A PRECISION RATIO OF 1 IN 321,215 FEET. IT HAS BEEN ADJUSTED USING THE COMPASS RULE.

THE DATA SHOWN ON THIS PLAT HAS A CLOSURE PRECISION OF ONE FOOT IN 596,838 FEET.

GENERAL NOTES

THE LINEAR AND ANGULAR MEASUREMENTS SHOWN ON THIS MAP OR PLAT WERE OBTAINED BY USING IN THE FIELD SURVEY A LEICA TS16 ROBOTIC TOTAL STATION, LEICA CS20 FIELD CONTROLLER, AND LEICA GS38 GNSS RTK ROVER.

BEARINGS ARE CALCULATED FROM ANGLES TURNED FROM A SINGLE GRID BASELINE.

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS AND BASED ON POSITIONAL VALUES FOR THE VIRTUAL REFERENCE STATION NETWORK DEVELOPED BY LEICA SMARTNET. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983 (NAD83). THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).

INITIAL FIELD WORK COMPLETED IN 2004, 2005, 2010, 2011 AND 2021. SITE INSPECTION PERFORMED ON 4 JANUARY 2023.

BY GRAPHIC PLOTTING ONLY, NO PORTIONS OF THIS SITE ARE LOCATED WITHIN SPECIAL FLOOD HAZARD AREA "A", AS PER THE FLOOD INSURANCE RATE MAP (FIRM) OF FULTON COUNTY, GEORGIA, MAP NUMBER 131210066, WITH AN EFFECTIVE DATE OF 9/18/2013. THE SITE IS PRIMARILY IN ZONE X (AREA OF MINIMAL FLOOD HAZARD) WITH A PORTION LOCATED IN ZONE X* (0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH OF LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE).

ALL IRON PINS SET ARE 1/2" REBAR WITH STAMPED CAP UNLESS OTHERWISE INDICATED.

THIS PLAT IS SUBJECT TO ALL LEGAL EASEMENTS AND RIGHTS OF WAY, PUBLIC OR PRIVATE.

ABOVE GROUND UTILITY LOCATIONS AS SHOWN HEREON WERE OBTAINED FROM FIELD OBSERVATIONS. UNDERGROUND UTILITIES AS SHOWN HEREON ARE FROM REFERENCE NUMBER 5. THE INFORMATION SHOWN ON THIS DRAWING CONCERNING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE OWNER, ARCHITECT, CONTRACTOR, AND THEIR AGENTS ARE RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE ACTUAL SIZE, TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERE TO.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES ON THE PROJECT. THE CONTRACTOR SHALL HIRE AN INDEPENDENT UTILITY LOCATING COMPANY TO LOCATE ALL UTILITIES PRIOR TO THE START OF WORK.

THE SURVEY AND PLAT SHOWN HEREON IS NOT INTENDED FOR USE OR RELIANCE BY ANY PARTIES OR ENTITIES NOT SPECIFICALLY LISTED IN THE TITLE. UNAUTHORIZED THIRD PARTIES SHALL INDEMNIFY AND HOLD LOWE ENGINEERS, LLC HARMLESS AGAINST ANY AND ALL LIABILITY FOR ANY LOSSES ARISING OUT OF, OR RELATED TO, RELIANCE BY ANY THIRD PARTY ON ANY WORK PERFORMED THEREUNDER, OR THE CONTENTS OF THE SURVEY.

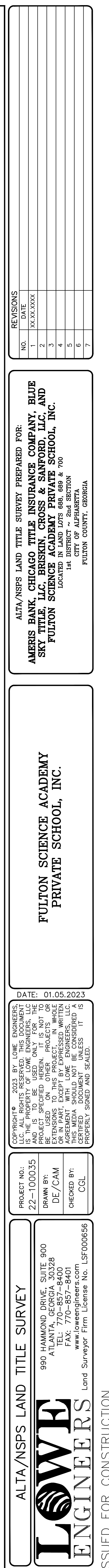
THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK - TABLE A, ITEM 16.

THE SURVEYOR IS NOT AWARE OF ANY PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK - TABLE A, ITEM 17.

ZONING: CLUP (COMMUNITY UNIT PLAN)
USE: PRIVATE SCHOOL
SETBACKS: 40' FRONT
15' WEST (SIDE)
40' EAST (SIDE)
120' REAR (GA 400 BUFFER)

PARKING SPACE COUNT - TOTAL 153 SPACES
1 HANDICAPPED
1 HANDICAPPED VAN
148 REGULAR

SITE INCLUDES THE FOLLOWING TAX PARCEL:
12 2600069437
3035 FANFARE WAY
ALPHARETTA, GA 30009



Legal Description As Surveyed

All that tract or parcel of land lying and being in Land Lots 688, 689 and 700 of the 1st District, 2nd Section, City of Alpharetta, Fulton County, Georgia, and being more particularly described as follows:

BEGINNING at an iron pin set located at the intersection of the Land Lot Line common to Land Lots 743 and 744 with the northwesterly right-of-way line of State Route 400, U.S. Highway 19 (having a variable width public right-of-way); thence run southwesterly along said northwesterly right-of-way line of State Route 400, U.S. Highway 19 the following courses and distances: S63°43'36"W a distance of 154.60 feet to a point; S70°43'17"W a distance of 499.99 feet to a concrete monument found; S70°39'47"W a distance of 199.60 feet to a concrete monument found; S63°43'47"W a distance of 201.60 feet to a concrete monument found; S70°44'42"W a distance of 343.70 feet to a concrete monument found; along the arc of a curve to the left an arc distance of 280.19 feet to a point, having a radius of 5879.58 feet, being subtended by a chord bearing of S69°25'04"W and a chord distance of 280.16 feet; along the arc of a curve to the left an arc distance of 371.37 feet to an iron pin found, having a radius of 5879.58 feet, being subtended by a chord bearing of S66°14'35"W and a chord distance of 371.31 feet; N38°26'44"W a distance of 35.04 feet to an iron pin set, said iron pin set being the TRUE POINT OF BEGINNING.

FROM THE TRUE POINT OF BEGINNING AS THUS ESTABLISHED, thence continue to run southwesterly along said northwesterly right-of-way line of State Route 400, U.S. Highway 19 the following courses and distances: S62°27'10"W a distance of 185.56 feet to an iron pin set; along the arc of a curve to the left an arc distance of 1413.61 feet to an iron pin set, having a radius of 5880.00 feet, being subtended by a chord bearing of S55°41'44"W and a chord distance of 1410.21 feet; S55°41'00"W a distance of 40.68 feet to an iron pin set; thence leave said northwesterly right-of-way line of State Route 400, U.S. Highway 19 and run N41°32'22"W a distance of 165.85 feet to an iron pin set located on the southeasterly right-of-way line of Fanfare Way (having a 62' width public right-of-way); thence run generally northeasterly along said southeasterly right-of-way line of Fanfare Way the following courses and distances: N44°56'59"E a distance of 68.90 feet to a point; along the arc of a curve to the left an arc distance of 288.06 feet to a point, having a radius of 381.00 feet, being subtended by a chord bearing of N23°17'25"E and a chord distance of 281.25 feet; N01°37'51"E a distance of 178.03 feet to a point; along the arc of a curve to the right an arc distance of 477.88 feet to a point, having a radius of 349.00 feet, being subtended by a chord bearing of N40°51'29"E and a chord distance of 441.41 feet; N80°05'07"E a distance of 121.57 feet to a point; along the arc of a curve to the left an arc distance of 236.72 feet to a point, having a radius of 331.00 feet, being subtended by a chord bearing of N59°35'49"E and a chord distance of 231.71 feet; N39°06'31"E a distance of 326.09 feet to an iron pin set located at the western point of the mitered intersection of said southeasterly right-of-way line of Fanfare Way with the southwesterly right-of-way line of Maxwell Road (having a 62' width public right-of-way); thence run southeasterly along said miter S89°40'03"E a distance of 34.26 feet to an iron pin set located on the southwesterly right-of-way line of Maxwell Road at the eastern point of the mitered intersection; thence leave said miter and run N51°34'38"E a distance of 62.00 feet to an iron pin set located on the northeasterly right-of-way line of Maxwell Road; thence leave said northeasterly right-of-way line and run N51°34'38"E a distance of 30.37 feet to an iron pin set; thence run S38°26'44"E a distance of 623.02 feet to an iron pin set located on the northwesterly right-of-way line of State Route 400, U.S. Highway 19, said iron pin set being the TRUE POINT OF BEGINNING.

Said tract or parcel of land containing 17.457 acres (760,430 square feet).

Legal Description Record

ALL THAT TRACT OR PARCEL OF LAND KNOWN AS POD "O" OF THE COUSINS WESTSIDE SUBDIVISION LYING AND BEING IN LAND LOTS 688, 689 & 700, 1ST LAND DISTRICT, 2ND SECTION, CITY OF ALPHARETTA, FULTON COUNTY, GEORGIA AND AS SHOWN ON THAT CERTAIN SUBDIVISION PLAT PREPARED BY LOWE ENGINEERS, DATED 12/20/2004, LAST REVISED 04/15/2011, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT LOCATED AT THE INTERSECTION OF THE NORTHERLY RIGHT OF WAY LINE OF STATE ROUTE 400 - U.S. HWY 19 (TURNER MACDONALD PKWY) HAVING A VARIABLE RIGHT OF WAY AND THE LINE COMMON TO LAND LOTS 743 & 744, 1ST LAND DISTRICT, 2ND SECTION, CITY OF ALPHARETTA, FULTON COUNTY, GEORGIA; THENCE ALONG THE AFORESAID RIGHT OF WAY A DISTANCE OF 2051.05 FEET TO A 1/2" REBAR FOUND, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY WITH A CURVE TURNING TO THE LEFT, HAVING AN ARC LENGTH OF 237.46', A RADIUS OF 5879.58', A CHORD BEARING OF S 63°27'27" W, AND A CHORD LENGTH OF 237.44' TO A CONCRETE MONUMENT FOUND; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY WITH A COMPOUND CURVE TURNING TO THE LEFT, HAVING AN ARC LENGTH OF 1025.77', A RADIUS OF 5879.58', A CHORD BEARING OF S 57°06'45" W, AND A CHORD LENGTH OF 1024.47' TO A 1/2" REBAR FOUND; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY S 55°40'57" W A DISTANCE OF 378.66' TO A 1/2" REBAR SET; THENCE LEAVING THE AFORESAID RIGHT OF WAY N 41°32'16" W A DISTANCE OF 165.85' TO A 1/2" REBAR SET ALONG THE SOUTHERLY RIGHT OF WAY LINE OF FANFARE WAY HAVING A 62' RIGHT OF WAY;

THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY N 44°55'59" E A DISTANCE OF 68.90' TO A POINT; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY WITH A CURVE TURNING TO THE LEFT, HAVING AN ARC LENGTH OF 288.06', A RADIUS OF 381.00', A CHORD BEARING OF N 23°17'34" E, AND A CHORD LENGTH OF 281.25' TO A POINT; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY N 01°38'00" E A DISTANCE OF 178.03' TO A POINT; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY WITH A CURVE TURNING TO THE RIGHT, HAVING AN ARC LENGTH OF 236.16', A RADIUS OF 349.00', A CHORD BEARING OF N 21°01'06" E, AND A CHORD LENGTH OF 231.68' TO A POINT; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY WITH A COMPOUND CURVE TURNING TO THE RIGHT, HAVING AN ARC LENGTH OF 241.73', A RADIUS OF 349.00', A CHORD BEARING OF N 60°14'44" E, AND A CHORD LENGTH OF 236.93' TO A POINT; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY N 80°05'16" E A DISTANCE OF 121.57' TO A POINT; THENCE CONTINUING ALONG THE AFORESAID RIGHT OF WAY WITH A CURVE TURNING TO THE LEFT, HAVING AN ARC LENGTH OF 236.72', A RADIUS OF 331.00', A CHORD BEARING OF N 59°35'58" E, AND A CHORD LENGTH OF 231.71' TO A POINT; THENCE N 39°06'40" E A DISTANCE OF 326.09' TO A ½" REBAR SET AT THE SOUTHWESTERN POINT OF MITERED INTERSECTION OF FANFARE WAY (62' R/W) AND MAXWELL ROAD (62' R/W); THENCE CONTINUING ALONG THE MITERED INTERSECTION S 89°39'54" E A DISTANCE OF 34.26' TO A ½" REBAR SET; THENCE CONTINUING ALONG THE MITERED INTERSECTION N 51°34'47" E A DISTANCE OF 62.00' TO A ½" REBAR SET; THENCE LEAVING THE RIGHT OF WAY OF MAXWELL ROAD N 52°06'46" E A DISTANCE OF 30.26' TO A ½" REBAR FOUND; THENCE S 38°29'03" E A DISTANCE OF 658.30' TO A ½" REBAR FOUND, SAID POINT BEING THE TRUE POINT OF BEGINNING.

LESS AND EXCEPT THE RIGHT OF WAY TAKING SET FORTH IN DEED BOOK 65923 PAGE 33, AFORESAID RECORDS.

Legal Description Reserved ROW

All that tract or parcel of land lying and being in Land Lot 689 of the 1st District, 2nd Section, City of Alpharetta, Fulton County, Georgia, and being more particularly described as follows:

BEGINNING at an iron pin set located at the intersection of the Land Lot Line common to Land Lots 743 and 744 with the northwesterly right-of-way line of State Route 400, U.S. Highway 19 (having a variable width public right-of-way); thence run southwesterly along said northwesterly right-of-way line of State Route 400, U.S. Highway 19 the following courses and distances: S63°43'36"W a distance of 154.60 feet to a point; S70°43'17"W a distance of 499.99 feet to a concrete monument found; S70°39'47"W a distance of 199.60 feet to a concrete monument found; S63°43'47"W a distance of 201.60 feet to a concrete monument found; S70°44'42"W a distance of 343.70 feet to a concrete monument found; along the arc of a curve to the left an arc distance of 280.19 feet to a point, having a radius of 5879.58 feet, being subtended by a chord bearing of S69°25'04"W and a chord distance of 280.16 feet; along the arc of a curve to the left an arc distance of 371.37 feet to an iron pin found, having a radius of 5879.58 feet, being subtended by a chord bearing of S66°14'35"W and a chord distance of 371.31 feet; N38°26'44"W a distance of 35.04 feet to an iron pin set; thence leave said northwesterly right-of-way line of State Route 400, U.S. Highway 19 and run N38°26'44"W a distance of 623.02 feet to an iron pin set; thence run S51°34'38"W a distance of 30.37 feet to an iron pin set located on the northeasterly right-of-way line of Maxwell Road (having a 62' width public right-of-way); thence run S51°34'38"W a distance of 62.00 feet to an iron pin set located on the southwesterly right-of-way line of Maxwell Road at the eastern point of the mitered intersection with Fanfare Way (having a 62' width public right-of-way), said iron pin set being the TRUE POINT OF BEGINNING.

FROM THE TRUE POINT OF BEGINNING AS THUS ESTABLISHED, thence leave said southwesterly right-of-way line of Maxwell Road and run S38°26'44"E a distance of 17.66 feet to a point; thence run S89°49'34"W a distance of 25.78 feet to a point; thence run S39°06'31"W a distance of 327.38 feet to a point; thence run along the arc of a curve to the right an arc distance of 277.84 feet to a point, having a radius of 355.01 feet, being subtended by a chord bearing of S61°31'47"W and a chord distance of 270.80 feet; thence run S83°57'06"W a distance of 88.28 feet to a point; thence run along the arc of a curve to the left an arc distance of 477.28 feet to a point located on the southeasterly right-of-way line of Fanfare Way, having a radius of 337.00 feet, being subtended by a chord bearing of S43°23'38"W and a chord distance of 438.38 feet; thence run generally northeasterly along said southeasterly right-of-way line of Fanfare Way the following courses and distances: along the arc of a curve to the right an arc distance of 477.88 feet to a point, having a radius of 349.00 feet, being subtended by a chord bearing of N40°51'29"E and a chord distance of 441.41 feet; N80°05'07"E a distance of 121.57 feet to a point; along the arc of a curve to the left an arc distance of 236.72 feet to a point, having a radius of 331.00 feet, being subtended by a chord bearing of N59°35'49"E and a chord distance of 231.71 feet; N39°06'31"E a distance of 326.09 feet to an iron pin set located at the western point of the mitered intersection of said southeasterly right-of-way line of Fanfare Way with the southwesterly right-of-way line of Maxwell Road; thence run southeasterly along said miter S89°40'03"E a distance of 34.26 feet to an iron pin set located on the southwesterly right-of-way line of Maxwell Road at the eastern point of the mitered intersection with Fanfare Way, said iron pin set being the TRUE POINT OF BEGINNING.

Said tract or parcel of land containing 0.465 acre (20,260 square feet).

**TRAFFIC IMPACT STUDY
FOR
FULTON SCIENCE ACADEMY

ALPHARETTA, GEORGIA**



Prepared for:

Fulton Science Academy,
Fanfare Way,
Alpharetta, GA 30009

Prepared by:



A&R Engineering Inc.

2160 Kingston Court, Suite O
Marietta, GA 30067
Tel: (770) 690-9255 Fax: (770) 690-9210
www.areneg.com

September 10, 2011

A & R Project # 11-063

TABLE OF CONTENTS

Item	Page
Introduction.....	1
Study Assumptions	1
Existing Facilities / Conditions.....	3
Roadway Facilities.....	3
Study Methodology.....	4
Unsignalized Intersections.....	4
Signalized Intersections	5
Existing Traffic Operations	6
Base Traffic Operations	9
Proposed Development	11
Trip Generation.....	11
Trip Distribution	12
Total Future 2012 Traffic Operations.....	16
Conclusions and Recommendations	20
Appendix	

LIST OF TABLES

Table	Page
1	Level of Service Criteria for Unsignalized Intersections4
2	Level of Service Criteria for Signalized Intersections.....5
3	Existing Intersection Operations.....6
4	Base Year Intersection Operations – with Existing Lane Geometry.....9
5	Trip Generation.....12
6	Future Year (2012) Intersection Operations16
7	Future Year (2012) 95 th Percentile Queue Lengths.....17

LIST OF FIGURES

Figure	Page
1	Location Map.....2
2	Existing Weekday Peak Hour Volumes.....7
3	Existing Traffic Control and Lane Geometry8
4	Base 2012 Weekday Peak Hour Volumes10
5	Site Plan13
6	Trip Distribution for 2012.....14
7	Site Generated Peak Hour Volumes – 201215
8	Future 2012 Weekday Peak Hour Volumes.....18
9	Recommended Future 2012 Traffic Control and Lane Geometry19

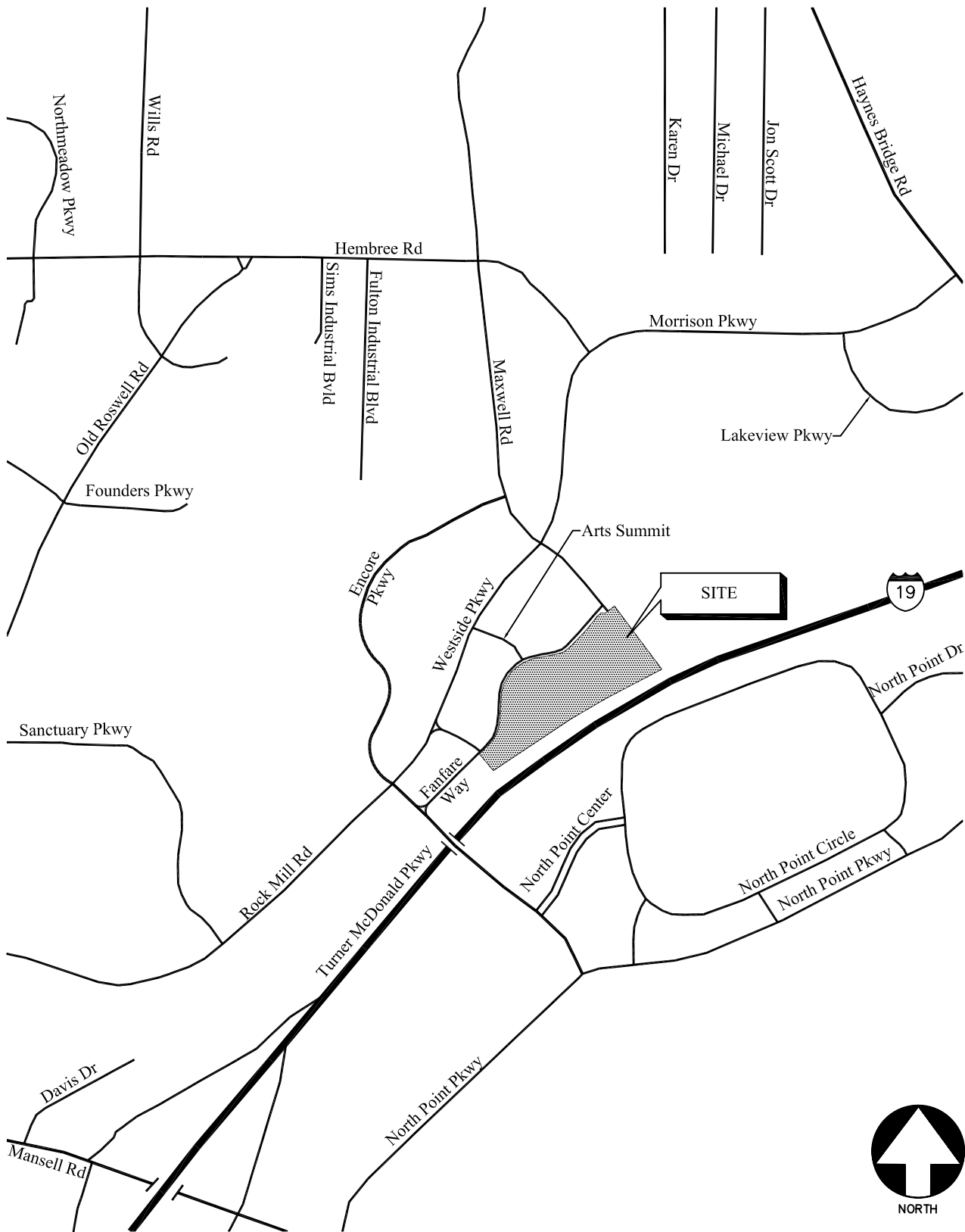
INTRODUCTION

The purpose of this study is to determine the traffic impact that will result from the proposed Fulton Science Academy. The Fulton Science Academy is currently divided into two separate locations, the middle school (1675 Hembree Road, Alpharetta) and the high school (4100 Old Milton Parkway, Alpharetta). The plans for the new Academy site will combine the middle school and high school into one location at the southwest corner of the intersection of Maxwell Road / Fanfare Way in Alpharetta, Georgia. The enrollment for the current middle school location is 508 students, and the current enrollment at the high school is 300 students. These enrollment numbers are not anticipated to change when the schools are combined at the proposed site. The location of the development and the surrounding roadway network is shown in Figure 1.

The proposed development will have one full access driveway, which will be the westbound approach to the intersection of Fanfare Way / Maxwell Road after completion of the site. The AM and PM peak hours have been analyzed in this study. The proposed project will be completed in 2012. As confirmed by City of Alpharetta, this study includes the evaluation of existing, base 2012 and future 2012 traffic operations at the intersections of Westside Parkway / Encore Parkway, Westside Parkway / Maxwell Road and Fanfare Way / Maxwell Road. Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the report.

STUDY ASSUMPTIONS

The study includes various assumptions that have been reviewed and confirmed by City of Alpharetta city staff to project the future traffic conditions at the study intersections. Trip generation for High school was estimates based on the rates and equations published in the 8th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. Trip generation rates of Middle school were estimates based on collected counts from intersections of Hembree Road / Fulton Science Academy Parkway & Sims Industrial Boulevard / Fulton Science Academy Parkway. The new site generated trip distributions for 2012 conditions were based on the locations of major roadways and highways that will serve the development. The growth factor is calculated to be annual 1% and used to estimate future background traffic growth based on Georgia DOT historical traffic data collected in the vicinity of the site. All these assumptions used in the study have been confirmed by City of Alpharetta City staff.



LOCATION MAP

FIGURE 1

A&R Engineering Inc.

EXISTING FACILITIES / CONDITIONS

Roadway Facilities

The following is a brief description of each of the roadway facilities located in close proximity to the site:

Westside Parkway

Westside Parkway is a north-south, four-lane, divided roadway with a posted speed limit of 40 mph in the vicinity of the site. It runs between Old Milton Road (to the north) and Mansell Road (to the south).

Encore Parkway

Encore Parkway is an east-west in the vicinity of the site. It is a four-lane roadway west of Westside Parkway with a posted speed limit of 25 mph and two-lane roadway east of Westside Parkway with a posted speed limit of 35 mph. Encore Parkway runs between Maxwell Road (to the north) and North Point Parkway (to the south).

Fanfare Way

Fanfare Way is a north-south, three-lane, undivided roadway in the vicinity of the site with a two-way left turn lane at either end. It runs between Maxwell Road (to the north) and Encore Parkway (to the south). Fanfare Parkway runs parallel to Westside Parkway and fronts a large portion of the proposed site.

STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 2000 edition (HCM 2000). Synchro software, which utilizes the HCM 2000 methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

Unsignalized Intersections

For unsignalized intersections at which the side street or minor street is controlled by a stop sign, the criteria for evaluating traffic operations are the level of service (LOS) for the turning movements at the intersection and the level of service for the overall intersection. Level of service is based on the average controlled delay incurred at the intersection. Controlled delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the controlled delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level of service is assigned a letter designation from A through F. Level of service A indicates excellent operations with little delay to motorists, while level of service F exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross safely, resulting in extremely long total delays and long queues. The level of service criteria for two-way stop-controlled and all-way stop-controlled (unsignalized) intersections is given in Table 1.

TABLE 1 LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS	
<u>Level of Service</u>	<u>Average Controlled Delay (sec/veh)</u>
A	≤ 10
B	$> 10 \text{ and } \leq 15$
C	$> 15 \text{ and } \leq 25$
D	$> 25 \text{ and } \leq 35$
E	$> 35 \text{ and } \leq 50$
F	> 50

Source: 2000 Highway Capacity Manual

Signalized Intersections

For signalized intersections, it is necessary to evaluate both capacity and level of service in order to evaluate the overall operation of the intersection. The capacity analysis of an intersection is performed by comparing the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This results in a volume/capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available, resulting in a temporary excess of demand. Although the capacity of the entire intersection is not defined, a composite v/c ratio for the sum of the critical lane groups within the intersection is computed. This composite v/c ratio is an indication of the overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of average controlled delay per vehicle, which is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The levels of service criteria for signalized intersections, based on average controlled delay, are shown in Table 2. Level of service A indicates operations with very low controlled delay, while level of service F describes operations with extremely high average controlled delay. Level of service E is typically considered to be the limit of acceptable delay, and level of service F is considered unacceptable by most drivers.

TABLE 2 LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS	
Level of Service	Controlled Delay Per Vehicle (sec)
A	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	> 80.0

Source: 2000 Highway Capacity Manual

EXISTING TRAFFIC OPERATIONS

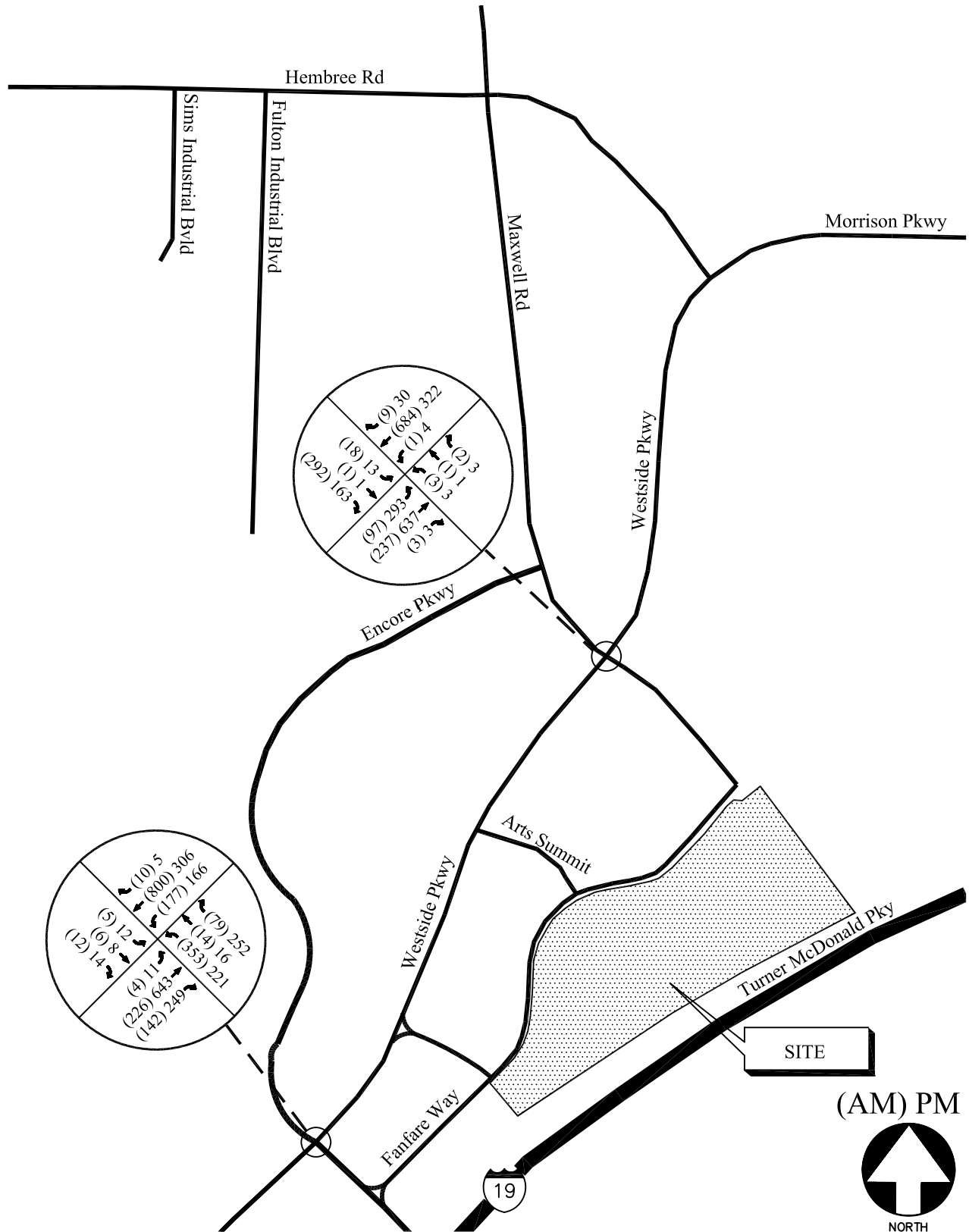
Existing traffic counts and intersection geometric data were obtained at the intersections of Westside Parkway / Encore Parkway and Westside Parkway / Maxwell Road. Turning movement counts were performed on Thursday, August 25, 2011. All turning movement counts were recorded during the AM and PM peak hours between 6:30 am to 9:30 am and 3:00 pm to 6:00 pm, respectively. These times were selected to account for the school hours at the study intersection. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersection were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2 for morning and evening peak hours.

Existing traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Table 3. The existing traffic control and lane geometry for the intersections are shown in Figure 3.

TABLE 3					
EXISTING INTERSECTION OPERATIONS — WITH EXISTING SIGNAL TIMING					
Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
		LOS (Delay)	v/c ratio*	LOS (Delay)	v/c ratio*
Westside Pkwy / Encore pkwy	Signalized	C (25.1)	0.46	C (22.0)	0.39
Westside Pkwy / Maxwell Rd	Signalized	B (17.0)	0.28	B (12.0)	0.36

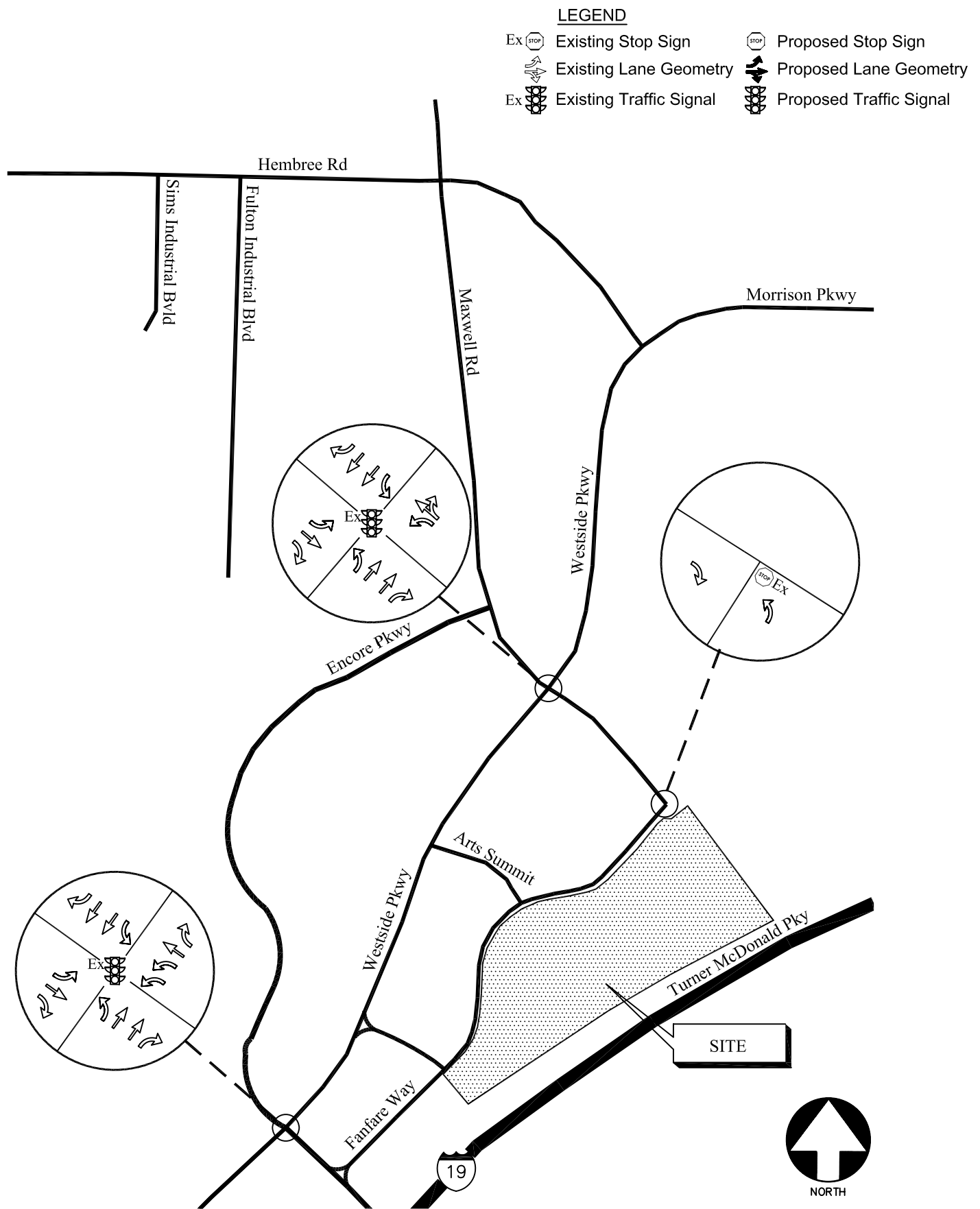
* v/c ratio is not calculated for unsignalized intersections

The existing condition analysis indicates that all study intersections currently operate at level-of-service (LOS) C or better during both the AM peak and PM peak hours.



EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2
A&R Engineering Inc.



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3
A&R Engineering Inc.

BASE TRAFFIC OPERATIONS

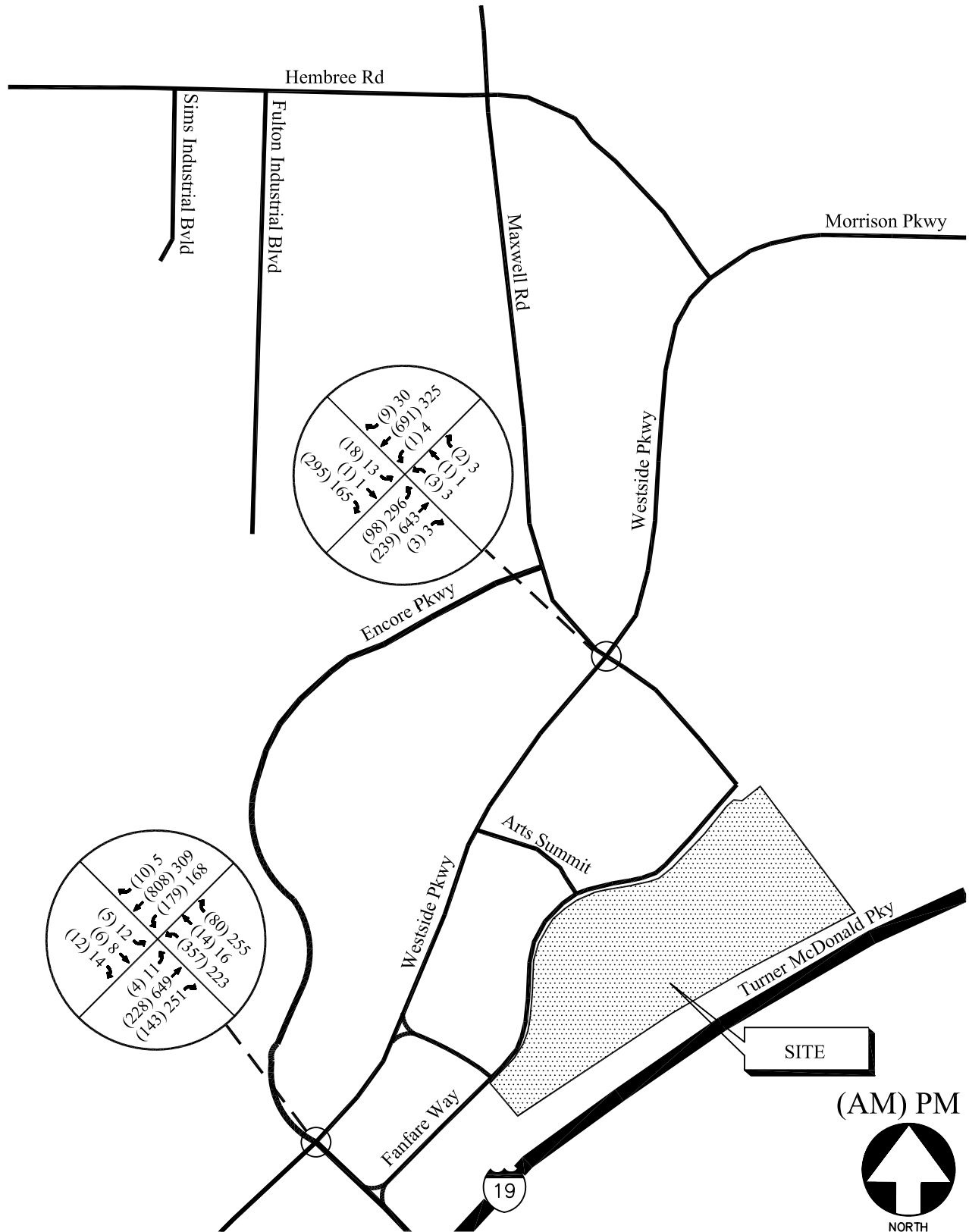
In order to evaluate future traffic operations in this area prior to the addition of the new traffic from the projected site, a projection was made of future base year traffic volumes. The base traffic volumes are made up of the existing traffic volumes and expected growth in the area. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. A linear regression of these volumes over the last several years revealed growth of approximately 1% in the area. This growth factor was applied to the existing traffic volumes on the roadways in order to estimate the future year 2012 traffic volumes prior to the addition of site-generated traffic. It should be noted that this growth rate has been confirmed by City of Alpharetta city staff.

The resulting base traffic volumes are shown in Figure 4. These volumes were used to analyze the future base traffic operations at the study intersections. The results of the analysis are shown in Table 4.

TABLE 4 BASE INTERSECTION OPERATIONS - WITH EXISTING LANE GEOMETRY					
Intersection	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
		LOS (Delay)	v/c ratio*	LOS (Delay)	v/c ratio*
Westside Pkwy / Encore Pkwy	Signalized	C (25.2)	0.46	C (22.0)	0.39
Westside Pkwy / Maxwell Rd	Signalized	B (17.0)	0.29	B (12.1)	0.37

* v/c ratio is not calculated for unsignalized intersections

The results of the base traffic operation analysis indicate that all study intersections will continue to operate at LOS C or better during both the AM peak and PM peak hours.



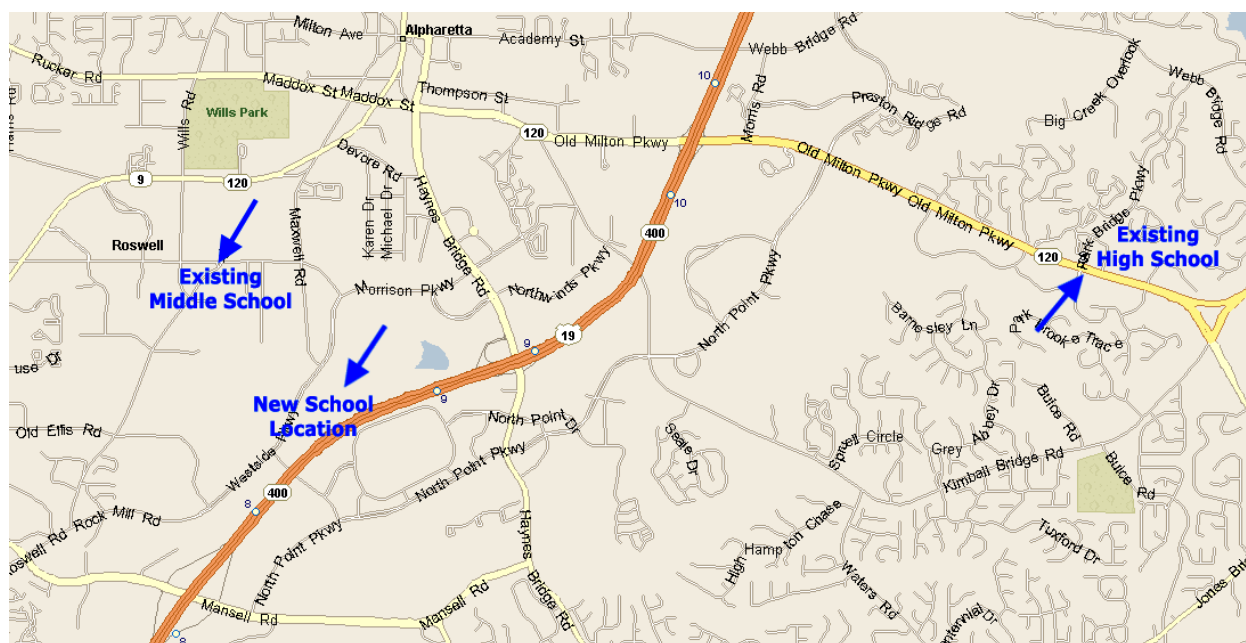
BASE 2012 WEEKDAY PEAK-HOUR VOLUMES

FIGURE 4

A&R Engineering Inc.

PROPOSED DEVELOPMENT

The Fulton Science Academy is currently divided into two separate locations, the middle school (1675 Hembree Road, Alpharetta) and the High school (4100 Old Milton Parkway, Alpharetta). The plans for the new Academy site will combine the middle school and high school into one location at the southwest corner of the intersection of Maxwell Road / Fanfare Way in Alpharetta, Georgia. The current middle school building is located in a standalone structure, but the high school shares its building with Reinhardt University - North Fulton Center. The proposed development will have one full access driveway, which will be the westbound approach to the intersection of Fanfare Way / Maxwell Road after completion of the site.



Trip Generation

The enrollment for the current middle school location is 508 students, and the current enrollment at the high school is 300 students. These enrollment numbers are not anticipated to change when the schools are combined at the proposed site. With the middle being a stand-alone location, trip generation rates of Middle school were based on collected counts collected from the current campus, specifically the intersections of Hembree Road / Fulton Science Academy Parkway and Sims Industrial Boulevard / Fulton Science Academy Parkway. Turning movement counts were performed on Thursday, August 25, 2011. All turning movement counts were recorded during the AM and PM peak hours between 6:30 am to 9:30 am and 3:00 pm to 6:00 pm, respectively.

Trip generation estimates for the high school project were based on the rates and equations

published in the 8th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE Land Use: 530 – *High School*. The calculated trip generation for the High School and Middle School are shown in Table 5.

TABLE 5 TRIP GENERATION – ACADEMY								
Land Use	Size Students	A.M. Peak Hour			P.M Peak Hour			24-Hour
		Enter	Exit	Total	Enter	Exit	Total	2-way
530 – High School	300	171	73	244	32	48	80	949
Middle School	508	282	242	524	130	195	325	N/A
New Trips	808	453	315	768	162	243	405	949

Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on zip code information on the enrolled student population, a review of the existing travel patterns in the area, and the locations of major roadways and highways that will serve the development. A site plan is shown in Figure 5, and further details on the zip code data is shown graphically in the Appendix.

The trip distribution has been approved by City of Alpharetta city staff and is shown in Figure 6. The site-generated new traffic volumes, shown in Table 5, were assigned to the study area intersections based on these distributions. The AM and PM peak hour new traffic generated by the site is shown in Figure 7.



© Copyright Cooper Carry 2011

[illegible]

ISSUANCES	
No.	Drawing Issue Description Date

FULTON SCIENCE ACADEMY

Fanfare Way,
Alpharetta, GA 30009

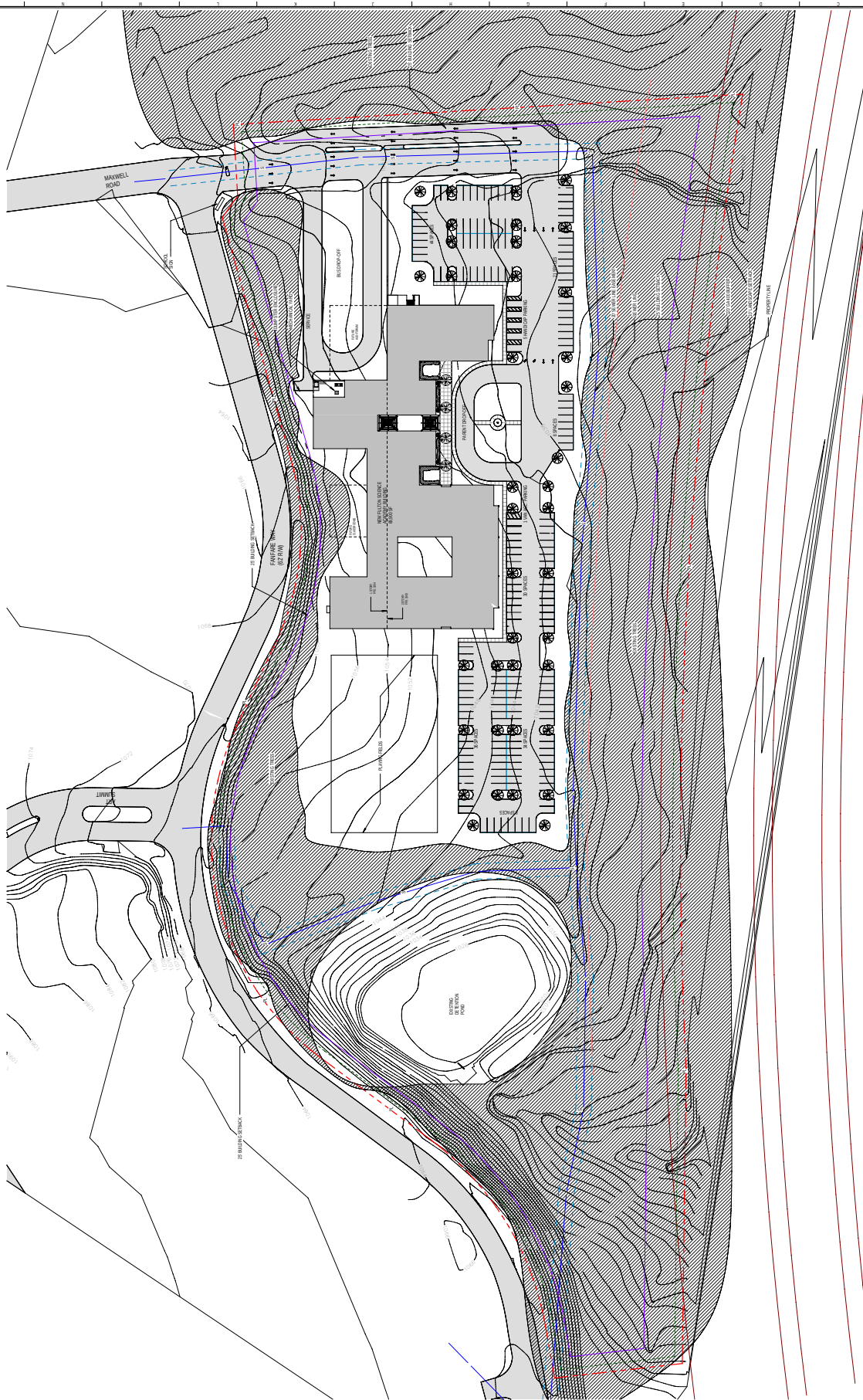
Fulton Science Academy

ARCHITECTURAL SITE PLAN

201.10.032	201.10.032
Project Size	Project Size
0008711	0008711
Date	Date

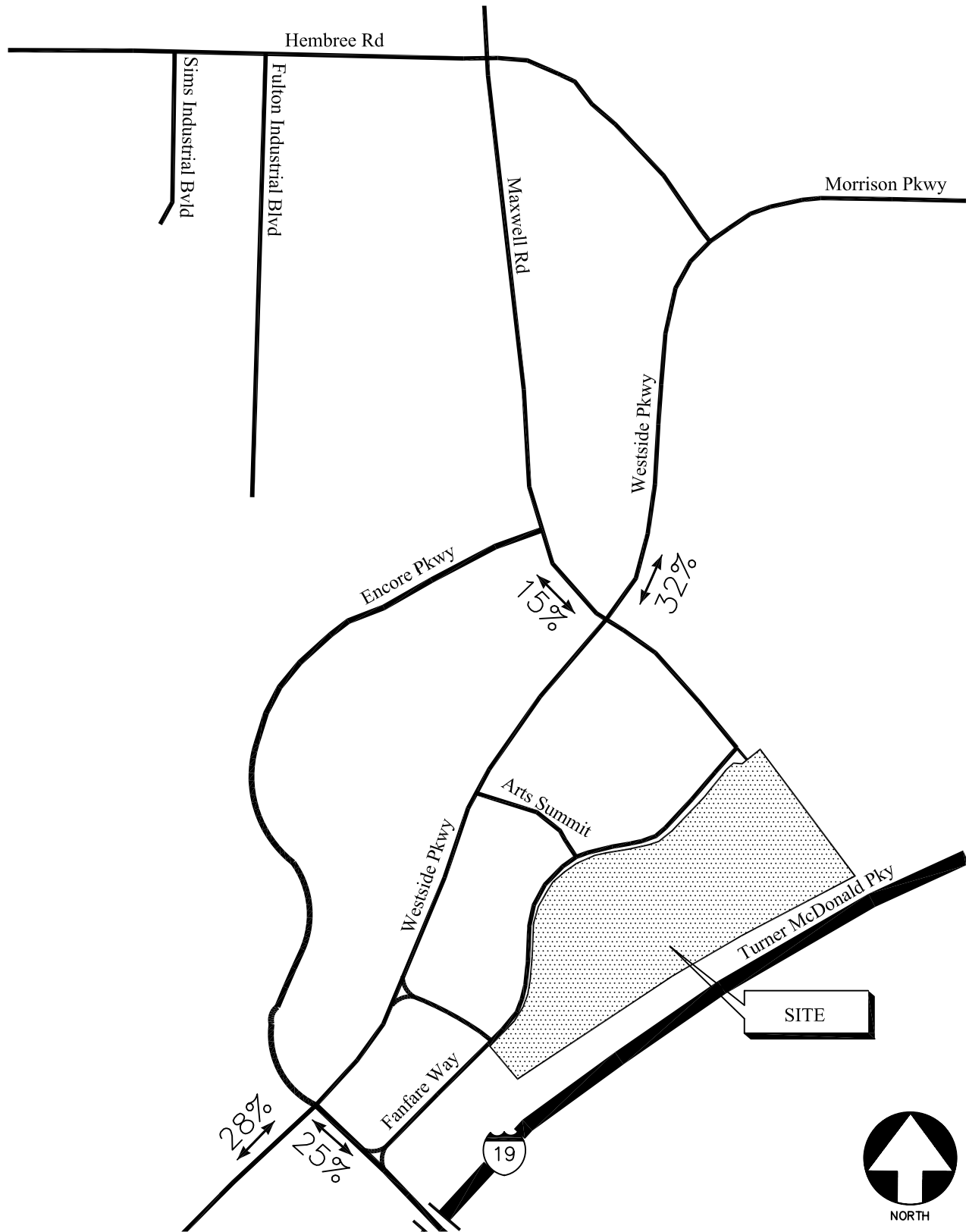
A0.2

DATE FOR INFO. FROM COLLECTION



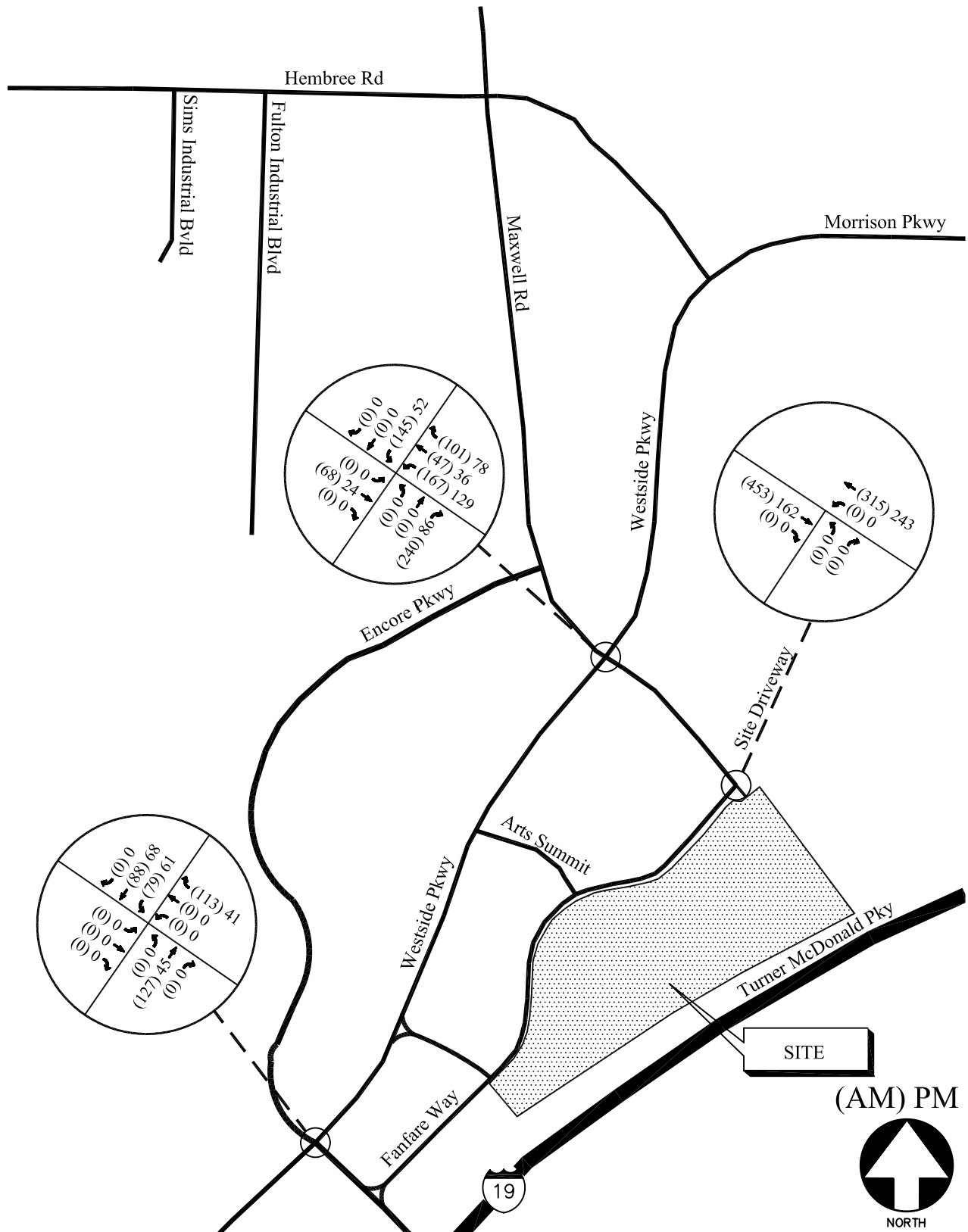
POD 0: 20.17 ACRES
2 STORY SPLIT LEVEL BUILDING: 89,910 GSF
LOADING DOCKS: 107

1 ARCHITECTURAL SITE PLAN
A0.2 SCALE 1"=50'-0"



TRIP DISTRIBUTION

FIGURE 6
A&R Engineering Inc.



SITE-GENERATED WEEKDAY PEAK-HOUR VOLUMES

FIGURE 7

A&R Engineering Inc.

TOTAL FUTURE 2012 TRAFFIC OPERATIONS

The new traffic volumes that will be generated by the proposed development, shown in Figure 7, were added to the base year 2012 traffic volumes (Figure 4) in order to determine the traffic volumes that will be on the roadway network after completion of the project. The total future 2012 peak hour volumes are shown in Figure 8. These volumes were used to analyze future traffic operations at the study intersections including the site driveway. The results of the future traffic operations are shown in Table 6.

TABLE 6 FUTURE 2012 INTERSECTION OPERATIONS					
Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
		LOS (Delay)	v/c ratio*	LOS (Delay)	v/c ratio*
Westside Pkwy / Encore Pkwy	Signalized	C (26.5)	0.48	C (22.3)	0.49
Westside Pkwy / Maxwell Rd	Signalized	D (44.9)	0.94	C (28.8)	0.59
Maxwell Rd / Fanfare Way / Site Drwy	All-Way Stop Controlled				
-Northbound Approach		B (10.3)		A (9.1)	
-Eastbound Approach		F (118.6)	-	B (10.7)	-
-Westbound Approach		D (27.4)		B (13.4)	

* v/c ratio is not calculated for unsignalized intersections

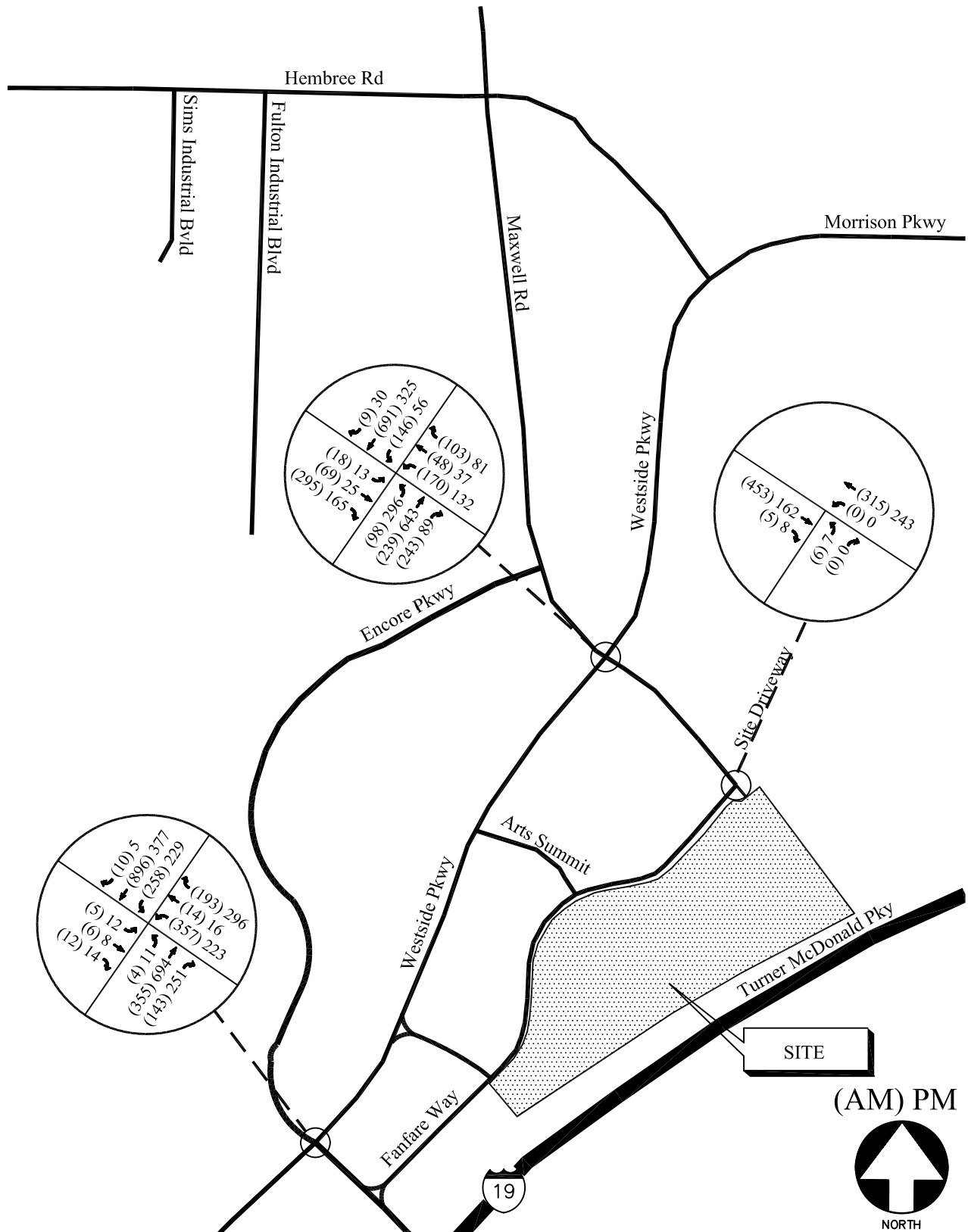
As can be seen from Table 6, the intersections of Westside Parkway with Maxwell Road and Westside Parkway with Encore Parkway will continue to operate at LOS D or better during the AM and PM peak hours after the traffic is added to the road network for the proposed school, without any changes to the existing lane geometry.

The future driveway intersection, at Maxwell Road and Fanfare Way, has been assumed be stop-controlled on all approaches. The eastbound approach will experience some delays from traffic entering the school in the morning peak hour. In reality, drivers will have other alternatives to Maxwell Road to enter the site, such as the right-in / right-out access to Fanfare Way from Encore Parkway and the two non-signalized access points to Fanfare Parkway from Westside Parkway (between Encore Parkway and Maxwell Road). This study has evaluated the worst-case scenario, in which all of the future traffic will enter via the signalized intersection of Maxwell Road / Westside Parkway at the height of the morning rush hour. In order to evaluate if this worst-case scenario will cause vehicles to queue beyond the approximate storage provided at the site driveway intersection, a 95th percentile queuing analysis has been performed at this location. The results of this analysis are shown in Table 7.

TABLE 7 FUTURE QUEUE LENGTHS (IN FEET)			
		AM Peak Hour	PM Peak Hour
Intersection	Available Storage (approximate feet)	Queue Length (95 th)	Queue Length (95 th)
Westside Pkwy / Encore Pkwy			
-Northbound Left	260	4	9
-Northbound Through	-	18	255
-Northbound Right	160	39	78
-Southbound Left	270	137	143
-Southbound Through	-	314	91
-Southbound Right	165	10	2
-Eastbound Left	430	12	25
-Eastbound Through	-	16	20
-Eastbound Right	-	3	17
-Westbound Left	180	200	144
-Westbound Through	-	13	35
-Westbound Right	180	64	89
Westside Pkwy / Maxwell Rd			
-Northbound Left	320	79	202
-Northbound Through	-	123	261
-Northbound Right	200	0	22
-Southbound Left	285	88	34
-Southbound Through	-	295	149
-Southbound Right	170	6	18
-Eastbound Left	130	20	18
-Eastbound Through	-	69	32
-Eastbound Right	380	181	33
-Westbound Left	400	117	102
-Westbound Through / Right	645	50	38
Maxwell Rd / Fanfare Way / Site Drwy*			
-Northbound Approach	-	24	29
-Eastbound Approach	645	95	71
-Westbound Approach	-	64	32

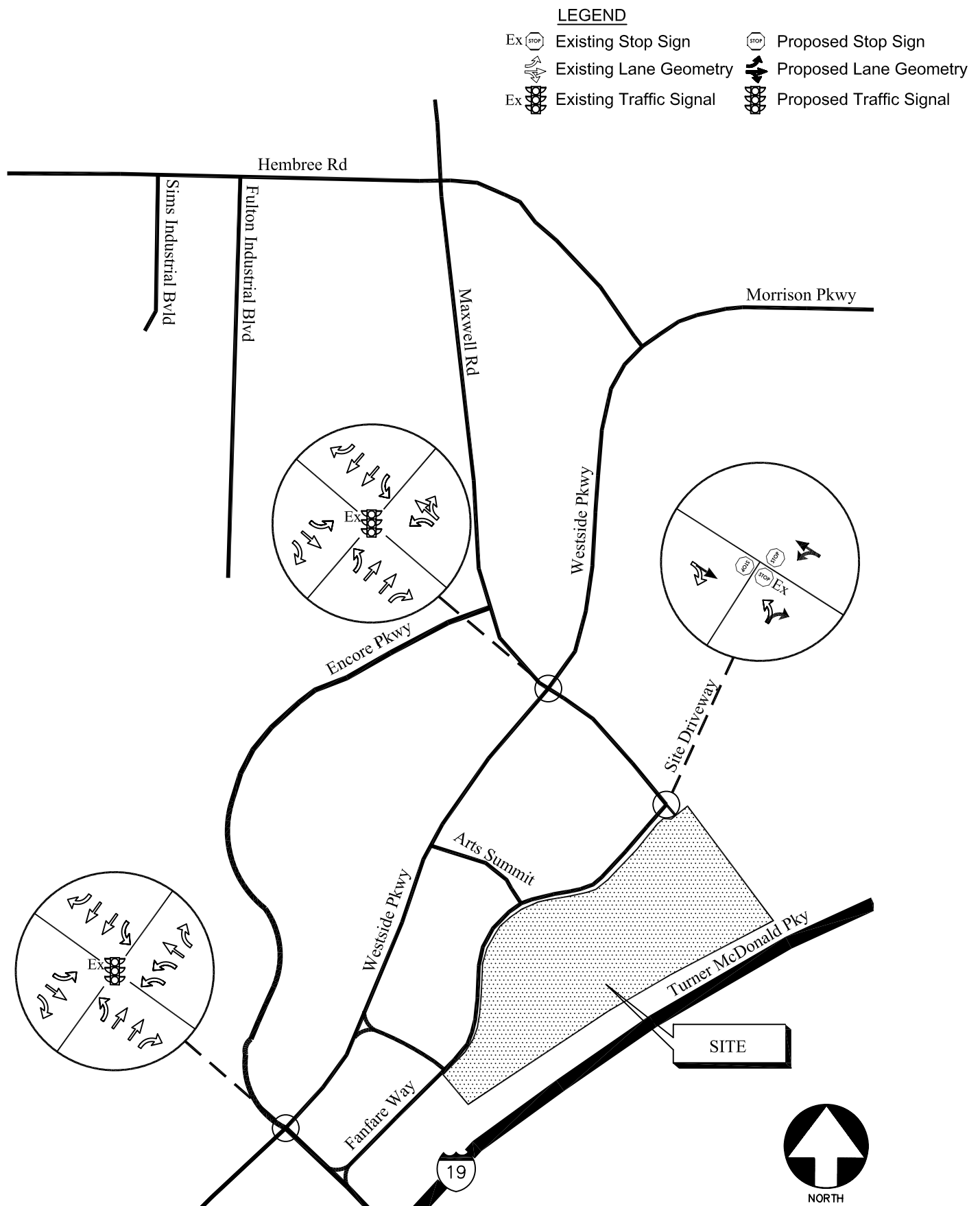
*95th percentile queues for all-way stop controlled intersections are generated through SimTraffic software

As shown in Table 7, the queue lengths for the eastbound approach to the site and the westbound approach to Westside Parkway will not exceed the available capacity.



FUTURE WEEKDAY PEAK HOUR VOLUMES

FIGURE 8
A&R Engineering Inc.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

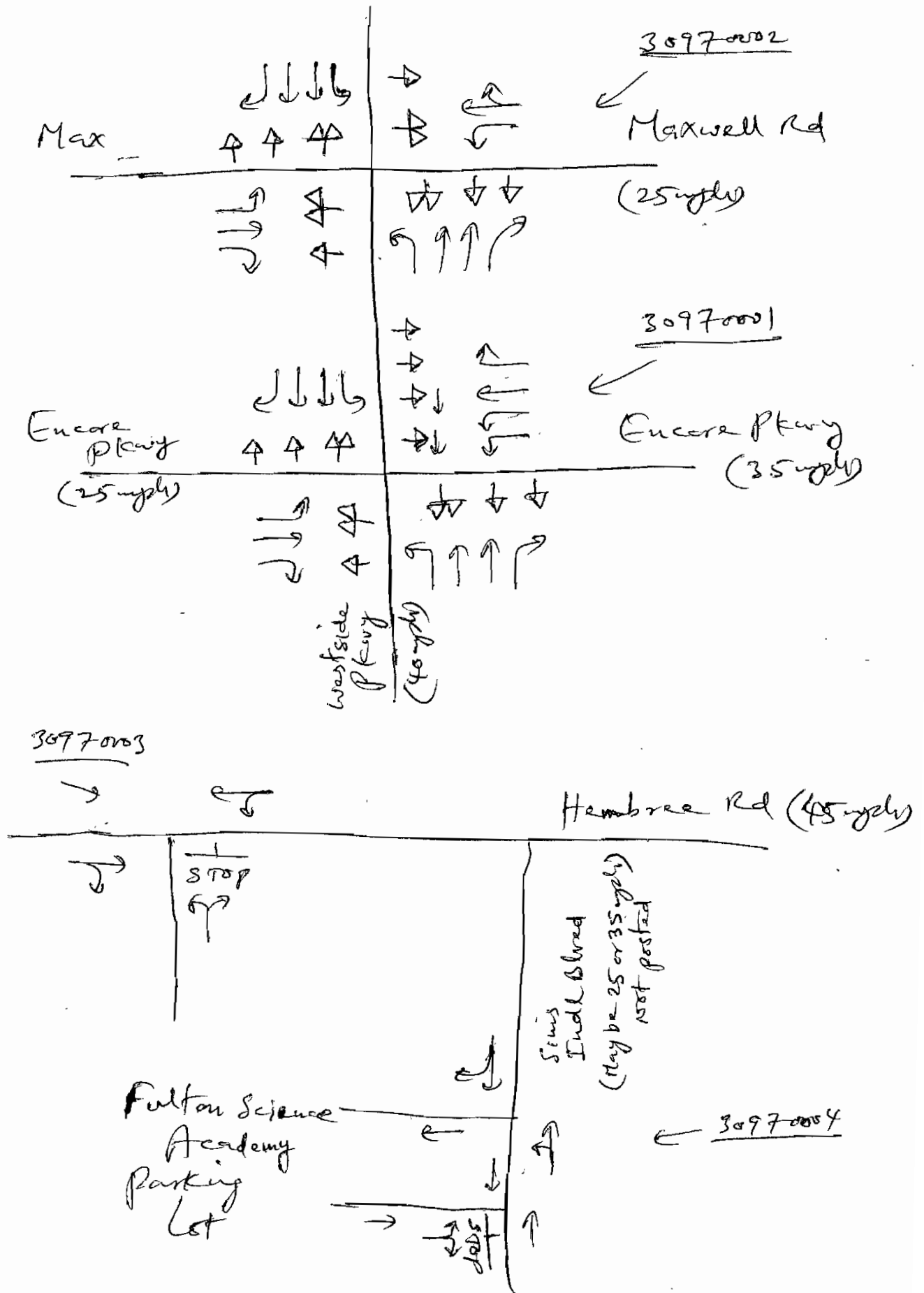
FIGURE 9
A&R Engineering Inc.

CONCLUSIONS AND RECOMMENDATIONS

This study determined the traffic impact that will result from the proposed Fulton Science Academy. The Fulton Science Academy is currently divided into two separate locations, the middle school (1675 Hembree Road, Alpharetta) and the high school (4100 Old Milton Parkway, Alpharetta). The plans for the new Academy site will combine the middle school and high school into one location at the southwest corner of the intersection of Maxwell Road / Fanfare Way in Alpharetta, Georgia. The enrollment for the current middle school location is 508 students, and the current enrollment at the high school is 300 students. These enrollment numbers are not anticipated to change when the schools are combined at the proposed site.

The proposed development will have one full access driveway, which will be the westbound approach to the intersection of Fanfare Way / Maxwell Road after completion of the site. The results of the traffic operations analysis revealed that the intersections of Westside Parkway with Encore Parkway and Westside Parkway with Maxwell Road are currently operating at an acceptable level-of-service during the both AM and PM peak hours will continue to operate at an acceptable level of service in the future after the addition of traffic from the academy.

The future driveway intersection, at Maxwell Road and Fanfare Way, has been assumed be stop-controlled on all approaches. The eastbound approach will experience some delays from traffic entering the school in the morning peak hour. In reality, drivers will have other alternatives to Maxwell Road to enter the site, such as the right-in / right-out access to Fanfare Way from Encore Parkway and the two non-signalized access points to Fanfare Parkway from Westside Parkway (between Encore Parkway and Maxwell Road). This study has evaluated the worst-case scenario, in which all of the future traffic will enter via the signalized intersection of Maxwell Road / Westside Parkway at the height of the morning rush hour. In order to evaluate if this worst-case scenario will cause vehicles to queue beyond the approximate storage provided at the site driveway intersection, a 95th percentile queuing analysis has been performed at this location, which showed that the queue lengths for the eastbound approach to the site and the westbound approach to Westside Parkway will not exceed the available capacity.



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Westside Pkwy @ Encore Pkwy

6.30am-9.30am 3pm-6pm

File Name : 30970001

Site Code : 30970001

Start Date : 8/25/2011

Page No : 1

Groups Printed- Cars, Trucks & Buses

	Westside Pkwy Northbound					Westside Pkwy Southbound					Encore Pkwy Eastbound					Encore Pkwy Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:30 AM	2	17	7	0	26	22	97	1	0	120	2	1	1	0	4	37	3	12	0	52	202
06:45 AM	2	24	14	0	40	28	122	2	0	152	0	1	1	0	2	69	5	13	0	87	281
Total	4	41	21	0	66	50	219	3	0	272	2	2	2	0	6	106	8	25	0	139	483
07:00 AM	2	37	10	0	49	29	162	0	0	191	1	2	4	0	7	66	6	15	0	87	334
07:15 AM	3	43	23	0	69	31	179	0	0	210	0	1	6	0	7	88	2	18	0	108	394
07:30 AM	1	47	22	0	70	33	215	1	0	249	1	2	4	0	7	79	1	26	0	106	432
07:45 AM	0	58	39	0	97	46	218	3	0	267	0	1	7	0	8	121	5	22	0	148	520
Total	6	185	94	0	285	139	774	4	0	917	2	6	21	0	29	354	14	81	0	449	1680
08:00 AM	3	53	30	0	86	45	203	2	0	250	1	4	1	0	6	81	2	20	0	103	445
08:15 AM	0	57	35	0	92	44	192	3	0	239	2	0	4	0	6	55	1	17	0	73	410
08:30 AM	1	58	38	0	97	42	187	2	0	231	2	1	0	0	3	96	6	20	0	122	453
08:45 AM	0	55	44	0	99	40	184	2	0	226	0	2	1	0	3	89	1	18	0	108	436
Total	4	223	147	0	374	171	766	9	0	946	5	7	6	0	18	321	10	75	0	406	1744
09:00 AM	1	52	41	0	94	38	172	2	0	212	1	0	1	0	2	86	2	16	0	104	412
09:15 AM	0	49	37	0	86	35	168	1	0	204	1	1	1	0	3	82	1	13	0	96	389
*** BREAK ***																					
Total	1	101	78	0	180	73	340	3	0	416	2	1	2	0	5	168	3	29	0	200	801
*** BREAK ***																					
03:00 PM	3	70	46	0	119	30	43	2	0	75	1	6	4	0	11	38	6	33	0	77	282
03:15 PM	6	78	28	0	112	34	46	1	0	81	2	8	5	0	15	44	2	37	0	83	291
03:30 PM	3	73	40	0	116	31	51	5	0	87	1	5	3	0	9	46	1	34	0	81	293
03:45 PM	5	88	37	0	130	27	52	1	0	80	2	2	1	0	5	37	6	50	0	93	308
Total	17	309	151	0	477	122	192	9	0	323	6	21	13	0	40	165	15	154	0	334	1174
04:00 PM	7	109	61	0	177	31	53	3	0	87	5	4	6	0	15	41	6	41	0	88	367
04:15 PM	5	129	43	0	177	37	57	1	0	95	1	1	2	0	4	32	2	50	0	84	360
04:30 PM	5	146	76	0	227	44	78	2	0	124	2	4	6	0	12	33	5	49	0	87	450
04:45 PM	3	138	59	0	200	35	76	1	0	112	2	5	3	0	10	65	4	62	0	131	453
Total	20	522	239	0	781	147	264	7	0	418	10	14	17	0	41	171	17	202	0	390	1630
05:00 PM	3	176	71	0	250	49	79	3	0	131	4	1	5	0	10	63	5	57	0	125	516
05:15 PM	2	167	62	0	231	42	74	0	0	116	4	0	3	0	7	48	4	68	0	120	474
05:30 PM	3	162	57	0	222	40	77	1	0	118	2	2	3	0	7	45	3	65	0	113	460
05:45 PM	2	146	53	0	201	37	72	1	0	110	2	1	2	0	5	42	2	62	0	106	422
Total	10	651	243	0	904	168	302	5	0	475	12	4	13	0	29	198	14	252	0	464	1872
Grand Total	62	2032	973	0	3067	870	2857	40	0	3767	39	55	74	0	168	1483	81	818	0	2382	9384
Apprch %	2	66.3	31.7	0		23.1	75.8	1.1	0		23.2	32.7	44	0		62.3	3.4	34.3	0		
Total %	0.7	21.7	10.4	0	32.7	9.3	30.4	0.4	0	40.1	0.4	0.6	0.8	0	1.8	15.8	0.9	8.7	0	25.4	

Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Westside Pkwy @ Encore Pkwy

6.30am-9.30am 3pm-6pm

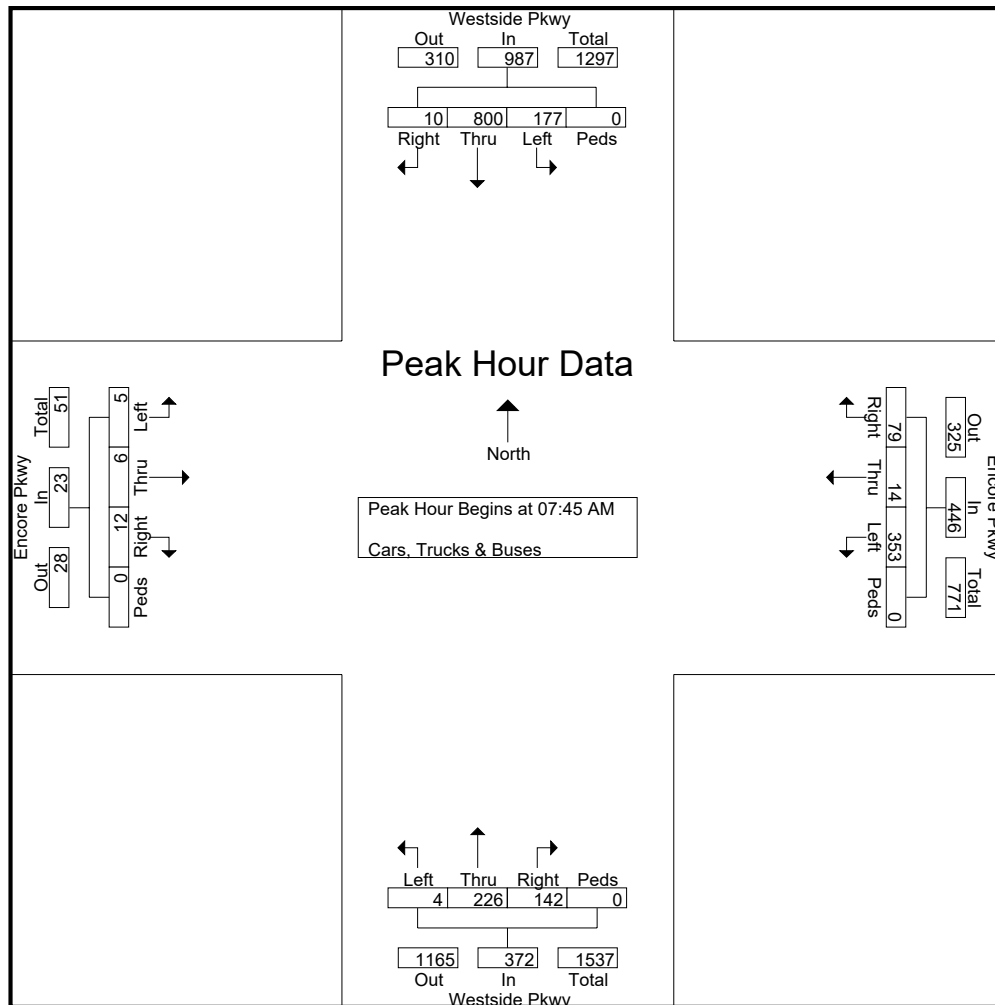
File Name : 30970001

Site Code : 30970001

Start Date : 8/25/2011

Page No : 2

	Westside Pkwy Northbound					Westside Pkwy Southbound					Encore Pkwy Eastbound					Encore Pkwy Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	58	39	0	97	46	218	3	0	267	0	1	7	0	8	121	5	22	0	148	520
08:00 AM	3	53	30	0	86	45	203	2	0	250	1	4	1	0	6	81	2	20	0	103	445
08:15 AM	0	57	35	0	92	44	192	3	0	239	2	0	4	0	6	55	1	17	0	73	410
08:30 AM	1	58	38	0	97	42	187	2	0	231	2	1	0	0	3	96	6	20	0	122	453
Total Volume	4	226	142	0	372	177	800	10	0	987	5	6	12	0	23	353	14	79	0	446	1828
% App. Total	1.1	60.8	38.2	0		17.9	81.1	1	0		21.7	26.1	52.2	0		79.1	3.1	17.7	0		
PHF	.333	.974	.910	.000	.959	.962	.917	.833	.000	.924	.625	.375	.429	.000	.719	.729	.583	.898	.000	.753	.879



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Westside Pkwy @ Encore Pkwy

6.30am-9.30am 3pm-6pm

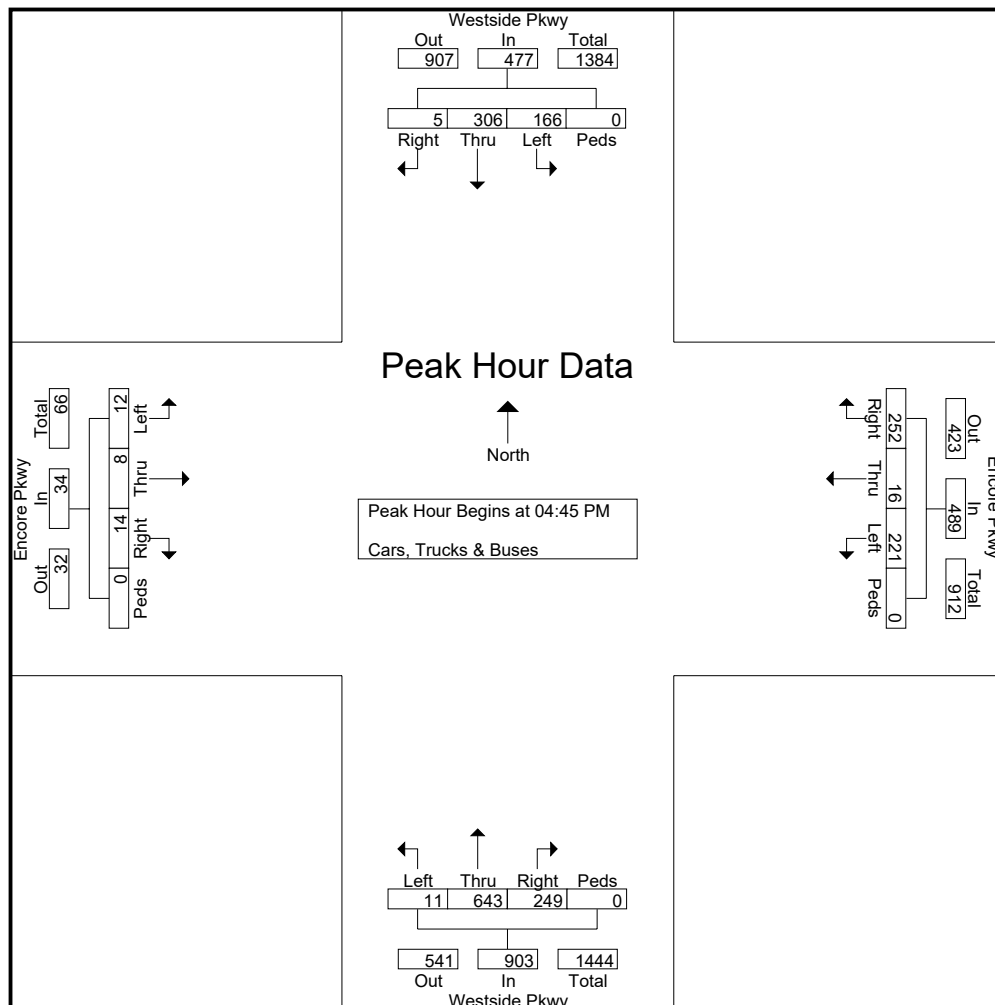
File Name : 30970001

Site Code : 30970001

Start Date : 8/25/2011

Page No : 3

	Westside Pkwy Northbound					Westside Pkwy Southbound					Encore Pkwy Eastbound					Encore Pkwy Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	3	138	59	0	200	35	76	1	0	112	2	5	3	0	10	65	4	62	0	131	453
05:00 PM	3	176	71	0	250	49	79	3	0	131	4	1	5	0	10	63	5	57	0	125	516
05:15 PM	2	167	62	0	231	42	74	0	0	116	4	0	3	0	7	48	4	68	0	120	474
05:30 PM	3	162	57	0	222	40	77	1	0	118	2	2	3	0	7	45	3	65	0	113	460
Total Volume	11	643	249	0	903	166	306	5	0	477	12	8	14	0	34	221	16	252	0	489	1903
% App. Total	1.2	71.2	27.6	0		34.8	64.2	1	0		35.3	23.5	41.2	0		45.2	3.3	51.5	0		
PHF	.917	.913	.877	.000	.903	.847	.968	.417	.000	.910	.750	.400	.700	.000	.850	.850	.800	.926	.000	.933	.922



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Westside Pkwy @ Maxwell Rd

6.30am-9.30am 3pm-6pm

File Name : 30970002

Site Code : 30970002

Start Date : 8/25/2011

Page No : 1

Groups Printed- Cars, Trucks & Buses

	Westside Pkwy Northbound					Westside Pkwy Southbound					Maxwell Rd Eastbound					Maxwell Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:30 AM	11	25	0	0	36	0	93	0	0	93	1	0	33	0	34	0	0	0	0	0	163
06:45 AM	13	28	0	0	41	1	107	1	0	109	2	0	45	0	47	0	0	1	0	1	198
Total	24	53	0	0	77	1	200	1	0	202	3	0	78	0	81	0	0	1	0	1	361
07:00 AM	17	41	1	0	59	0	119	1	0	120	1	0	53	0	54	0	0	2	0	2	235
07:15 AM	22	46	0	0	68	1	148	5	0	154	8	0	65	0	73	1	0	0	0	1	296
07:30 AM	27	54	2	0	83	0	183	4	0	187	7	0	80	0	87	0	0	0	0	0	357
07:45 AM	25	57	0	0	82	1	179	1	0	181	8	0	72	0	80	2	0	1	0	3	346
Total	91	198	3	0	292	2	629	11	0	642	24	0	270	0	294	3	0	3	0	6	1234
08:00 AM	21	63	1	0	85	0	165	1	0	166	0	1	78	0	79	0	1	0	0	1	331
08:15 AM	24	63	0	0	87	0	157	3	0	160	3	0	62	0	65	1	0	1	0	2	314
08:30 AM	20	54	1	0	75	0	163	3	0	166	7	0	65	0	72	0	0	1	0	1	314
08:45 AM	17	57	0	0	74	1	159	3	0	163	2	1	69	0	72	1	0	0	0	1	310
Total	82	237	2	0	321	1	644	10	0	655	12	2	274	0	288	2	1	2	0	5	1269
09:00 AM	15	53	1	0	69	0	156	2	0	158	3	0	63	0	66	0	0	1	0	1	294
09:15 AM	14	50	1	0	65	1	152	1	0	154	2	1	57	0	60	1	0	0	0	1	280
*** BREAK ***																					
Total	29	103	2	0	134	1	308	3	0	312	5	1	120	0	126	1	0	1	0	2	574
*** BREAK ***																					
03:00 PM	40	65	1	0	106	0	33	2	0	35	2	0	32	0	34	1	1	0	0	2	177
03:15 PM	43	69	1	0	113	0	36	4	0	40	1	1	35	0	37	2	2	1	0	5	195
03:30 PM	48	76	0	0	124	1	42	4	0	47	2	0	31	0	33	0	0	0	0	0	204
03:45 PM	55	85	1	0	141	1	47	2	0	50	2	0	34	0	36	1	0	1	0	2	229
Total	186	295	3	0	484	2	158	12	0	172	7	1	132	0	140	4	3	2	0	9	805
04:00 PM	62	103	2	0	167	0	51	7	0	58	1	0	36	0	37	0	0	0	0	0	262
04:15 PM	57	119	0	0	176	0	66	4	0	70	6	1	39	0	46	0	2	1	0	3	295
04:30 PM	61	134	1	0	196	1	57	5	0	63	5	1	36	0	42	1	0	0	0	1	302
04:45 PM	64	153	1	0	218	0	84	10	0	94	6	0	41	0	47	0	1	2	0	3	362
Total	244	509	4	0	757	1	258	26	0	285	18	2	152	0	172	1	3	3	0	7	1221
05:00 PM	82	159	0	0	241	0	80	7	0	87	2	0	54	0	56	2	0	0	0	2	386
05:15 PM	76	164	1	0	241	1	77	9	0	87	3	1	44	0	48	0	0	1	0	1	377
05:30 PM	71	161	1	0	233	3	81	4	0	88	2	0	24	0	26	1	0	0	0	1	348
05:45 PM	64	154	0	0	218	1	74	3	0	78	2	0	21	0	23	0	0	1	0	1	320
Total	293	638	2	0	933	5	312	23	0	340	9	1	143	0	153	3	0	2	0	5	1431
Grand Total	949	2033	16	0	2998	13	2509	86	0	2608	78	7	1169	0	1254	14	7	14	0	35	6895
Apprch %	31.7	67.8	0.5	0		0.5	96.2	3.3	0		6.2	0.6	93.2	0		40	20	40	0		
Total %	13.8	29.5	0.2	0	43.5	0.2	36.4	1.2	0	37.8	1.1	0.1	17	0	18.2	0.2	0.1	0.2	0	0.5	

Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Westside Pkwy @ Maxwell Rd

6.30am-9.30am 3pm-6pm

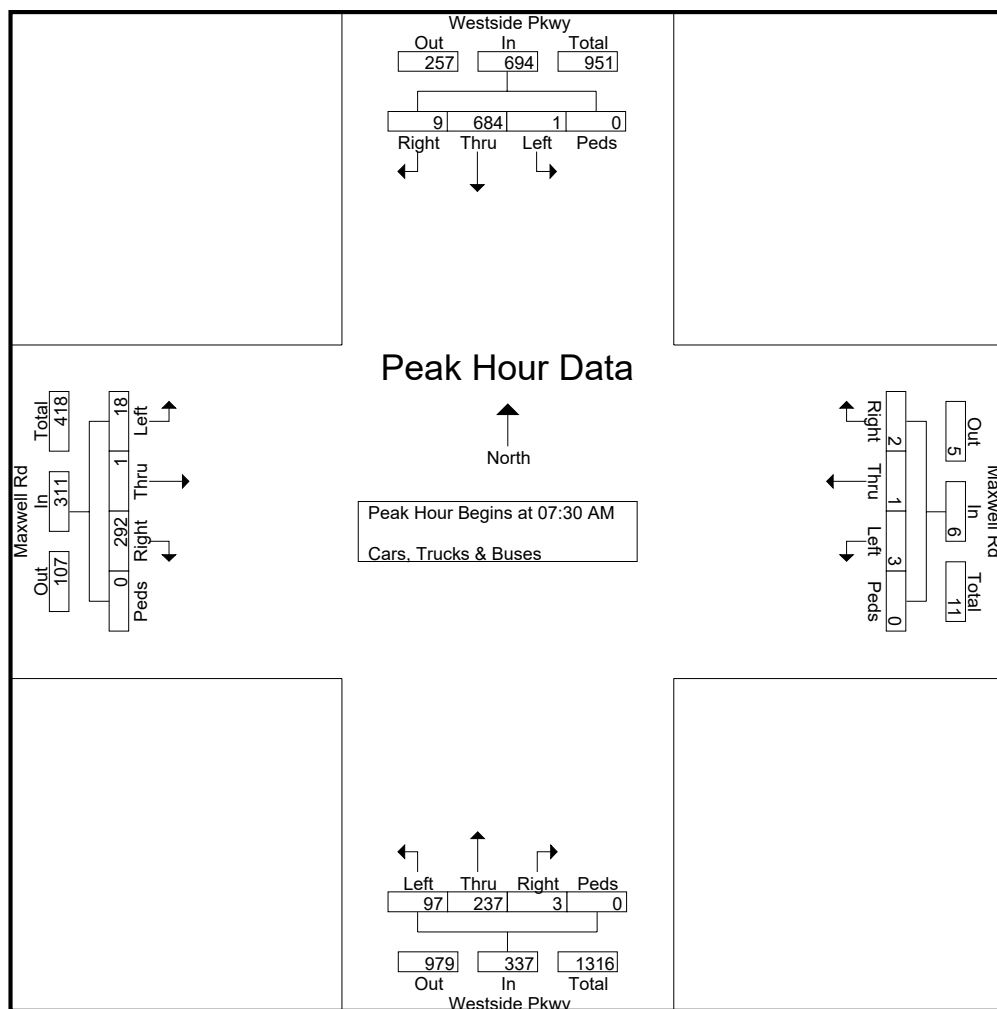
File Name : 30970002

Site Code : 30970002

Start Date : 8/25/2011

Page No : 2

	Westside Pkwy Northbound					Westside Pkwy Southbound					Maxwell Rd Eastbound					Maxwell Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	27	54	2	0	83	0	183	4	0	187	7	0	80	0	87	0	0	0	0	0	357
07:45 AM	25	57	0	0	82	1	179	1	0	181	8	0	72	0	80	2	0	1	0	3	346
08:00 AM	21	63	1	0	85	0	165	1	0	166	0	1	78	0	79	0	1	0	0	1	331
08:15 AM	24	63	0	0	87	0	157	3	0	160	3	0	62	0	65	1	0	1	0	2	314
Total Volume	97	237	3	0	337	1	684	9	0	694	18	1	292	0	311	3	1	2	0	6	1348
% App. Total	28.8	70.3	0.9	0		0.1	98.6	1.3	0		5.8	0.3	93.9	0		50	16.7	33.3	0		
PHF	.898	.940	.375	.000	.968	.250	.934	.563	.000	.928	.563	.250	.913	.000	.894	.375	.250	.500	.000	.500	.944



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Westside Pkwy @ Maxwell Rd

6.30am-9.30am 3pm-6pm

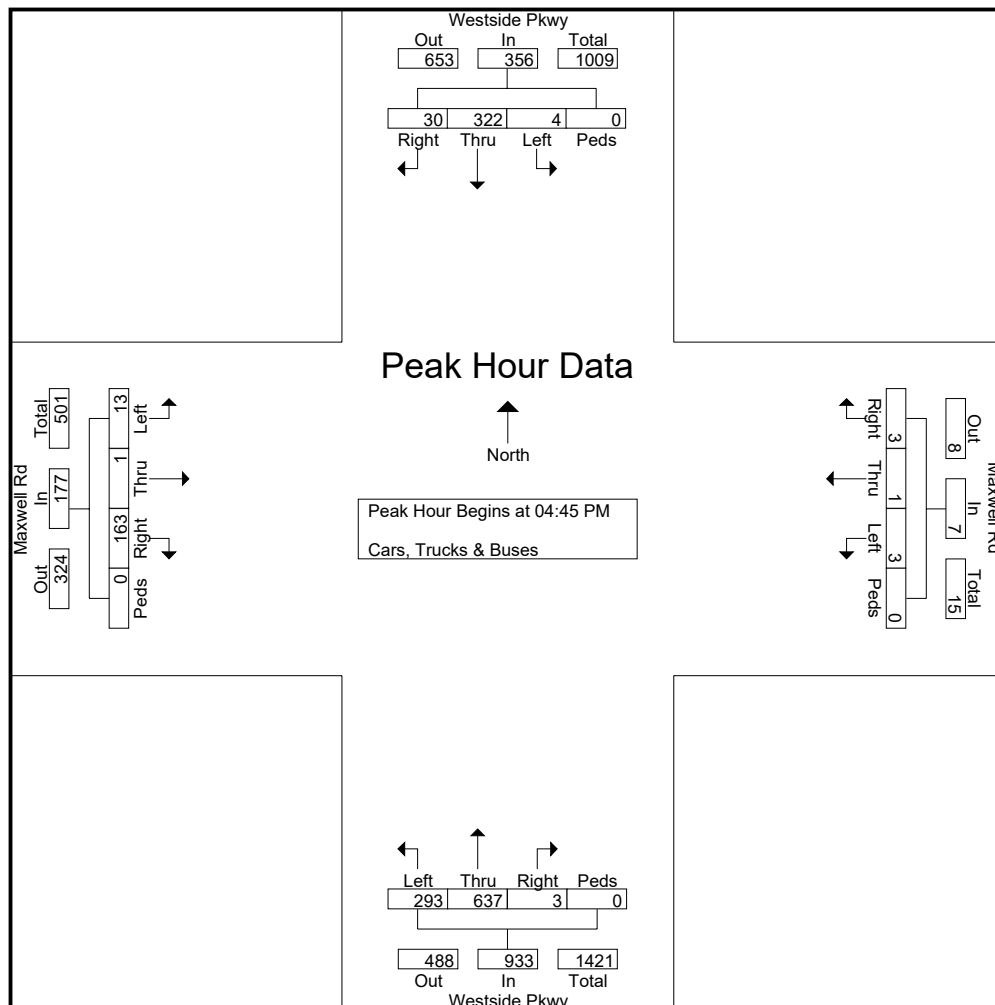
File Name : 30970002

Site Code : 30970002

Start Date : 8/25/2011

Page No : 3

	Westside Pkwy Northbound					Westside Pkwy Southbound					Maxwell Rd Eastbound					Maxwell Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	64	153	1	0	218	0	84	10	0	94	6	0	41	0	47	0	1	2	0	3	362
05:00 PM	82	159	0	0	241	0	80	7	0	87	2	0	54	0	56	2	0	0	0	2	386
05:15 PM	76	164	1	0	241	1	77	9	0	87	3	1	44	0	48	0	0	1	0	1	377
05:30 PM	71	161	1	0	233	3	81	4	0	88	2	0	24	0	26	1	0	0	0	1	348
Total Volume	293	637	3	0	933	4	322	30	0	356	13	1	163	0	177	3	1	3	0	7	1473
% App. Total	31.4	68.3	0.3	0		1.1	90.4	8.4	0		7.3	0.6	92.1	0		42.9	14.3	42.9	0		
PHF	.893	.971	.750	.000	.968	.333	.958	.750	.000	.947	.542	.250	.755	.000	.790	.375	.250	.375	.000	.583	.954



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Hembree Rd @ Fulton Science

Academy Drwy (N)

6.30am-9.30am 3pm-6pm

File Name : 30970003

Site Code : 30970003

Start Date : 8/25/2011

Page No : 1

Groups Printed- Cars, Trucks & Buses

	Fulton Science Academy Drwy (N) Northbound					Southbound					Hembree Rd Eastbound					Hembree Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	68	0	0	68	0	104	0	0	104	172
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	75	0	0	75	0	115	0	0	115	190
Total	0	0	0	0	0	0	0	0	0	0	0	143	0	0	143	0	219	0	0	219	362
07:00 AM	1	0	1	0	2	0	0	0	0	0	0	84	0	0	84	0	126	0	0	126	212
07:15 AM	0	0	3	0	3	0	0	0	0	0	0	116	0	0	116	0	185	0	0	185	304
07:30 AM	3	0	12	0	15	0	0	0	0	0	0	169	0	0	169	0	172	0	0	172	356
07:45 AM	14	0	30	0	44	0	0	0	0	0	0	178	0	0	178	0	179	0	0	179	401
Total	18	0	46	0	64	0	0	0	0	0	0	547	0	0	547	0	662	0	0	662	1273
08:00 AM	36	0	42	0	78	0	0	0	0	0	0	167	0	0	167	0	129	0	0	129	374
08:15 AM	57	0	49	0	106	0	0	0	0	0	0	147	0	0	147	0	146	0	0	146	399
08:30 AM	6	0	4	0	10	0	0	0	0	0	0	142	0	0	142	0	168	0	0	168	320
08:45 AM	3	0	2	0	5	0	0	0	0	0	0	133	0	0	133	0	163	0	0	163	301
Total	102	0	97	0	199	0	0	0	0	0	0	589	0	0	589	0	606	0	0	606	1394
09:00 AM	2	0	2	0	4	0	0	0	0	0	0	137	0	0	137	0	158	0	0	158	299
09:15 AM	1	0	1	0	2	0	0	0	0	0	0	128	0	0	128	0	152	0	0	152	282
*** BREAK ***																					
Total	3	0	3	0	6	0	0	0	0	0	0	265	0	0	265	0	310	0	0	310	581
*** BREAK ***																					
03:00 PM	1	0	1	0	2	0	0	0	0	0	0	121	0	0	121	0	112	0	0	112	235
03:15 PM	0	0	2	0	2	0	0	0	0	0	0	125	0	0	125	0	115	0	0	115	242
03:30 PM	1	0	1	0	2	0	0	0	0	0	0	133	0	0	133	0	127	0	0	127	262
03:45 PM	3	0	4	0	7	0	0	0	0	0	0	142	0	0	142	0	116	0	0	116	265
Total	5	0	8	0	13	0	0	0	0	0	0	521	0	0	521	0	470	0	0	470	1004
04:00 PM	53	0	30	0	83	0	0	0	0	0	0	138	0	0	138	0	119	0	0	119	340
04:15 PM	5	0	2	0	7	0	0	0	0	0	0	153	0	0	153	0	127	0	0	127	287
04:30 PM	2	0	3	0	5	0	0	0	0	0	0	135	0	0	135	0	138	0	0	138	278
04:45 PM	40	0	40	0	80	0	0	0	0	0	0	167	0	0	167	0	183	0	0	183	430
Total	100	0	75	0	175	0	0	0	0	0	0	593	0	0	593	0	567	0	0	567	1335
05:00 PM	23	0	26	0	49	0	0	0	0	0	0	218	0	0	218	0	197	0	0	197	464
05:15 PM	5	0	1	0	6	0	0	0	0	0	0	197	0	0	197	0	192	0	0	192	395
05:30 PM	3	0	2	0	5	0	0	0	0	0	0	185	0	0	185	0	177	0	0	177	367
05:45 PM	2	0	1	0	3	0	0	0	0	0	0	167	0	0	167	0	165	0	0	165	335
Total	33	0	30	0	63	0	0	0	0	0	0	767	0	0	767	0	731	0	0	731	1561
Grand Total	261	0	259	0	520	0	0	0	0	0	0	3425	0	0	3425	0	3565	0	0	3565	7510
Apprch %	50.2	0	49.8	0		0	0	0	0		0	100	0	0		0	100	0	0		
Total %	3.5	0	3.4	0	6.9	0	0	0	0	0	0	45.6	0	0	45.6	0	47.5	0	0	47.5	

Reliable Traffic Data Services, LLC

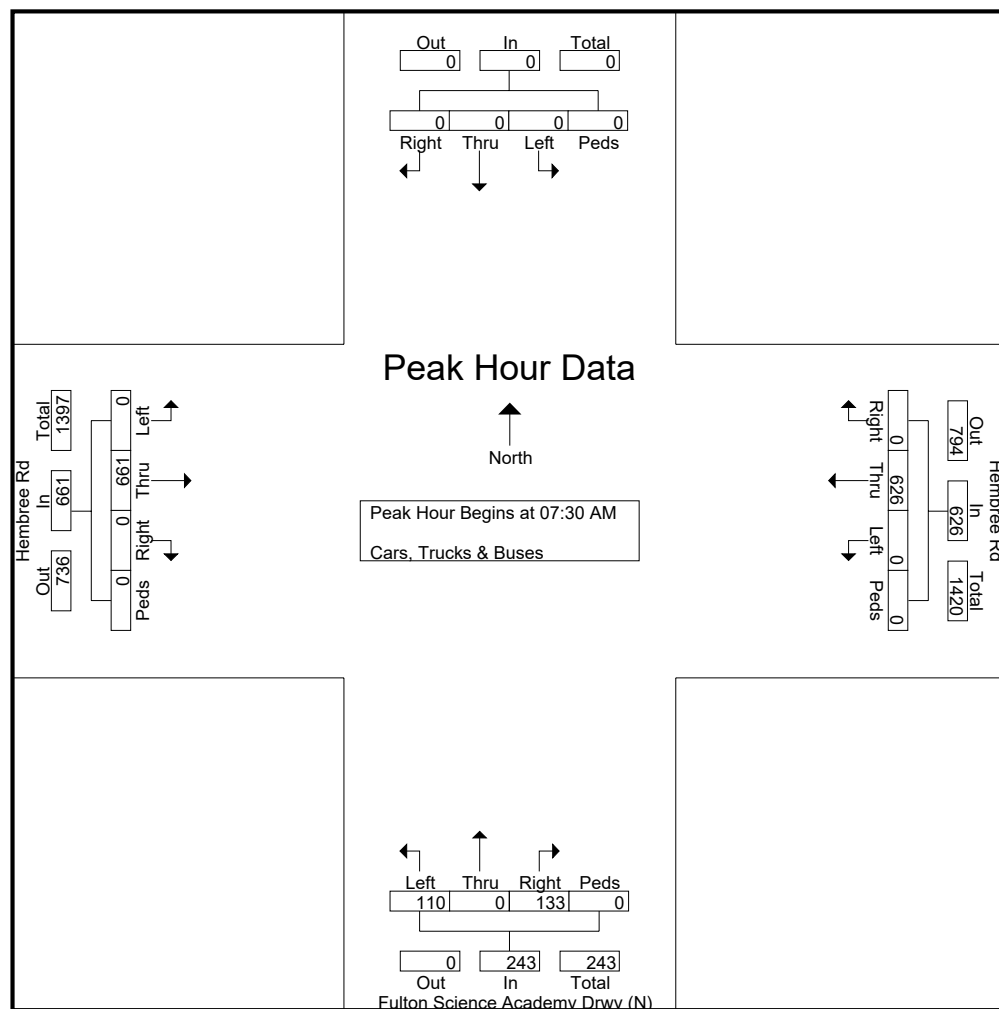
Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data
Hembree Rd @ Fulton Science
Academy Drwy (N)
6.30am-9.30am 3pm-6pm

File Name : 30970003
Site Code : 30970003
Start Date : 8/25/2011
Page No : 2

	Fulton Science Academy Drwy (N) Northbound					Southbound					Hembree Rd Eastbound					Hembree Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	3	0	12	0	15	0	0	0	0	0	0	169	0	0	169	0	172	0	0	172	356
07:45 AM	14	0	30	0	44	0	0	0	0	0	0	178	0	0	178	0	179	0	0	179	401
08:00 AM	36	0	42	0	78	0	0	0	0	0	0	167	0	0	167	0	129	0	0	129	374
08:15 AM	57	0	49	0	106	0	0	0	0	0	0	147	0	0	147	0	146	0	0	146	399
Total Volume	110	0	133	0	243	0	0	0	0	0	0	661	0	0	661	0	626	0	0	626	1530
% App. Total	45.3	0	54.7	0		0	0	0	0	0	0	100	0	0		0	100	0	0		
PHF	.482	.000	.679	.000	.573	.000	.000	.000	.000	.000	.000	.928	.000	.000	.928	.000	.874	.000	.000	.874	.954



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Hembree Rd @ Fulton Science

Academy Drwy (N)

6.30am-9.30am 3pm-6pm

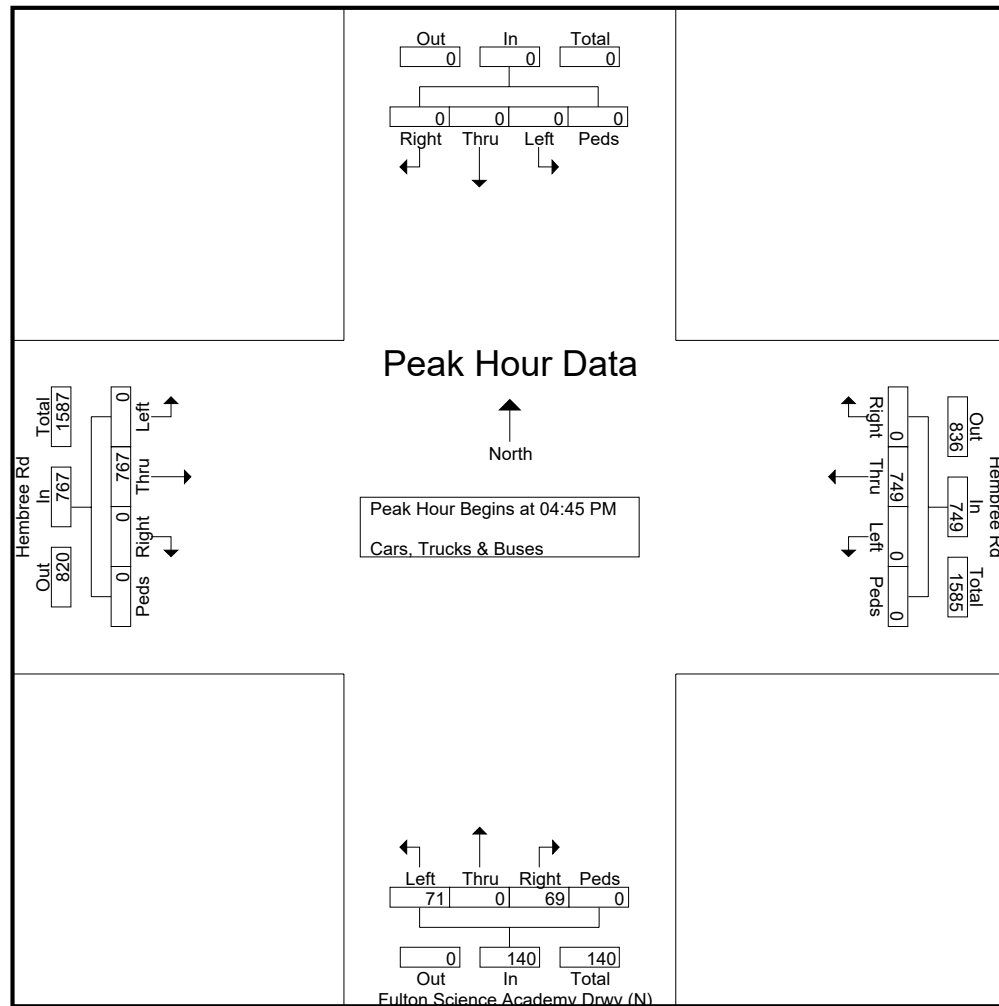
File Name : 30970003

Site Code : 30970003

Start Date : 8/25/2011

Page No : 3

	Fulton Science Academy Drwy (N) Northbound					Southbound					Hembree Rd Eastbound					Hembree Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	40	0	40	0	80	0	0	0	0	0	0	167	0	0	167	0	183	0	0	183	430
05:00 PM	23	0	26	0	49	0	0	0	0	0	0	218	0	0	218	0	197	0	0	197	464
05:15 PM	5	0	1	0	6	0	0	0	0	0	0	197	0	0	197	0	192	0	0	192	395
05:30 PM	3	0	2	0	5	0	0	0	0	0	0	185	0	0	185	0	177	0	0	177	367
Total Volume	71	0	69	0	140	0	0	0	0	0	0	767	0	0	767	0	749	0	0	749	1656
% App. Total	50.7	0	49.3	0		0	0	0	0	0	0	100	0	0		0	100	0	0		
PHF	.444	.000	.431	.000	.438	.000	.000	.000	.000	.000	.000	.880	.000	.000	.880	.000	.951	.000	.000	.951	.892



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Sims Industrial Blvd @ Fulton Science

Academy Drwy (E)

6.30am-9.30am 3pm-6pm

File Name : 30970004

Site Code : 30970004

Start Date : 8/25/2011

Page No : 1

Groups Printed- Cars, Trucks & Buses

	Sims Industrial Blvd Northbound					Sims Industrial Blvd Southbound					Fulton Science Academy Drwy (E) Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:30 AM	0	1	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	3
06:45 AM	0	1	0	0	1	0	3	2	0	5	1	0	0	0	1	0	0	0	0	0	7
Total	0	2	0	0	2	0	4	3	0	7	1	0	0	0	1	0	0	0	0	0	10
07:00 AM	0	1	0	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	4
07:15 AM	0	0	0	0	0	0	2	15	0	17	0	0	0	0	0	0	0	0	0	0	17
07:30 AM	0	1	0	0	1	0	3	47	0	50	0	0	0	0	0	0	0	0	0	0	51
07:45 AM	0	0	0	0	0	0	8	70	0	78	1	0	0	0	1	0	0	0	0	0	79
Total	0	2	0	0	2	0	14	134	0	148	1	0	0	0	1	0	0	0	0	0	151
08:00 AM	0	1	0	0	1	0	6	124	0	130	3	0	0	0	3	0	0	0	0	0	134
08:15 AM	0	2	0	0	2	0	6	41	0	47	0	0	0	0	0	0	0	0	0	0	49
08:30 AM	0	1	0	0	1	0	1	8	0	9	0	0	0	0	0	0	0	0	0	0	10
08:45 AM	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	3
Total	0	5	0	0	5	0	13	175	0	188	3	0	0	0	3	0	0	0	0	0	196
09:00 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	2
09:15 AM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																					
Total	0	1	0	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	4
*** BREAK ***																					
03:00 PM	0	1	0	0	1	0	3	8	0	11	1	0	0	0	1	0	0	0	0	0	13
03:15 PM	1	2	0	0	3	0	6	10	0	16	2	0	0	0	2	0	0	0	0	0	21
03:30 PM	1	3	0	0	4	0	11	21	0	32	1	0	0	0	1	0	0	0	0	0	37
03:45 PM	1	24	0	0	25	0	9	33	0	42	3	0	0	0	3	0	0	0	0	0	70
Total	3	30	0	0	33	0	29	72	0	101	7	0	0	0	7	0	0	0	0	0	141
04:00 PM	0	10	0	0	10	0	0	11	0	11	1	0	0	0	1	0	0	0	0	0	22
04:15 PM	0	0	0	0	0	0	1	26	0	27	3	0	0	0	3	0	0	0	0	0	30
04:30 PM	0	2	0	0	2	0	11	33	0	44	2	0	1	0	3	0	0	0	0	0	49
04:45 PM	0	17	0	0	17	0	11	60	0	71	13	0	0	0	13	0	0	0	0	0	101
Total	0	29	0	0	29	0	23	130	0	153	19	0	1	0	20	0	0	0	0	0	202
05:00 PM	1	1	0	0	2	0	0	20	0	20	9	0	1	0	10	0	0	0	0	0	32
05:15 PM	0	2	0	0	2	0	2	3	0	5	1	0	0	0	1	0	0	0	0	0	8
05:30 PM	0	2	0	0	2	0	1	25	0	26	2	0	0	0	2	0	0	0	0	0	30
05:45 PM	0	1	0	0	1	0	1	4	0	5	1	0	0	0	1	0	0	0	0	0	7
Total	1	6	0	0	7	0	4	52	0	56	13	0	1	0	14	0	0	0	0	0	77
Grand Total	4	75	0	0	79	0	88	568	0	656	44	0	2	0	46	0	0	0	0	0	781
Apprch %	5.1	94.9	0	0		0	13.4	86.6	0		95.7	0	4.3	0		0	0	0	0		
Total %	0.5	9.6	0	0	10.1	0	11.3	72.7	0	84	5.6	0	0.3	0	5.9	0	0	0	0	0	

Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Sims Industrial Blvd @ Fulton Science

Academy Drwy (E)

6.30am-9.30am 3pm-6pm

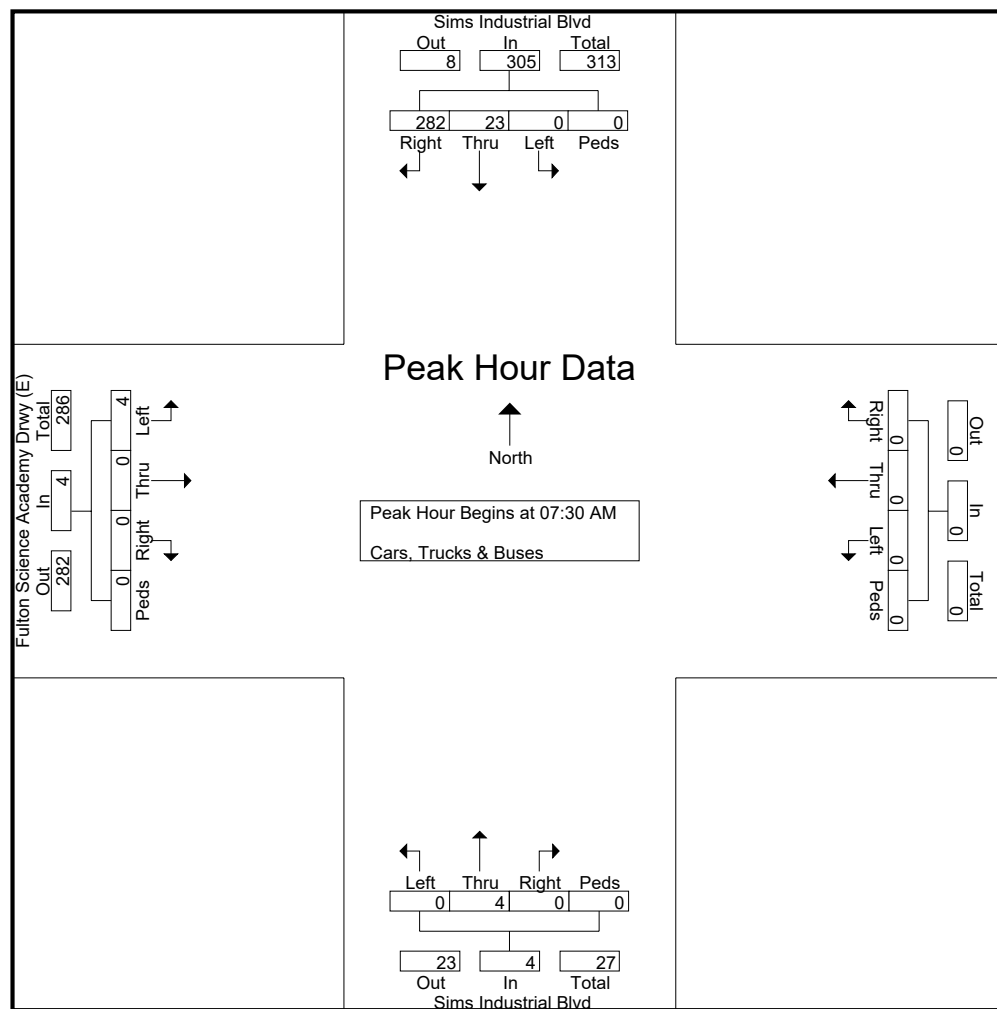
File Name : 30970004

Site Code : 30970004

Start Date : 8/25/2011

Page No : 2

	Sims Industrial Blvd Northbound					Sims Industrial Blvd Southbound					Fulton Science Academy Drwy (E) Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	1	0	0	1	0	3	47	0	50	0	0	0	0	0	0	0	0	0	0	51
07:45 AM	0	0	0	0	0	0	8	70	0	78	1	0	0	0	1	0	0	0	0	0	79
08:00 AM	0	1	0	0	1	0	6	124	0	130	3	0	0	0	3	0	0	0	0	0	134
08:15 AM	0	2	0	0	2	0	6	41	0	47	0	0	0	0	0	0	0	0	0	0	49
Total Volume	0	4	0	0	4	0	23	282	0	305	4	0	0	0	4	0	0	0	0	0	313
% App. Total	0	100	0	0		0	7.5	92.5	0		100	0	0	0		0	0	0	0		
PHF	.000	.500	.000	.000	.500	.000	.719	.569	.000	.587	.333	.000	.000	.000	.333	.000	.000	.000	.000	.000	.584



Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 Fax: (770) 578-8159

Email: reliabletraffic@msn.com

TMC Data

Sims Industrial Blvd @ Fulton Science

Academy Drwy (E)

6.30am-9.30am 3pm-6pm

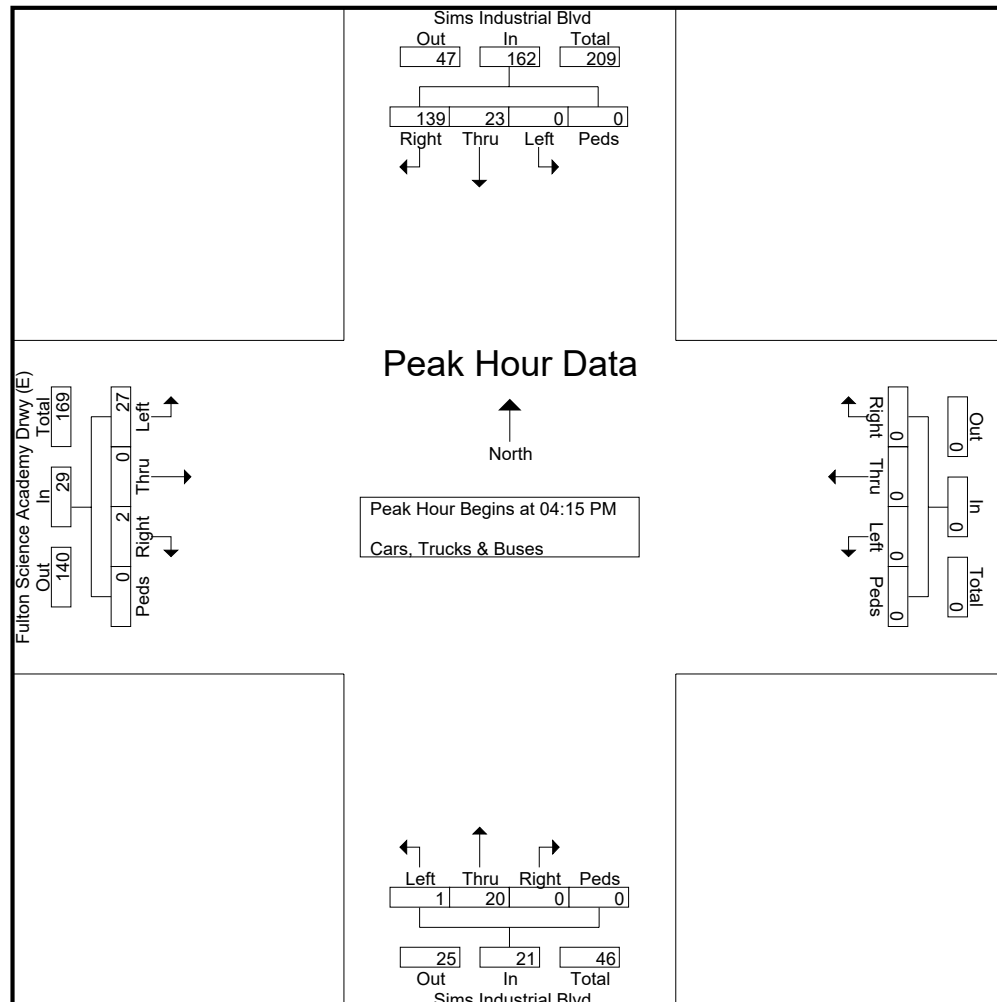
File Name : 30970004

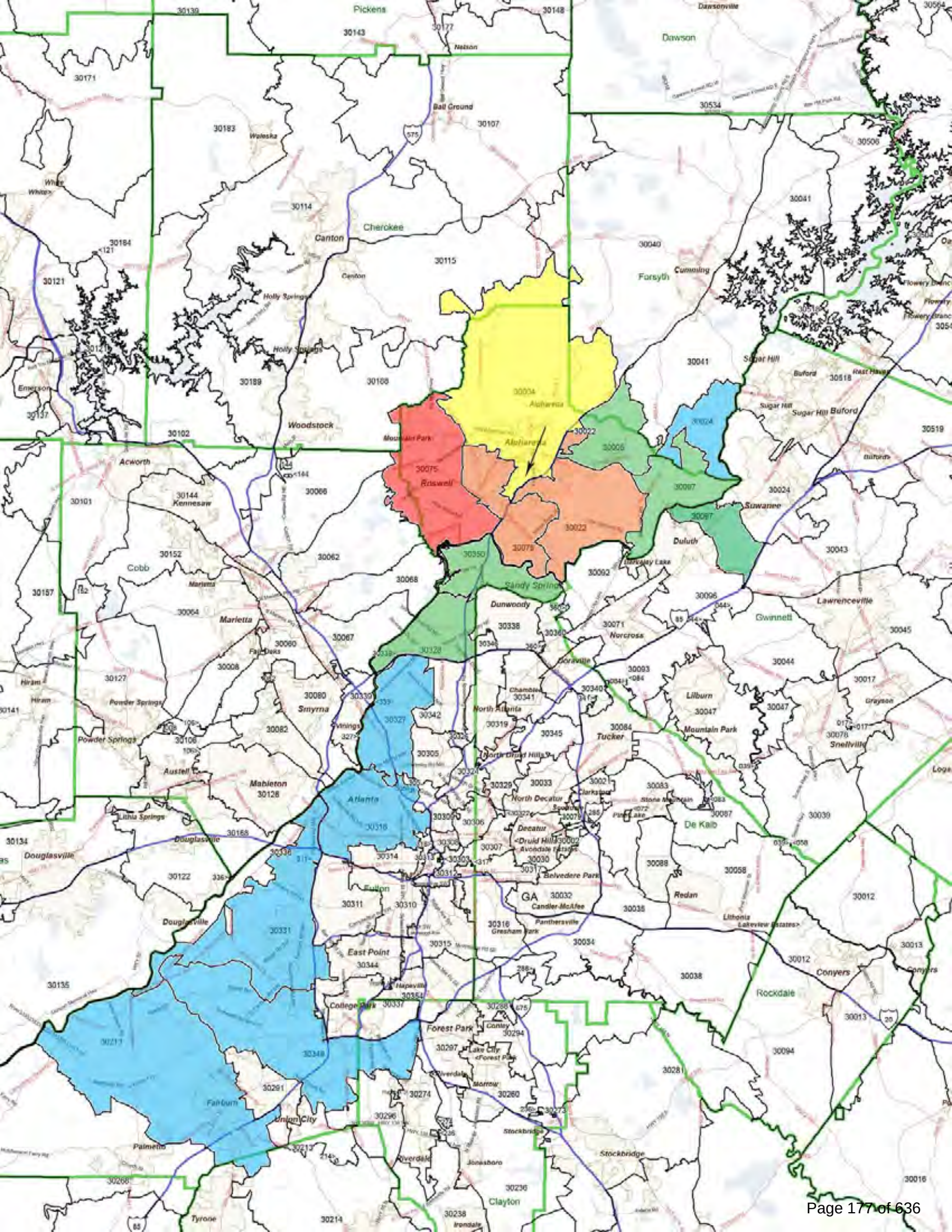
Site Code : 30970004

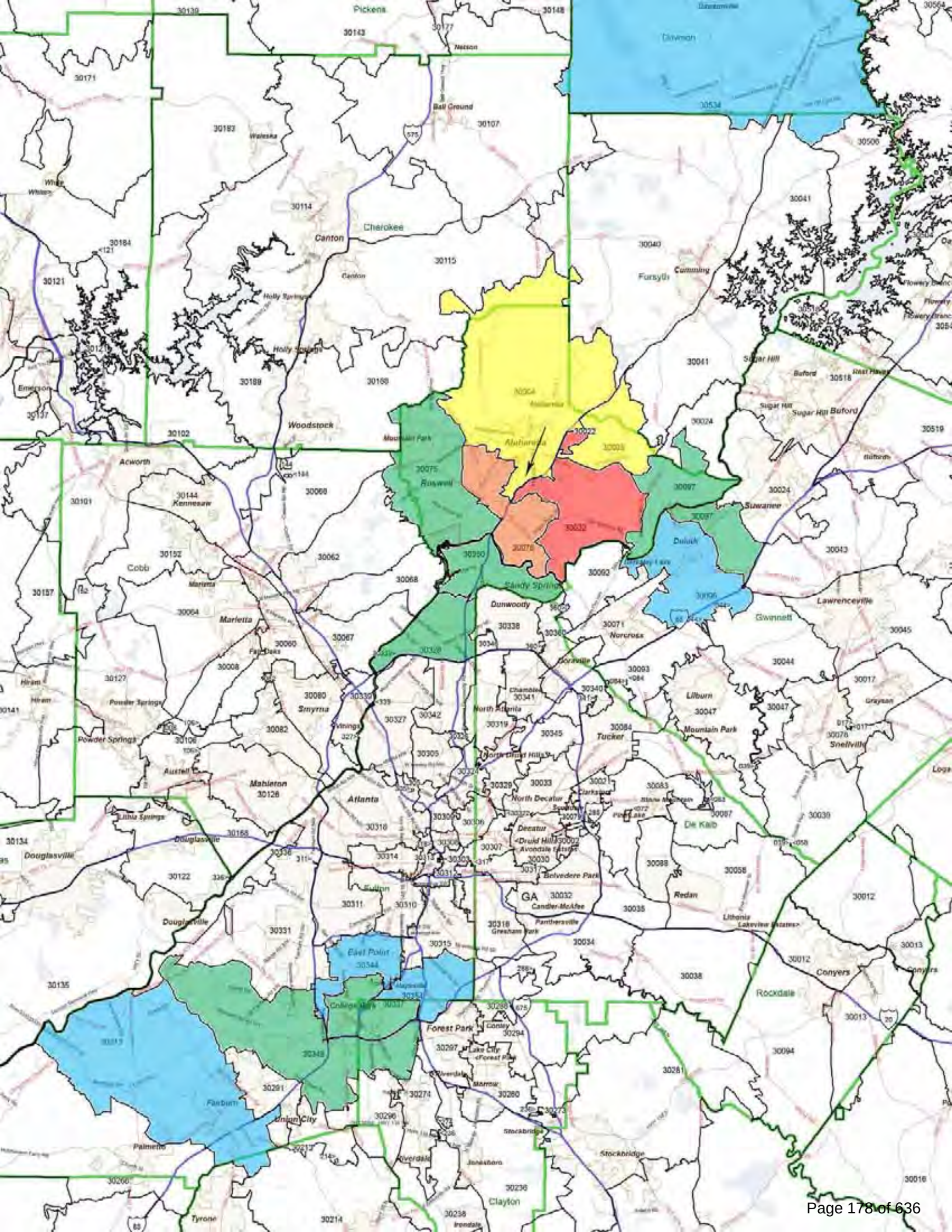
Start Date : 8/25/2011

Page No : 3

	Sims Industrial Blvd Northbound					Sims Industrial Blvd Southbound					Fulton Science Academy Drwy (E) Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0	0	0	1	26	0	27	3	0	0	0	3	0	0	0	0	0	30
04:30 PM	0	2	0	0	2	0	11	33	0	44	2	0	1	0	3	0	0	0	0	0	49
04:45 PM	0	17	0	0	17	0	11	60	0	71	13	0	0	0	13	0	0	0	0	0	101
05:00 PM	1	1	0	0	2	0	0	20	0	20	9	0	1	0	10	0	0	0	0	0	32
Total Volume	1	20	0	0	21	0	23	139	0	162	27	0	2	0	29	0	0	0	0	0	212
% App. Total	4.8	95.2	0	0		0	14.2	85.8	0		93.1	0	6.9	0		0	0	0	0		
PHF	.250	.294	.000	.000	.309	.000	.523	.579	.000	.570	.519	.000	.500	.000	.558	.000	.000	.000	.000	.000	.525







Queues
1: Encore Pkwy & Westside Pkwy

Existing AM
9/10/2011

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	6	12	353	14	79	4	226	142	177	800	10
Lane Group Flow (vph)	8	16	28	484	24	88	12	233	156	184	870	12
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Detector Phases	3	8	8	7	4	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.5	30.5	12.0	30.5	30.5	12.0	24.0	24.0	12.0	27.5	27.5
Total Split (s)	15.0	33.5	33.5	33.0	51.5	51.5	15.0	47.0	47.0	17.0	49.0	49.0
Total Split (%)	11.5%	25.7%	25.7%	25.3%	39.5%	39.5%	11.5%	36.0%	36.0%	13.0%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.06	0.17	0.26	0.80	0.03	0.22	0.05	0.11	0.15	0.23	0.36	0.01
Control Delay	36.2	62.8	26.2	61.5	37.8	9.0	9.0	13.5	3.0	8.3	11.5	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	62.8	26.2	61.5	37.8	9.0	9.0	13.5	3.0	8.3	11.5	7.9
Queue Length 50th (ft)	5	13	0	204	7	0	3	45	0	51	150	1
Queue Length 95th (ft)	12	16	3	196	13	44	4	82	37	96	278	10
Internal Link Dist (ft)		265			665			598			2378	
Turn Bay Length (ft)				180		180	260		160	270		165
Base Capacity (vph)	195	421	380	763	1288	632	317	2126	1013	800	2403	1078
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.04	0.07	0.63	0.02	0.14	0.04	0.11	0.15	0.23	0.36	0.01

Intersection Summary

Cycle Length: 130.5

Actuated Cycle Length: 130.5

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Encore Pkwy & Westside Pkwy

			
ø1	ø2	ø3	ø4
15 s	49 s	15 s	51.5 s
			
ø5	ø6	ø7	ø8
17 s	47 s	33 s	33.5 s

HCM Signalized Intersection Capacity Analysis

Existing AM

1: Encore Pkwy & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.95	1.00	1.00	0.31	1.00	1.00	0.58	1.00	1.00
Satd. Flow (perm)	1380	1863	1583	3433	3539	1583	572	3539	1583	1072	3539	1583
Volume (vph)	5	6	12	353	14	79	4	226	142	177	800	10
Peak-hour factor, PHF	0.62	0.38	0.43	0.73	0.58	0.90	0.33	0.97	0.91	0.96	0.92	0.83
Adj. Flow (vph)	8	16	28	484	24	88	12	233	156	184	870	12
RTOR Reduction (vph)	0	0	27	0	0	69	0	0	66	0	0	3
Lane Group Flow (vph)	8	16	1	484	24	19	12	233	90	184	870	9
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Actuated Green, G (s)	7.3	5.9	5.9	23.1	27.6	27.6	77.7	75.2	75.2	89.5	83.0	83.0
Effective Green, g (s)	7.3	5.9	5.9	23.1	27.6	27.6	77.7	75.2	75.2	89.5	83.0	83.0
Actuated g/C Ratio	0.06	0.05	0.05	0.18	0.21	0.21	0.60	0.58	0.58	0.69	0.64	0.64
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	84	72	608	748	335	364	2039	912	790	2251	1007
v/s Ratio Prot	0.00	c0.01		c0.14	0.01		0.00	0.07		c0.02	c0.25	
v/s Ratio Perm	0.00		0.00			0.01	0.02		0.06	0.14		0.01
v/c Ratio	0.10	0.19	0.02	0.80	0.03	0.06	0.03	0.11	0.10	0.23	0.39	0.01
Uniform Delay, d1	58.4	60.0	59.5	51.4	40.8	41.1	10.8	12.5	12.4	7.3	11.5	8.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.1	0.1	7.1	0.0	0.1	0.0	0.1	0.2	0.2	0.5	0.0
Delay (s)	59.0	61.1	59.6	58.6	40.9	41.1	10.9	12.7	12.6	7.4	12.0	8.7
Level of Service	E	E	E	E	D	D	B	B	B	A	B	A
Approach Delay (s)		60.0			55.3			12.6			11.1	
Approach LOS		E			E			B			B	
Intersection Summary												
HCM Average Control Delay	25.1			HCM Level of Service			C					
HCM Volume to Capacity ratio	0.46											
Actuated Cycle Length (s)	130.5			Sum of lost time (s)			16.0					
Intersection Capacity Utilization	52.2%			ICU Level of Service			A					
Analysis Period (min)	15											
c Critical Lane Group												

Queues
2: Maxwell Road & Westside Pkwy

Existing AM
9/10/2011

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	18	1	292	3	1	97	237	3	1	684	9
Lane Group Flow (vph)	32	4	321	8	8	108	252	8	4	735	16
Turn Type	pm+pt		Perm	pm+pt		pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phases	3	8	8	7	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.0	30.0	12.0	30.5	12.0	20.5	20.5	12.0	20.0	20.0
Total Split (s)	18.0	36.5	36.5	18.0	36.5	20.0	47.5	47.5	18.0	45.5	45.5
Total Split (%)	15.0%	30.4%	30.4%	15.0%	30.4%	16.7%	39.6%	39.6%	15.0%	37.9%	37.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.21	0.03	0.77	0.07	0.07	0.27	0.09	0.01	0.00	0.28	0.01
Control Delay	49.3	48.0	18.7	45.7	40.0	4.3	3.6	3.7	4.0	6.3	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	48.0	18.7	45.7	40.0	4.3	3.6	3.7	4.0	6.3	3.8
Queue Length 50th (ft)	24	3	0	6	3	8	9	0	0	67	0
Queue Length 95th (ft)	28	4	87	8	3	42	56	1	1	184	4
Internal Link Dist (ft)		353			298		2378			398	
Turn Bay Length (ft)	130		380	400		320		200	285		170
Base Capacity (vph)	238	505	663	239	470	508	2916	1306	1007	2651	1190
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.01	0.48	0.03	0.02	0.21	0.09	0.01	0.00	0.28	0.01

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 2: Maxwell Road & Westside Pkwy

			
ø1	ø2	ø3	ø4
20 s	45.5 s	18 s	36.5 s
			
ø5	ø6	ø7	ø8
18 s	47.5 s	18 s	36.5 s

HCM Signalized Intersection Capacity Analysis

Existing AM

2: Maxwell Road & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1723		1770	3539	1583	1770	3539	1583
Flt Permitted	0.45	1.00	1.00	0.80	1.00		0.34	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	837	1863	1583	1490	1723		624	3539	1583	1110	3539	1583
Volume (vph)	18	1	292	3	1	2	97	237	3	1	684	9
Peak-hour factor, PHF	0.56	0.25	0.91	0.38	0.25	0.50	0.90	0.94	0.38	0.25	0.93	0.56
Adj. Flow (vph)	32	4	321	8	4	4	108	252	8	4	735	16
RTOR Reduction (vph)	0	0	297	0	4	0	0	0	2	0	0	4
Lane Group Flow (vph)	32	4	24	8	4	0	108	252	6	4	735	12
Turn Type	pm+pt	Perm		pm+pt	pm+pt			Perm		pm+pt	Perm	
Protected Phases	3	8	7		4	1		6	5		2	
Permitted Phases	8	8		4	6			6		2	2	
Actuated Green, G (s)	14.2	8.9	8.9	6.4	5.0	97.7		92.5	92.5	87.9	86.7	86.7
Effective Green, g (s)	14.2	8.9	8.9	6.4	5.0	97.7		92.5	92.5	87.9	86.7	86.7
Actuated g/C Ratio	0.12	0.07	0.07	0.05	0.04	0.81		0.77	0.77	0.73	0.72	0.72
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	140	138	117	83	72	575		2728	1220	820	2557	1144
v/s Ratio Prot	c0.01	0.00	0.00		0.00	c0.01		0.07	0.00		c0.21	
v/s Ratio Perm	c0.02	0.02		0.00	0.14			0.00		0.00	0.01	
v/c Ratio	0.23	0.03	0.20	0.10	0.06	0.19		0.09	0.01	0.00	0.29	0.01
Uniform Delay, d1	47.6	51.5	52.2	54.0	55.2	2.6		3.4	3.2	4.3	5.8	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.1	0.9	0.5	0.3	0.2		0.1	0.0	0.0	0.3	0.0
Delay (s)	48.4	51.6	53.1	54.5	55.6	2.8		3.5	3.2	4.3	6.1	4.7
Level of Service	D	D	D	D	E	A		A	A	A	A	A
Approach Delay (s)	52.6		55.0			3.3		6.1				
Approach LOS	D		E			A		A				
Intersection Summary												
HCM Average Control Delay			17.0		HCM Level of Service				B			
HCM Volume to Capacity ratio			0.28									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				16.0			
Intersection Capacity Utilization			50.3%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

Queues
1: Encore Pkwy & Westside Pkwy

Existing PM
9/10/2011

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	8	14	221	16	252	11	643	249	166	306	5
Lane Group Flow (vph)	16	20	20	260	20	271	12	707	283	195	315	12
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Detector Phases	3	8	8	7	4	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.5	30.5	12.0	30.5	30.5	12.0	24.0	24.0	12.0	27.5	27.5
Total Split (s)	17.0	35.5	35.5	24.0	42.5	42.5	17.0	44.0	44.0	27.0	54.0	54.0
Total Split (%)	13.0%	27.2%	27.2%	18.4%	32.6%	32.6%	13.0%	33.7%	33.7%	20.7%	41.4%	41.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.12	0.20	0.20	0.66	0.04	0.61	0.02	0.30	0.25	0.54	0.12	0.01
Control Delay	43.5	63.6	26.5	63.5	47.9	12.0	5.7	10.9	3.5	10.6	6.6	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.5	63.6	26.5	63.5	47.9	12.0	5.7	10.9	3.5	10.6	6.6	4.2
Queue Length 50th (ft)	11	17	0	110	7	0	2	133	18	42	34	0
Queue Length 95th (ft)	25	20	17	141	18	81	9	205	60	74	76	2
Internal Link Dist (ft)		265			665			598			2378	
Turn Bay Length (ft)				180		180	260		160	270		165
Base Capacity (vph)	224	450	397	526	1044	658	867	2362	1131	509	2620	1175
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.04	0.05	0.49	0.02	0.41	0.01	0.30	0.25	0.38	0.12	0.01

Intersection Summary

Cycle Length: 130.5

Actuated Cycle Length: 130.5

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Encore Pkwy & Westside Pkwy

			
ø1	ø2	ø3	ø4
17 s	54 s	17 s	42.5 s
			
ø5	ø6	ø7	ø8
27 s	44 s	24 s	35.5 s

HCM Signalized Intersection Capacity Analysis

Existing PM

1: Encore Pkwy & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.95	1.00	1.00	0.56	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	1385	1863	1583	3433	3539	1583	1044	3539	1583	617	3539	1583
Volume (vph)	12	8	14	221	16	252	11	643	249	166	306	5
Peak-hour factor, PHF	0.75	0.40	0.70	0.85	0.80	0.93	0.92	0.91	0.88	0.85	0.97	0.42
Adj. Flow (vph)	16	20	20	260	20	271	12	707	283	195	315	12
RTOR Reduction (vph)	0	0	19	0	0	235	0	0	79	0	0	4
Lane Group Flow (vph)	16	20	1	260	20	36	12	707	204	195	315	8
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Actuated Green, G (s)	8.4	5.4	5.4	14.9	17.3	17.3	87.0	84.6	84.6	98.2	91.8	91.8
Effective Green, g (s)	8.4	5.4	5.4	14.9	17.3	17.3	87.0	84.6	84.6	98.2	91.8	91.8
Actuated g/C Ratio	0.06	0.04	0.04	0.11	0.13	0.13	0.67	0.65	0.65	0.75	0.70	0.70
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	77	66	392	469	210	709	2294	1026	549	2490	1114
v/s Ratio Prot	0.00	c0.01		c0.08	0.01		0.00	0.20		c0.03	0.09	
v/s Ratio Perm	0.01		0.00			0.02	0.01		0.13	c0.24		0.01
v/c Ratio	0.16	0.26	0.01	0.66	0.04	0.17	0.02	0.31	0.20	0.36	0.13	0.01
Uniform Delay, d1	57.6	60.6	60.0	55.4	49.4	50.2	7.3	10.1	9.3	5.2	6.3	5.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.8	0.1	4.2	0.0	0.4	0.0	0.3	0.4	0.4	0.1	0.0
Delay (s)	58.4	62.4	60.1	59.6	49.4	50.6	7.3	10.4	9.7	5.6	6.4	5.8
Level of Service	E	E	E	E	D	D	A	B	A	A	A	A
Approach Delay (s)		60.4			54.8			10.2			6.1	
Approach LOS		E			D			B			A	
Intersection Summary												
HCM Average Control Delay			22.0				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.39									
Actuated Cycle Length (s)			130.5				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			49.9%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

Queues
2: Maxwell Road & Westside Pkwy

Existing PM
9/10/2011

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	13	1	163	3	1	293	637	3	4	322	30
Lane Group Flow (vph)	24	4	214	8	12	329	657	4	12	335	40
Turn Type	pm+pt		Perm	pm+pt		pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phases	3	8	8	7	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.0	30.0	12.0	30.5	12.0	20.5	20.5	12.0	20.0	20.0
Total Split (s)	18.0	36.5	36.5	18.0	36.5	37.0	47.5	47.5	18.0	28.5	28.5
Total Split (%)	15.0%	30.4%	30.4%	15.0%	30.4%	30.8%	39.6%	39.6%	15.0%	23.8%	23.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.18	0.03	0.70	0.07	0.12	0.50	0.22	0.00	0.02	0.13	0.03
Control Delay	49.8	50.0	19.5	47.0	35.0	5.2	3.6	3.7	3.5	6.8	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	50.0	19.5	47.0	35.0	5.2	3.6	3.7	3.5	6.8	3.2
Queue Length 50th (ft)	18	3	0	6	3	26	26	0	1	30	0
Queue Length 95th (ft)	23	4	35	8	2	108	138	3	3	91	11
Internal Link Dist (ft)		353			298		2378			398	
Turn Bay Length (ft)	130		380	400		320		200	285		170
Base Capacity (vph)	232	505	585	232	460	860	2940	1316	741	2560	1156
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.37	0.03	0.03	0.38	0.22	0.00	0.02	0.13	0.03

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 2: Maxwell Road & Westside Pkwy

			
ø1	ø2	ø3	ø4
37 s	28.5 s	18 s	36.5 s
			
ø5	ø6	ø7	ø8
18 s	47.5 s	18 s	36.5 s

HCM Signalized Intersection Capacity Analysis

Existing PM

2: Maxwell Road & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1676		1770	3539	1583	1770	3539	1583
Flt Permitted	0.49	1.00	1.00	0.87	1.00		0.52	1.00	1.00	0.40	1.00	1.00
Satd. Flow (perm)	920	1863	1583	1620	1676		978	3539	1583	749	3539	1583
Volume (vph)	13	1	163	3	1	3	293	637	3	4	322	30
Peak-hour factor, PHF	0.54	0.25	0.76	0.38	0.25	0.38	0.89	0.97	0.75	0.33	0.96	0.75
Adj. Flow (vph)	24	4	214	8	4	8	329	657	4	12	335	40
RTOR Reduction (vph)	0	0	200	0	8	0	0	0	1	0	0	12
Lane Group Flow (vph)	24	4	14	8	4	0	329	657	3	12	335	28
Turn Type	pm+pt	Perm		pm+pt	pm+pt			Perm		pm+pt	Perm	
Protected Phases	3	8	7		4	1		6	5		2	
Permitted Phases	8	8		4	6			6	2	2		
Actuated Green, G (s)	13.0	8.1	8.1	6.0	4.6	98.5		93.3	93.3	84.8	83.6	83.6
Effective Green, g (s)	13.0	8.1	8.1	6.0	4.6	98.5		93.3	93.3	84.8	83.6	83.6
Actuated g/C Ratio	0.11	0.07	0.07	0.05	0.04	0.82		0.78	0.78	0.71	0.70	0.70
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	126	107	83	64	875		2752	1231	540	2466	1103
v/s Ratio Prot	c0.01	0.00	0.00		0.00	c0.03		0.19	0.00		0.09	
v/s Ratio Perm	c0.01	0.01		0.00	c0.27			0.00		0.02	0.02	
v/c Ratio	0.18	0.03	0.13	0.10	0.07	0.38		0.24	0.00	0.02	0.14	0.03
Uniform Delay, d1	48.4	52.3	52.7	54.4	55.6	2.5		3.6	3.0	5.2	6.1	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.6	0.5	0.4	0.3		0.2	0.0	0.0	0.1	0.0
Delay (s)	49.1	52.4	53.2	54.9	56.1	2.7		3.9	3.0	5.2	6.2	5.7
Level of Service	D	D	D	D	E	A		A	A	A	A	A
Approach Delay (s)	52.8		55.6			3.5		6.1				
Approach LOS	D		E			A		A				
Intersection Summary												
HCM Average Control Delay			12.0		HCM Level of Service				B			
HCM Volume to Capacity ratio			0.36									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				12.0			
Intersection Capacity Utilization			42.5%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

Queues
1: Encore Pkwy & Westside Pkwy

Base AM
9/10/2011

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	6	12	357	14	80	4	228	143	179	808	10
Lane Group Flow (vph)	8	16	28	489	24	89	12	235	157	186	878	12
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Detector Phases	3	8	8	7	4	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.5	30.5	12.0	30.5	30.5	12.0	24.0	24.0	12.0	27.5	27.5
Total Split (s)	15.0	33.5	33.5	33.0	51.5	51.5	15.0	47.0	47.0	17.0	49.0	49.0
Total Split (%)	11.5%	25.7%	25.7%	25.3%	39.5%	39.5%	11.5%	36.0%	36.0%	13.0%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.06	0.17	0.26	0.80	0.03	0.22	0.05	0.11	0.16	0.24	0.37	0.01
Control Delay	36.0	62.8	26.2	61.6	37.7	9.0	9.2	13.5	3.0	8.4	11.6	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	62.8	26.2	61.6	37.7	9.0	9.2	13.5	3.0	8.4	11.6	7.9
Queue Length 50th (ft)	5	13	0	206	7	0	3	45	0	52	152	1
Queue Length 95th (ft)	12	16	3	198	13	44	4	82	37	97	281	10
Internal Link Dist (ft)		265			665			598			2378	
Turn Bay Length (ft)				180		180	260		160	270		165
Base Capacity (vph)	195	421	380	763	1288	633	312	2120	1011	798	2399	1076
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.04	0.07	0.64	0.02	0.14	0.04	0.11	0.16	0.23	0.37	0.01

Intersection Summary

Cycle Length: 130.5

Actuated Cycle Length: 130.5

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Encore Pkwy & Westside Pkwy

			
ø1	ø2	ø3	ø4
15 s	49 s	15 s	51.5 s
			
ø5	ø6	ø7	ø8
17 s	47 s	33 s	33.5 s

HCM Signalized Intersection Capacity Analysis

Base AM

1: Encore Pkwy & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.95	1.00	1.00	0.30	1.00	1.00	0.57	1.00	1.00
Satd. Flow (perm)	1380	1863	1583	3433	3539	1583	566	3539	1583	1069	3539	1583
Volume (vph)	5	6	12	357	14	80	4	228	143	179	808	10
Peak-hour factor, PHF	0.62	0.38	0.43	0.73	0.58	0.90	0.33	0.97	0.91	0.96	0.92	0.83
Adj. Flow (vph)	8	16	28	489	24	89	12	235	157	186	878	12
RTOR Reduction (vph)	0	0	27	0	0	70	0	0	67	0	0	3
Lane Group Flow (vph)	8	16	1	489	24	19	12	235	90	186	878	9
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Actuated Green, G (s)	7.4	6.0	6.0	23.2	27.8	27.8	77.4	74.9	74.9	89.3	82.8	82.8
Effective Green, g (s)	7.4	6.0	6.0	23.2	27.8	27.8	77.4	74.9	74.9	89.3	82.8	82.8
Actuated g/C Ratio	0.06	0.05	0.05	0.18	0.21	0.21	0.59	0.57	0.57	0.68	0.63	0.63
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	82	86	73	610	754	337	359	2031	909	787	2245	1004
v/s Ratio Prot	0.00	c0.01		c0.14	0.01		0.00	0.07		c0.02	c0.25	
v/s Ratio Perm	0.00		0.00			0.01	0.02		0.06	0.14		0.01
v/c Ratio	0.10	0.19	0.02	0.80	0.03	0.06	0.03	0.12	0.10	0.24	0.39	0.01
Uniform Delay, d1	58.3	59.9	59.4	51.4	40.7	40.9	11.0	12.7	12.6	7.3	11.6	8.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.0	0.1	7.5	0.0	0.1	0.0	0.1	0.2	0.2	0.5	0.0
Delay (s)	58.8	60.9	59.5	58.9	40.7	41.0	11.0	12.8	12.8	7.5	12.1	8.8
Level of Service	E	E	E	E	D	D	B	B	B	A	B	A
Approach Delay (s)		59.9			55.5			12.7			11.3	
Approach LOS		E			E			B			B	
Intersection Summary												
HCM Average Control Delay		25.2										
HCM Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		130.5										
Intersection Capacity Utilization		52.5%										
Analysis Period (min)		15										
c Critical Lane Group												

Queues
2: Maxwell Road & Westside Pkwy

Base AM
9/10/2011

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	18	1	295	3	1	98	239	3	1	691	9
Lane Group Flow (vph)	32	4	324	8	8	109	254	8	4	743	16
Turn Type	pm+pt		Perm	pm+pt		pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phases	3	8	8	7	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.0	30.0	12.0	30.5	12.0	20.5	20.5	12.0	20.0	20.0
Total Split (s)	18.0	36.5	36.5	18.0	36.5	20.0	47.5	47.5	18.0	45.5	45.5
Total Split (%)	15.0%	30.4%	30.4%	15.0%	30.4%	16.7%	39.6%	39.6%	15.0%	37.9%	37.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.21	0.03	0.78	0.07	0.07	0.28	0.09	0.01	0.00	0.28	0.01
Control Delay	49.3	48.0	18.7	45.7	40.0	4.4	3.6	3.7	4.0	6.3	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	48.0	18.7	45.7	40.0	4.4	3.6	3.7	4.0	6.3	3.8
Queue Length 50th (ft)	24	3	0	6	3	8	9	0	0	68	0
Queue Length 95th (ft)	28	4	87	8	3	42	57	1	1	186	4
Internal Link Dist (ft)		353			298		2378			398	
Turn Bay Length (ft)	130		380	400		320		200	285		170
Base Capacity (vph)	238	505	665	239	470	500	2916	1306	1006	2651	1190
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.01	0.49	0.03	0.02	0.22	0.09	0.01	0.00	0.28	0.01

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 2: Maxwell Road & Westside Pkwy

			
ø1	ø2	ø3	ø4
20 s	45.5 s	18 s	36.5 s
			
ø5	ø6	ø7	ø8
18 s	47.5 s	18 s	36.5 s

HCM Signalized Intersection Capacity Analysis

2: Maxwell Road & Westside Pkwy

Base AM
9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1723		1770	3539	1583	1770	3539	1583
Flt Permitted	0.45	1.00	1.00	0.80	1.00		0.33	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	837	1863	1583	1490	1723		618	3539	1583	1107	3539	1583
Volume (vph)	18	1	295	3	1	2	98	239	3	1	691	9
Peak-hour factor, PHF	0.56	0.25	0.91	0.38	0.25	0.50	0.90	0.94	0.38	0.25	0.93	0.56
Adj. Flow (vph)	32	4	324	8	4	4	109	254	8	4	743	16
RTOR Reduction (vph)	0	0	300	0	4	0	0	0	2	0	0	4
Lane Group Flow (vph)	32	4	24	8	4	0	109	254	6	4	743	12
Turn Type	pm+pt		Perm	pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	14.2	8.9	8.9	6.4	5.0		97.7	92.5	92.5	87.9	86.7	86.7
Effective Green, g (s)	14.2	8.9	8.9	6.4	5.0		97.7	92.5	92.5	87.9	86.7	86.7
Actuated g/C Ratio	0.12	0.07	0.07	0.05	0.04		0.81	0.77	0.77	0.73	0.72	0.72
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	140	138	117	83	72		570	2728	1220	818	2557	1144
v/s Ratio Prot	c0.01	0.00		0.00	0.00		c0.01	0.07		0.00	c0.21	
v/s Ratio Perm	c0.02		0.02	0.00			0.14		0.00	0.00		0.01
v/c Ratio	0.23	0.03	0.21	0.10	0.06		0.19	0.09	0.01	0.00	0.29	0.01
Uniform Delay, d1	47.6	51.5	52.2	54.0	55.2		2.6	3.4	3.2	4.3	5.8	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.1	0.9	0.5	0.3		0.2	0.1	0.0	0.0	0.3	0.0
Delay (s)	48.4	51.6	53.1	54.5	55.6		2.8	3.5	3.2	4.3	6.1	4.7
Level of Service	D	D	D	D	E		A	A	A	A	A	A
Approach Delay (s)		52.7			55.0			3.3			6.1	
Approach LOS		D			E			A			A	
Intersection Summary												
HCM Average Control Delay			17.0		HCM Level of Service				B			
HCM Volume to Capacity ratio			0.29									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				16.0			
Intersection Capacity Utilization			50.7%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

Queues
1: Encore Pkwy & Westside Pkwy

Base PM
9/10/2011

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	8	14	223	16	255	11	649	251	168	309	5
Lane Group Flow (vph)	16	20	20	262	20	274	12	713	285	198	319	12
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Detector Phases	3	8	8	7	4	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.5	30.5	12.0	30.5	30.5	12.0	24.0	24.0	12.0	27.5	27.5
Total Split (s)	17.0	35.5	35.5	25.0	43.5	43.5	17.0	42.0	42.0	28.0	53.0	53.0
Total Split (%)	13.0%	27.2%	27.2%	19.2%	33.3%	33.3%	13.0%	32.2%	32.2%	21.5%	40.6%	40.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.12	0.20	0.20	0.66	0.04	0.61	0.02	0.30	0.25	0.59	0.12	0.01
Control Delay	43.5	63.6	26.5	63.5	47.8	12.0	5.8	11.0	3.7	12.2	6.6	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.5	63.6	26.5	63.5	47.8	12.0	5.8	11.0	3.7	12.2	6.6	4.2
Queue Length 50th (ft)	11	17	0	111	7	0	2	135	20	43	35	0
Queue Length 95th (ft)	25	20	17	143	18	82	9	207	63	75	77	2
Internal Link Dist (ft)		265			665			598			2378	
Turn Bay Length (ft)				180		180	260		160	270		165
Base Capacity (vph)	224	450	397	552	1071	670	862	2358	1128	500	2618	1174
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.04	0.05	0.47	0.02	0.41	0.01	0.30	0.25	0.40	0.12	0.01

Intersection Summary

Cycle Length: 130.5

Actuated Cycle Length: 130.5

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Encore Pkwy & Westside Pkwy

			
ø1	ø2	ø3	ø4
17 s	53 s	17 s	43.5 s
			
ø5	ø6	ø7	ø8
28 s	42 s	25 s	35.5 s

HCM Signalized Intersection Capacity Analysis

Base PM

1: Encore Pkwy & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.75	1.00	1.00	0.95	1.00	1.00	0.56	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	1406	1863	1583	3433	3539	1583	1040	3539	1583	612	3539	1583
Volume (vph)	12	8	14	223	16	255	11	649	251	168	309	5
Peak-hour factor, PHF	0.75	0.40	0.70	0.85	0.80	0.93	0.92	0.91	0.88	0.85	0.97	0.42
Adj. Flow (vph)	16	20	20	262	20	274	12	713	285	198	319	12
RTOR Reduction (vph)	0	0	19	0	0	238	0	0	77	0	0	4
Lane Group Flow (vph)	16	20	1	262	20	36	12	713	208	198	319	8
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Actuated Green, G (s)	8.3	5.3	5.3	15.0	17.3	17.3	87.0	84.6	84.6	98.2	91.8	91.8
Effective Green, g (s)	8.3	5.3	5.3	15.0	17.3	17.3	87.0	84.6	84.6	98.2	91.8	91.8
Actuated g/C Ratio	0.06	0.04	0.04	0.11	0.13	0.13	0.67	0.65	0.65	0.75	0.70	0.70
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	76	64	395	469	210	707	2294	1026	546	2490	1114
v/s Ratio Prot	0.00	c0.01		c0.08	0.01		0.00	0.20		c0.03	0.09	
v/s Ratio Perm	0.01		0.00			0.02	0.01		0.13	c0.25		0.01
v/c Ratio	0.16	0.26	0.01	0.66	0.04	0.17	0.02	0.31	0.20	0.36	0.13	0.01
Uniform Delay, d1	57.7	60.7	60.1	55.3	49.4	50.2	7.3	10.1	9.3	5.3	6.3	5.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.9	0.1	4.2	0.0	0.4	0.0	0.4	0.4	0.4	0.1	0.0
Delay (s)	58.5	62.6	60.2	59.5	49.4	50.6	7.3	10.5	9.7	5.7	6.4	5.8
Level of Service	E	E	E	E	D	D	A	B	A	A	A	A
Approach Delay (s)		60.6			54.8			10.2			6.1	
Approach LOS		E			D			B			A	
Intersection Summary												
HCM Average Control Delay			22.0				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.39									
Actuated Cycle Length (s)			130.5				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			50.3%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

Queues
2: Maxwell Road & Westside Pkwy

Base PM
9/10/2011

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	13	1	165	3	1	296	643	3	4	325	30
Lane Group Flow (vph)	24	4	217	8	12	333	663	4	12	339	40
Turn Type	pm+pt		Perm	pm+pt		pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phases	3	8	8	7	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.0	30.0	12.0	30.5	12.0	20.5	20.5	12.0	20.0	20.0
Total Split (s)	18.0	36.5	36.5	18.0	36.5	38.0	47.5	47.5	18.0	27.5	27.5
Total Split (%)	15.0%	30.4%	30.4%	15.0%	30.4%	31.7%	39.6%	39.6%	15.0%	22.9%	22.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.18	0.03	0.70	0.07	0.12	0.52	0.23	0.00	0.02	0.13	0.03
Control Delay	49.8	50.0	19.5	47.0	35.0	5.5	3.6	3.7	3.8	7.1	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	50.0	19.5	47.0	35.0	5.5	3.6	3.7	3.8	7.1	3.3
Queue Length 50th (ft)	18	3	0	6	3	26	26	0	1	31	0
Queue Length 95th (ft)	23	4	35	8	2	109	140	3	3	94	12
Internal Link Dist (ft)		353			298		2378			398	
Turn Bay Length (ft)	130		380	400		320		200	285		170
Base Capacity (vph)	232	505	587	232	460	855	2940	1316	736	2542	1148
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.37	0.03	0.03	0.39	0.23	0.00	0.02	0.13	0.03

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 2: Maxwell Road & Westside Pkwy

			
ø1	ø2	ø3	ø4
38 s	27.5 s	18 s	36.5 s
			
ø5	ø6	ø7	ø8
18 s	47.5 s	18 s	36.5 s

HCM Signalized Intersection Capacity Analysis

2: Maxwell Road & Westside Pkwy

Base PM
9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1676		1770	3539	1583	1770	3539	1583
Flt Permitted	0.49	1.00	1.00	0.87	1.00		0.52	1.00	1.00	0.40	1.00	1.00
Satd. Flow (perm)	920	1863	1583	1620	1676		973	3539	1583	745	3539	1583
Volume (vph)	13	1	165	3	1	3	296	643	3	4	325	30
Peak-hour factor, PHF	0.54	0.25	0.76	0.38	0.25	0.38	0.89	0.97	0.75	0.33	0.96	0.75
Adj. Flow (vph)	24	4	217	8	4	8	333	663	4	12	339	40
RTOR Reduction (vph)	0	0	202	0	8	0	0	0	1	0	0	12
Lane Group Flow (vph)	24	4	15	8	4	0	333	663	3	12	339	28
Turn Type	pm+pt		Perm	pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	13.0	8.1	8.1	6.0	4.6		98.5	93.3	93.3	84.2	83.0	83.0
Effective Green, g (s)	13.0	8.1	8.1	6.0	4.6		98.5	93.3	93.3	84.2	83.0	83.0
Actuated g/C Ratio	0.11	0.07	0.07	0.05	0.04		0.82	0.78	0.78	0.70	0.69	0.69
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	126	107	83	64		875	2752	1231	533	2448	1095
v/s Ratio Prot	c0.01	0.00		0.00	0.00		c0.04	0.19		0.00	0.10	
v/s Ratio Perm	c0.01		0.01	0.00			c0.28		0.00	0.02		0.02
v/c Ratio	0.18	0.03	0.14	0.10	0.07		0.38	0.24	0.00	0.02	0.14	0.03
Uniform Delay, d1	48.4	52.3	52.7	54.4	55.6		2.5	3.7	3.0	5.4	6.3	5.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.6	0.5	0.4		0.3	0.2	0.0	0.0	0.1	0.0
Delay (s)	49.1	52.4	53.2	54.9	56.1		2.8	3.9	3.0	5.4	6.4	5.8
Level of Service	D	D	D	D	E		A	A	A	A	A	A
Approach Delay (s)		52.8			55.6			3.5			6.3	
Approach LOS		D			E			A			A	
Intersection Summary												
HCM Average Control Delay			12.1			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.37									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)				12.0		
Intersection Capacity Utilization			42.8%			ICU Level of Service				A		
Analysis Period (min)			15									
c Critical Lane Group												

Queues
1: Encore Pkwy & Westside Pkwy

Future AM
9/10/2011

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	6	12	357	14	193	4	35	143	258	896	10
Lane Group Flow (vph)	8	16	28	489	24	214	12	36	157	269	974	12
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Detector Phases	3	8	8	7	4	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.5	30.5	12.0	30.5	30.5	12.0	24.0	24.0	12.0	27.5	27.5
Total Split (s)	14.0	32.5	32.5	32.0	50.5	50.5	14.0	48.0	48.0	18.0	52.0	52.0
Total Split (%)	10.7%	24.9%	24.9%	24.5%	38.7%	38.7%	10.7%	36.8%	36.8%	13.8%	39.8%	39.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.06	0.17	0.26	0.81	0.03	0.42	0.06	0.02	0.16	0.29	0.41	0.01
Control Delay	36.2	62.8	26.1	62.2	38.0	7.8	9.5	16.0	3.2	8.6	12.0	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	62.8	26.1	62.2	38.0	7.8	9.5	16.0	3.2	8.6	12.0	7.8
Queue Length 50th (ft)	5	13	0	206	7	0	3	6	0	79	175	1
Queue Length 95th (ft)	12	16	3	200	13	65	4	18	39	137	314	10
Internal Link Dist (ft)		265			665			598			2378	
Turn Bay Length (ft)				180		180	260		160	270		165
Base Capacity (vph)	182	407	368	737	1261	702	274	2057	986	948	2403	1077
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.04	0.08	0.66	0.02	0.30	0.04	0.02	0.16	0.28	0.41	0.01

Intersection Summary

Cycle Length: 130.5

Actuated Cycle Length: 130.5

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Encore Pkwy & Westside Pkwy

HCM Signalized Intersection Capacity Analysis

Future AM

1: Encore Pkwy & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.95	1.00	1.00	0.28	1.00	1.00	0.69	1.00	1.00
Satd. Flow (perm)	1380	1863	1583	3433	3539	1583	513	3539	1583	1293	3539	1583
Volume (vph)	5	6	12	357	14	193	4	35	143	258	896	10
Peak-hour factor, PHF	0.62	0.38	0.43	0.73	0.58	0.90	0.33	0.97	0.91	0.96	0.92	0.83
Adj. Flow (vph)	8	16	28	489	24	214	12	36	157	269	974	12
RTOR Reduction (vph)	0	0	27	0	0	169	0	0	70	0	0	3
Lane Group Flow (vph)	8	16	1	489	24	45	12	36	87	269	974	9
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Actuated Green, G (s)	7.4	6.0	6.0	23.1	27.7	27.7	75.1	72.6	72.6	89.4	82.9	82.9
Effective Green, g (s)	7.4	6.0	6.0	23.1	27.7	27.7	75.1	72.6	72.6	89.4	82.9	82.9
Actuated g/C Ratio	0.06	0.05	0.05	0.18	0.21	0.21	0.58	0.56	0.56	0.69	0.64	0.64
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	82	86	73	608	751	336	319	1969	881	933	2248	1006
v/s Ratio Prot	0.00	0.01		c0.14	0.01		0.00	0.01		c0.03	c0.28	
v/s Ratio Perm	0.00		0.00			c0.03	0.02		0.06	0.17		0.01
v/c Ratio	0.10	0.19	0.02	0.80	0.03	0.14	0.04	0.02	0.10	0.29	0.43	0.01
Uniform Delay, d1	58.3	59.9	59.4	51.5	40.8	41.7	11.9	13.0	13.6	7.7	12.0	8.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.0	0.1	7.6	0.0	0.2	0.0	0.0	0.2	0.2	0.6	0.0
Delay (s)	58.8	60.9	59.5	59.1	40.8	41.9	12.0	13.0	13.8	7.9	12.6	8.7
Level of Service	E	E	E	E	D	D	B	B	B	A	B	A
Approach Delay (s)		59.9			53.5			13.6			11.5	
Approach LOS		E			D			B			B	
Intersection Summary												
HCM Average Control Delay			26.5				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.48									
Actuated Cycle Length (s)			130.5				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			48.3%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

Queues
2: Maxwell Road & Westside Pkwy

Future AM
9/10/2011

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	18	69	295	170	48	98	239	243	146	691	9
Lane Group Flow (vph)	32	276	324	447	398	109	254	639	584	743	16
Turn Type	pm+pt		Perm	pm+pt		pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phases	3	8	8	7	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.0	30.0	12.0	30.5	12.0	20.5	20.5	12.0	20.0	20.0
Total Split (s)	12.0	30.0	30.0	28.0	46.0	12.0	33.0	33.0	29.0	50.0	50.0
Total Split (%)	10.0%	25.0%	25.0%	23.3%	38.3%	10.0%	27.5%	27.5%	24.2%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.12	0.81	0.70	0.98	0.61	0.37	0.28	0.87	0.89	0.50	0.02
Control Delay	22.2	65.2	24.4	65.9	32.4	22.4	37.6	27.5	41.1	28.1	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.2	65.2	24.4	65.9	32.4	22.4	37.6	27.5	41.1	28.1	10.1
Queue Length 50th (ft)	14	204	80	261	229	43	85	164	322	228	0
Queue Length 95th (ft)	20	69	181	117	50	79	123	0	88	295	6
Internal Link Dist (ft)		353			678		2378			398	
Turn Bay Length (ft)	130		380	400		320		200	285		170
Base Capacity (vph)	283	404	507	457	653	297	898	732	655	1478	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.68	0.64	0.98	0.61	0.37	0.28	0.87	0.89	0.50	0.02

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Splits and Phases: 2: Maxwell Road & Westside Pkwy

HCM Signalized Intersection Capacity Analysis

2: Maxwell Road & Westside Pkwy

Future AM
9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1718		1770	3539	1583	1770	3539	1583
Flt Permitted	0.53	1.00	1.00	0.21	1.00		0.37	1.00	1.00	0.46	1.00	1.00
Satd. Flow (perm)	983	1863	1583	400	1718		688	3539	1583	861	3539	1583
Volume (vph)	18	69	295	170	48	103	98	239	243	146	691	9
Peak-hour factor, PHF	0.56	0.25	0.91	0.38	0.25	0.50	0.90	0.94	0.38	0.25	0.93	0.56
Adj. Flow (vph)	32	276	324	447	192	206	109	254	639	584	743	16
RTOR Reduction (vph)	0	0	168	0	32	0	0	0	336	0	0	10
Lane Group Flow (vph)	32	276	156	447	366	0	109	254	303	584	743	6
Turn Type	pm+pt		Perm	pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	27.9	23.5	23.5	51.5	43.1		36.9	28.9	28.9	60.5	48.5	48.5
Effective Green, g (s)	27.9	23.5	23.5	51.5	43.1		36.9	28.9	28.9	60.5	48.5	48.5
Actuated g/C Ratio	0.23	0.20	0.20	0.43	0.36		0.31	0.24	0.24	0.50	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	257	365	310	446	617		284	852	381	643	1430	640
v/s Ratio Prot	0.00	0.15		c0.20	0.21		0.03	0.07		c0.21	0.21	
v/s Ratio Perm	0.02		0.10	c0.23			0.09		0.19	c0.25		0.00
v/c Ratio	0.12	0.76	0.50	1.00	0.59		0.38	0.30	0.80	0.91	0.52	0.01
Uniform Delay, d1	36.0	45.5	43.0	30.4	31.3		30.7	37.3	42.8	23.0	27.0	21.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	8.6	1.3	43.2	1.5		0.9	0.9	15.8	16.6	1.4	0.0
Delay (s)	36.2	54.2	44.3	73.6	32.8		31.5	38.1	58.6	39.6	28.3	21.4
Level of Service	D	D	D	E	C		C	D	E	D	C	C
Approach Delay (s)		48.2			54.4			50.4			33.1	
Approach LOS		D			D			D			C	
Intersection Summary												
HCM Average Control Delay			44.9		HCM Level of Service				D			
HCM Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				8.0			
Intersection Capacity Utilization			56.8%		ICU Level of Service				B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis 3: Maxwell Road & Fanfare Way

Future AM
9/10/2011

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations					 	
Sign Control	Stop			Stop	Stop	
Volume (vph)	453	5	0	315	6	0
Peak Hour Factor	0.50	0.40	0.50	0.50	0.38	0.50
Hourly flow rate (vph)	906	12	0	630	16	0
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	919	630	16			
Volume Left (vph)	0	0	16			
Volume Right (vph)	13	0	0			
Hadj (s)	0.03	0.03	0.23			
Departure Headway (s)	4.7	4.8	7.0			
Degree Utilization, x	1.20	0.84	0.03			
Capacity (veh/h)	759	743	492			
Control Delay (s)	118.6	27.4	10.3			
Approach Delay (s)	118.6	27.4	10.3			
Approach LOS	F	D	B			
Intersection Summary						
Delay			80.8			
HCM Level of Service			F			
Intersection Capacity Utilization			34.1%	ICU Level of Service	A	
Analysis Period (min)			15			

Queues
1: Encore Pkwy & Westside Pkwy

Future PM
9/10/2011

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	8	14	223	16	296	11	694	251	229	377	5
Lane Group Flow (vph)	16	20	20	262	20	318	12	763	285	269	389	12
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Detector Phases	3	8	8	7	4	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.5	30.5	12.0	30.5	30.5	12.0	24.0	24.0	12.0	27.5	27.5
Total Split (s)	14.0	32.5	32.5	22.0	40.5	40.5	14.0	44.0	44.0	32.0	62.0	62.0
Total Split (%)	10.7%	24.9%	24.9%	16.9%	31.0%	31.0%	10.7%	33.7%	33.7%	24.5%	47.5%	47.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.12	0.20	0.20	0.67	0.08	0.66	0.02	0.34	0.26	0.75	0.15	0.01
Control Delay	43.8	63.5	26.4	64.1	49.1	12.4	6.3	13.1	4.7	23.5	6.6	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	63.5	26.4	64.1	49.1	12.4	6.3	13.1	4.7	23.5	6.6	4.2
Queue Length 50th (ft)	11	17	0	111	14	0	2	153	24	61	44	0
Queue Length 95th (ft)	25	20	17	144	35	89	9	255	78	143	91	2
Internal Link Dist (ft)		265			665			598			2378	
Turn Bay Length (ft)				180		180	260		160	270		165
Base Capacity (vph)	184	407	361	474	521	672	761	2277	1093	533	2623	1176
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.05	0.06	0.55	0.04	0.47	0.02	0.34	0.26	0.50	0.15	0.01

Intersection Summary

Cycle Length: 130.5

Actuated Cycle Length: 130.5

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Encore Pkwy & Westside Pkwy

			
ø1	ø2	ø3	ø4
14 s	62 s	14 s	40.5 s
			
ø5	ø6	ø7	ø8
32 s	44 s	22 s	32.5 s

HCM Signalized Intersection Capacity Analysis

Future PM

1: Encore Pkwy & Westside Pkwy

9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.95	1.00	1.00	0.52	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	1386	1863	1583	3433	1863	1583	972	3539	1583	564	3539	1583
Volume (vph)	12	8	14	223	16	296	11	694	251	229	377	5
Peak-hour factor, PHF	0.75	0.40	0.70	0.85	0.80	0.93	0.92	0.91	0.88	0.85	0.97	0.42
Adj. Flow (vph)	16	20	20	262	20	318	12	763	285	269	389	12
RTOR Reduction (vph)	0	0	19	0	0	276	0	0	78	0	0	4
Lane Group Flow (vph)	16	20	1	262	20	42	12	763	207	269	389	8
Turn Type	pm+pt		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6		6	2		2
Actuated Green, G (s)	8.4	5.4	5.4	14.8	17.2	17.2	83.9	81.5	81.5	98.3	91.9	91.9
Effective Green, g (s)	8.4	5.4	5.4	14.8	17.2	17.2	83.9	81.5	81.5	98.3	91.9	91.9
Actuated g/C Ratio	0.06	0.04	0.04	0.11	0.13	0.13	0.64	0.62	0.62	0.75	0.70	0.70
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	77	66	389	246	209	640	2210	989	543	2492	1115
v/s Ratio Prot	0.00	0.01		c0.08	0.01		0.00	0.22		c0.05	0.11	
v/s Ratio Perm	0.01		0.00			c0.03	0.01		0.13	c0.32		0.01
v/c Ratio	0.16	0.26	0.01	0.67	0.08	0.20	0.02	0.35	0.21	0.50	0.16	0.01
Uniform Delay, d1	57.6	60.6	60.0	55.5	49.7	50.5	8.4	11.7	10.6	5.9	6.4	5.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.8	0.1	4.6	0.1	0.5	0.0	0.4	0.5	0.7	0.1	0.0
Delay (s)	58.4	62.4	60.1	60.1	49.9	51.0	8.4	12.2	11.1	6.7	6.5	5.8
Level of Service	E	E	E	E	D	D	A	B	B	A	A	A
Approach Delay (s)		60.4			54.9			11.8			6.6	
Approach LOS		E			D			B			A	
Intersection Summary												
HCM Average Control Delay			22.3				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.49									
Actuated Cycle Length (s)			130.5				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			54.9%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

Queues
2: Maxwell Road & Westside Pkwy

Future PM
9/10/2011

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	13	25	165	132	37	296	643	89	56	325	30
Lane Group Flow (vph)	24	100	217	347	361	333	663	119	170	339	40
Turn Type	pm+pt		Perm	pm+pt		pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4	1	6		5	2	
Permitted Phases	8		8	4		6		6	2		2
Detector Phases	3	8	8	7	4	1	6	6	5	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	30.0	30.0	12.0	30.5	12.0	20.5	20.5	12.0	20.0	20.0
Total Split (s)	15.0	33.0	33.0	28.0	46.0	35.0	37.0	37.0	22.0	24.0	24.0
Total Split (%)	12.5%	27.5%	27.5%	23.3%	38.3%	29.2%	30.8%	30.8%	18.3%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.13	0.53	0.61	0.71	0.71	0.66	0.39	0.14	0.41	0.22	0.06
Control Delay	28.4	60.6	13.9	42.0	40.8	19.1	22.0	4.5	15.3	24.3	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	60.6	13.9	42.0	40.8	19.1	22.0	4.5	15.3	24.3	8.7
Queue Length 50th (ft)	13	75	0	224	219	118	166	0	54	84	0
Queue Length 95th (ft)	18	32	33	102	38	202	261	22	34	149	18
Internal Link Dist (ft)		353			678		2378			398	
Turn Bay Length (ft)	130		380	400		320		200	285		170
Base Capacity (vph)	256	450	547	491	637	650	1712	827	520	1526	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.22	0.40	0.71	0.57	0.51	0.39	0.14	0.33	0.22	0.06

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 2: Maxwell Road & Westside Pkwy

			
ø1	ø2	ø3	ø4
35 s	24 s	15 s	46 s
			
ø5	ø6	ø7	ø8
22 s	37 s	28 s	33 s

HCM Signalized Intersection Capacity Analysis

2: Maxwell Road & Westside Pkwy

Future PM
9/10/2011

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1698		1770	3539	1583	1770	3539	1583
Flt Permitted	0.55	1.00	1.00	0.45	1.00		0.47	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	1016	1863	1583	831	1698		876	3539	1583	671	3539	1583
Volume (vph)	13	25	165	132	37	81	296	643	89	56	325	30
Peak-hour factor, PHF	0.54	0.25	0.76	0.38	0.25	0.38	0.89	0.97	0.75	0.33	0.96	0.75
Adj. Flow (vph)	24	100	217	347	148	213	333	663	119	170	339	40
RTOR Reduction (vph)	0	0	192	0	48	0	0	0	63	0	0	23
Lane Group Flow (vph)	24	100	25	347	313	0	333	663	56	170	339	17
Turn Type	pm+pt		Perm	pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6		6	2		2
Actuated Green, G (s)	17.9	13.6	13.6	40.7	32.4		71.3	56.5	56.5	61.0	50.2	50.2
Effective Green, g (s)	17.9	13.6	13.6	40.7	32.4		71.3	56.5	56.5	61.0	50.2	50.2
Actuated g/C Ratio	0.15	0.11	0.11	0.34	0.27		0.59	0.47	0.47	0.51	0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	179	211	179	463	458		648	1666	745	440	1480	662
v/s Ratio Prot	0.00	0.05		c0.14	0.18		c0.07	0.19		0.03	0.10	
v/s Ratio Perm	0.02		0.02	c0.11			c0.23		0.04	0.16		0.01
v/c Ratio	0.13	0.47	0.14	0.75	0.68		0.51	0.40	0.08	0.39	0.23	0.03
Uniform Delay, d1	44.0	49.8	47.9	32.8	39.2		12.5	20.7	17.4	16.2	22.5	20.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.7	0.4	6.6	4.2		0.7	0.7	0.2	0.6	0.4	0.1
Delay (s)	44.4	51.5	48.3	39.4	43.4		13.2	21.4	17.6	16.7	22.8	20.6
Level of Service	D	D	D	D	D		B	C	B	B	C	C
Approach Delay (s)		49.0			41.4			18.5			20.8	
Approach LOS		D			D			B			C	
Intersection Summary												
HCM Average Control Delay			28.8			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)					8.0		
Intersection Capacity Utilization			49.4%		ICU Level of Service					A		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

3: Maxwell Road & Fanfare Way

Future PM
9/10/2011

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	162	8	0	243	7	0
Peak Hour Factor	0.50	0.58	0.50	0.50	0.33	0.50
Hourly flow rate (vph)	324	14	0	486	21	0
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	338	486	21			
Volume Left (vph)	0	0	21			
Volume Right (vph)	14	0	0			
Hadj (s)	0.01	0.03	0.23			
Departure Headway (s)	4.5	4.4	5.9			
Degree Utilization, x	0.42	0.59	0.03			
Capacity (veh/h)	789	813	523			
Control Delay (s)	10.7	13.4	9.1			
Approach Delay (s)	10.7	13.4	9.1			
Approach LOS	B	B	A			
Intersection Summary						
Delay			12.2			
HCM Level of Service			B			
Intersection Capacity Utilization			22.8%	ICU Level of Service	A	
Analysis Period (min)			15			

11-063 Fulton Science Academy - TIS
Traffic Volumes
Future Conditions

A&R Engineering
September-11

Westside Parkway / Encore Parkway

A.M. Peak Hour

Condition	Northbound					Southbound					Eastbound					Westbound			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing:	4	226	142	372		177	800	10	987		5	6	12	23		353	14	79	446
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
Base Condition:	4	228	143	376		179	808	10	997		5	6	12	23		357	14	80	450
Total New Trips	0	127	0	127		79	88	0	167		0	0	0	0		0	0	113	113
Future Traffic Volumes:	4	355	143	503		258	896	10	1164		5	6	12	23		357	14	193	563

P.M. Peak Hour

Condition	Northbound					Southbound					Eastbound					Westbound			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing:	11	643	249	903		166	306	5	477		12	8	14	34		221	16	252	489
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
Base Condition:	11	649	251	912		168	309	5	482		12	8	14	34		223	16	255	494
Total New Trips	0	45	0	45		61	68	0	129		0	0	0	0		0	0	41	41
Future Traffic Volumes:	11	694	251	957		229	377	5	611		12	8	14	34		223	16	296	535

11-063 Fulton Science Academy - TIS
Traffic Volumes
Future Conditions

A&R Engineering
September-11

Westside Parkway / Maxwell Road

A.M. Peak Hour

Condition	Northbound					Southbound					Eastbound					Westbound			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing:	97	237	3	337		1	684	9	694		18	1	292	311		3	1	2	6
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
Base Condition:	98	239	3	340		1	691	9	701		18	1	295	314		3	1	2	6
Total New Trips	0	0	240	240		145	0	0	145		0	68	0	68		167	47	101	315
Future Traffic Volumes:	98	239	243	580		146	691	9	846		18	69	295	382		170	48	103	321

P.M. Peak Hour

Condition	Northbound					Southbound					Eastbound					Westbound			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing:	293	637	3	933		4	322	30	356		13	1	163	177		3	1	3	7
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
Base Condition:	296	643	3	942		4	325	30	360		13	1	165	179		3	1	3	7
Total New Trips	0	0	86	86		52	0	0	52		0	24	0	24		129	36	78	243
Future Traffic Volumes:	296	643	89	1028		56	325	30	412		13	25	165	203		132	37	81	250

11-063 Fulton Science Academy - TIS
Traffic Volumes
Future Conditions

A&R Engineering
September-11

Maxwell Road / Fanfare Way / Site Driveway

A.M. Peak Hour

Condition	Northbound					Southbound					Eastbound					Westbound			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing:	6	0	0	6		0	0	0	0		0	0	5	5		0	0	0	0
Growth Factor (%):	1	1	0			0	1	1			1	0	1			0	0	0	
Base Condition:	6	0	0	6		0	0	0	0		0	0	5	5		0	0	0	0
Total New Trips	0	0	0	0		0	0	0	0		0	453	0	453		0	315	0	315
Future Traffic Volumes:	6	0	0	6		0	0	0	0		0	453	5	458		0	315	0	315

P.M. Peak Hour

Condition	Northbound					Southbound					Eastbound					Westbound			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing:	7	0	0	7		0	0	0	0		0	0	8	8		0	0	0	0
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
Base Condition:	7	0	0	7		0	0	0	0		0	0	8	8		0	0	0	0
Total New Trips	0	0	0	0		0	0	0	0		0	162	0	162		0	243	0	243
Future Traffic Volumes:	7	0	0	7		0	0	0	0		0	162	8	170		0	243	0	243

Mounting Height: EPH-640: 50'-0" AFG

Calculation Height: 3'-0" above playing field

Luminaire Schedule							
Project: Soccer Field							
Symbol	Qty	Label	Arrangement	LLF	Lum Lumens	Description	Total Watts
	8	EPH-640 57 70 4S	SINGLE	0.900	89596	EPH-08-0640L-57-70-4S-HEG	5448
	12	EPH-640 57 70 3S	SINGLE	0.900	89640	EPH-08-0640L-57-70-3S-HEG	8172

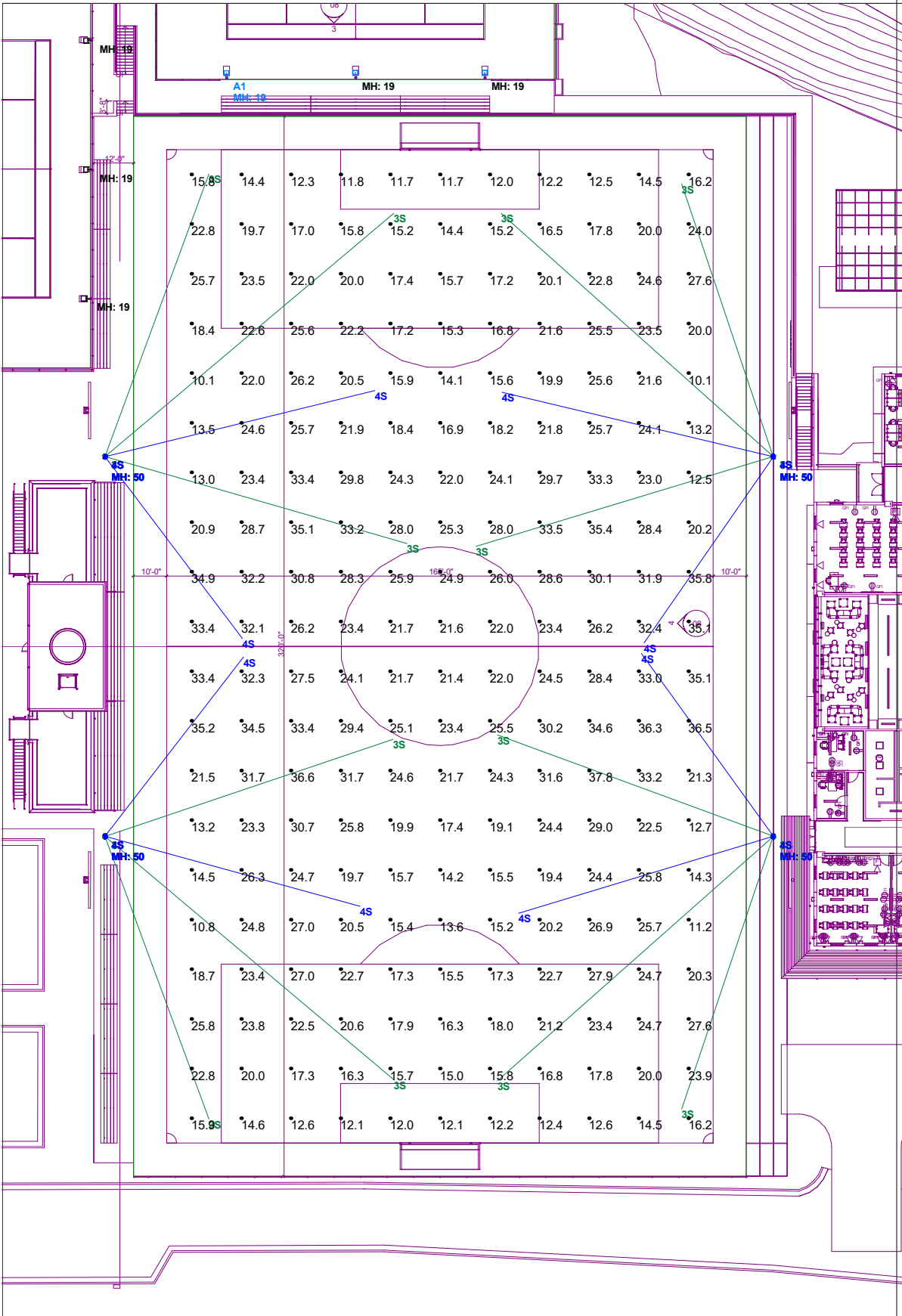
Calculation Summary										
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb	
Soccer_3FT APF	Illuminance	Fc	22.28	37.8	10.1	2.21	3.74	15	15	

The calculations provided in this report are predicted lighting levels based on the above described input data and characteristics. All information should be reviewed for accuracy, understanding and agreement with all information. Any discrepancies should be noted and the preparer of this report immediately advised to clarify or change as required.

Actual lighting levels may vary from this report due to a variety of circumstances, such as: reflectances, voltage variations, objects blocking or redirecting light, different mounting heights, installation, lamp and ballast tolerances, etc. Room is considered completely empty unless noted otherwise above. Unless specifically stated otherwise, predicted foot candles are not a recommendation of lighting levels.

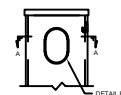
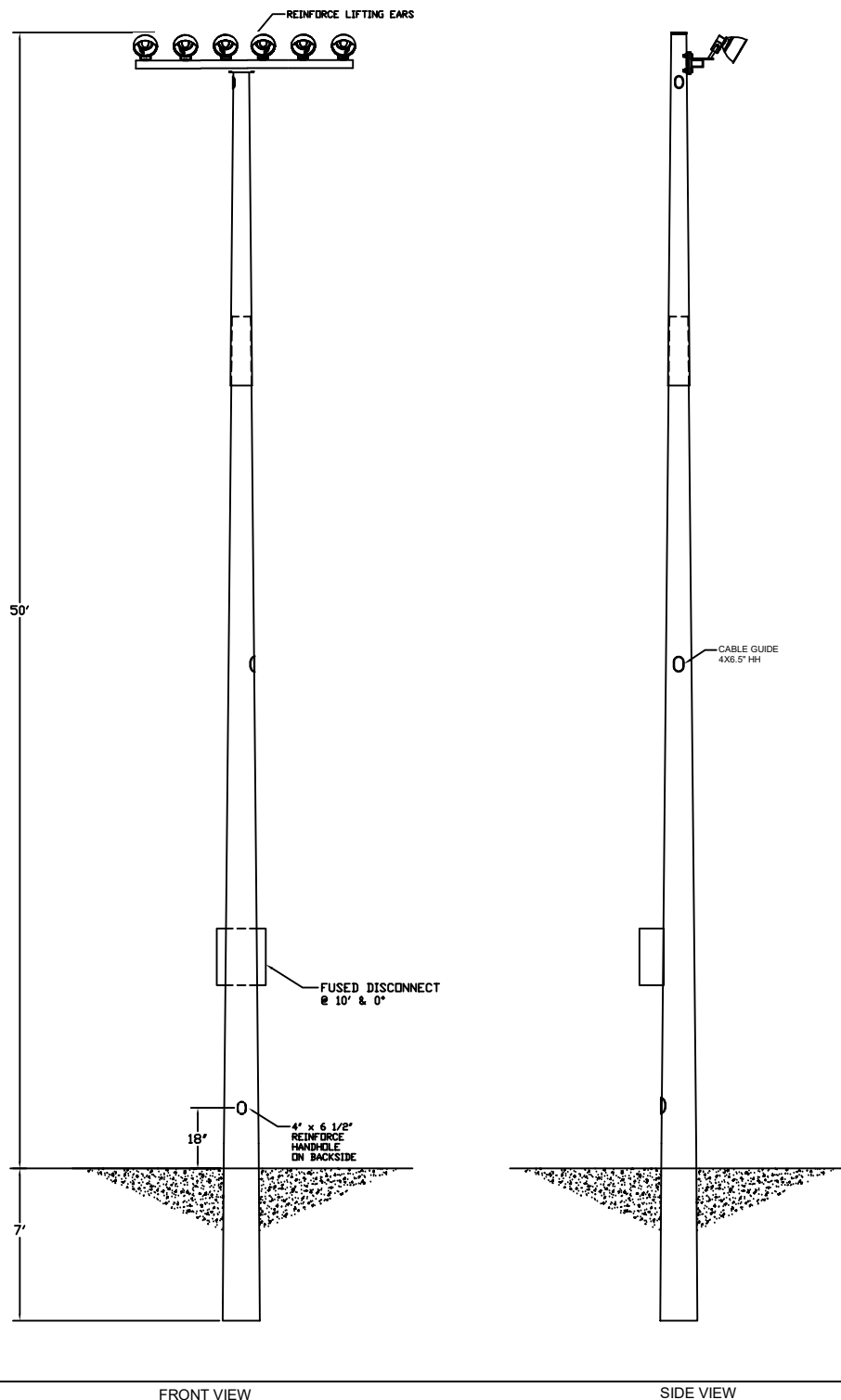
Ardd & Winter, Inc. assumes no responsibility for any such variances and will not be held responsible for lighting levels different from predicted levels in this report. Recipient of this report, or someone designated by recipient, must verify that lighting fixtures will physically fit within the specified location(s). Catalog numbers of lighting fixtures may not be complete as all conditions may not be known.

Where backgrounds are shown, these are typically used for reference purposes only, unless noted otherwise. Additional details available upon request.



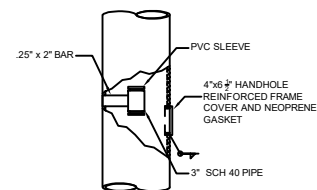
Calculations By: WES
Revised By:
Date: 3/30/2023
Scale: Not to Scale

Project Name: FSA Phase 3 Soccer Field
Revision: P1

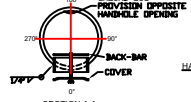
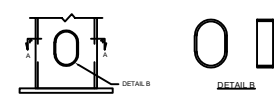


SECTION A-A

3 X 5" REINFORCE HANDHOLE



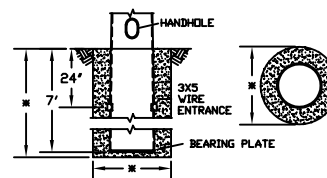
CABLE GUIDE



4 X 6 1/2" REINFORCE HANDHOLE

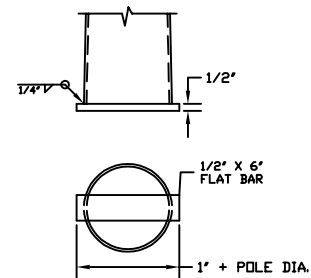
	BASE OD (in)	TOP OD (in)	WALL THC	LENGHT (ft)	WEIGHT (lbs)
TOP	7.23	6.4	.188	5.96	82
BOTTOM	14	6.58	.188	53	1119

POLE DIMENSION



■ DIMENSIONS TO BE DETERMINED BY ENGINEER.

NOTE:
EXTERIOR TOP COATED WITH COAL
TAR MASTIC FOR EMBEDMENT
DEPTH PLUS 6".



COMPONENT	SPECIFICATION
POLE TOP	ASTM A572 GR. 65
POLE BOTTOM	ASTM A572 GR. 65
MISC. STEEL	ASTM A36

GENERAL NOTES:
1. ALL HARDWARE TO BE GALVANIZED TO ASTM A153.
2. POLE ASSEMBLY TO BE GALVANIZED TO ASTM A153.
3. ALL WELDING TO CONFORM TO AWS D1.1 MOST RECENT EDITION.
4. DESIGN INCORPORATE GUST FACTOR PER REF CODE.
5. REFER TO GENERAL INSTALLATION INSTRUCTIONS PRIOR TO ASSEMBLY.

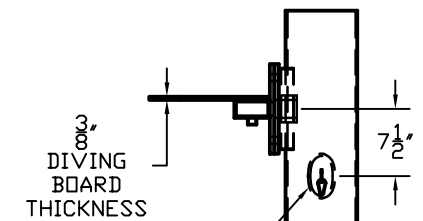
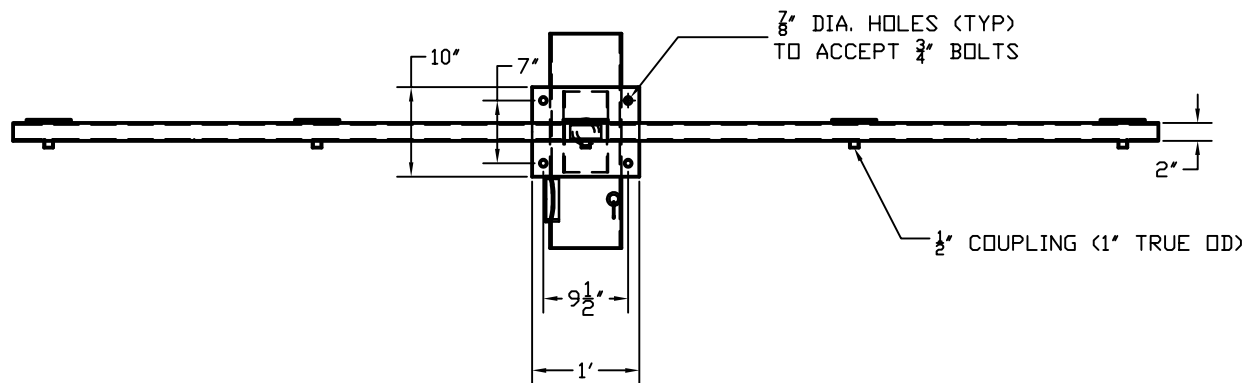
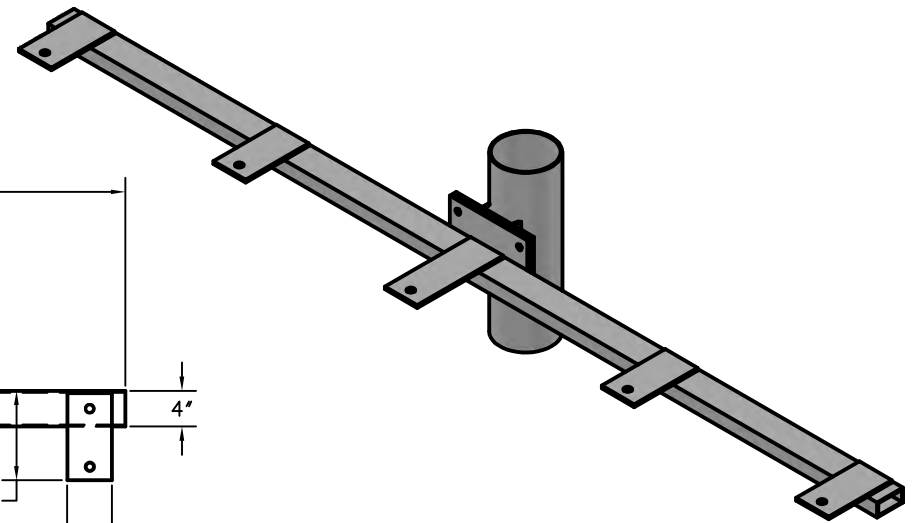
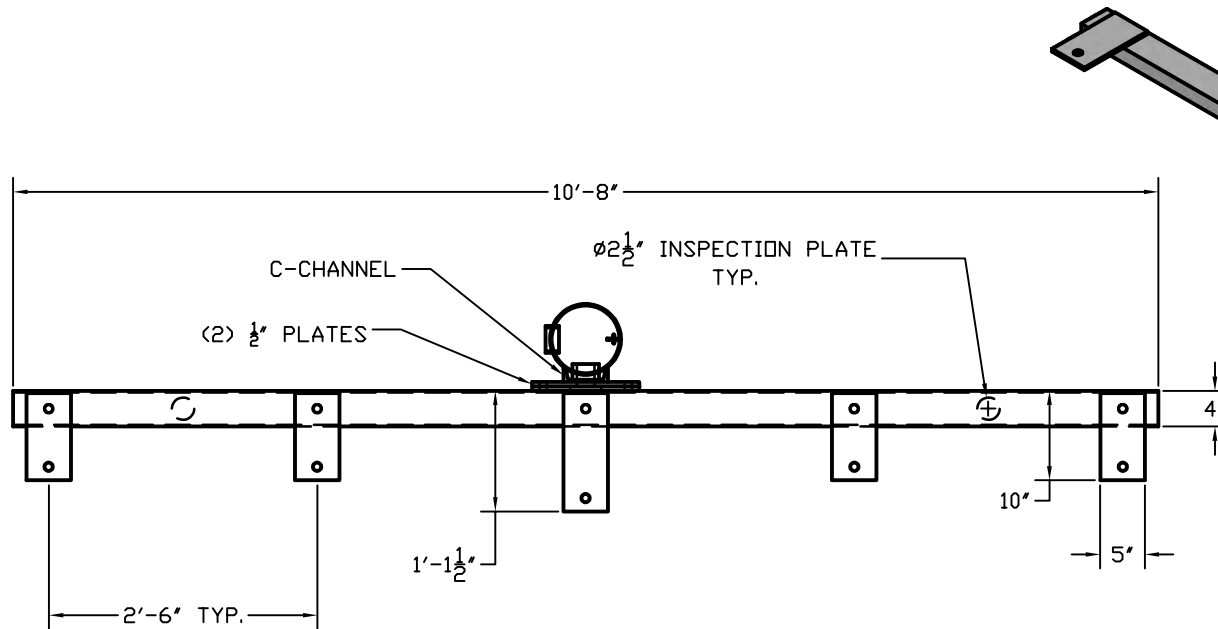
FINISH:	WIND SPEED:	DESIGN CRITERIA:
☒ GALVANIZED	☐ 80 MPH ☐ 110 MPH	☐ ASHTO LTS 3 ☐ IBC
☐ PAINTED	☒ 50 MPH ☐ 120 MPH	☒ ASHTO LTS 6 ☐ DSA
☐ PAINTED & GALV	☐ 100 MPH ☐ ___ MPH	☐ ASCE 7-10 ☐ UBC

FOUNDATION

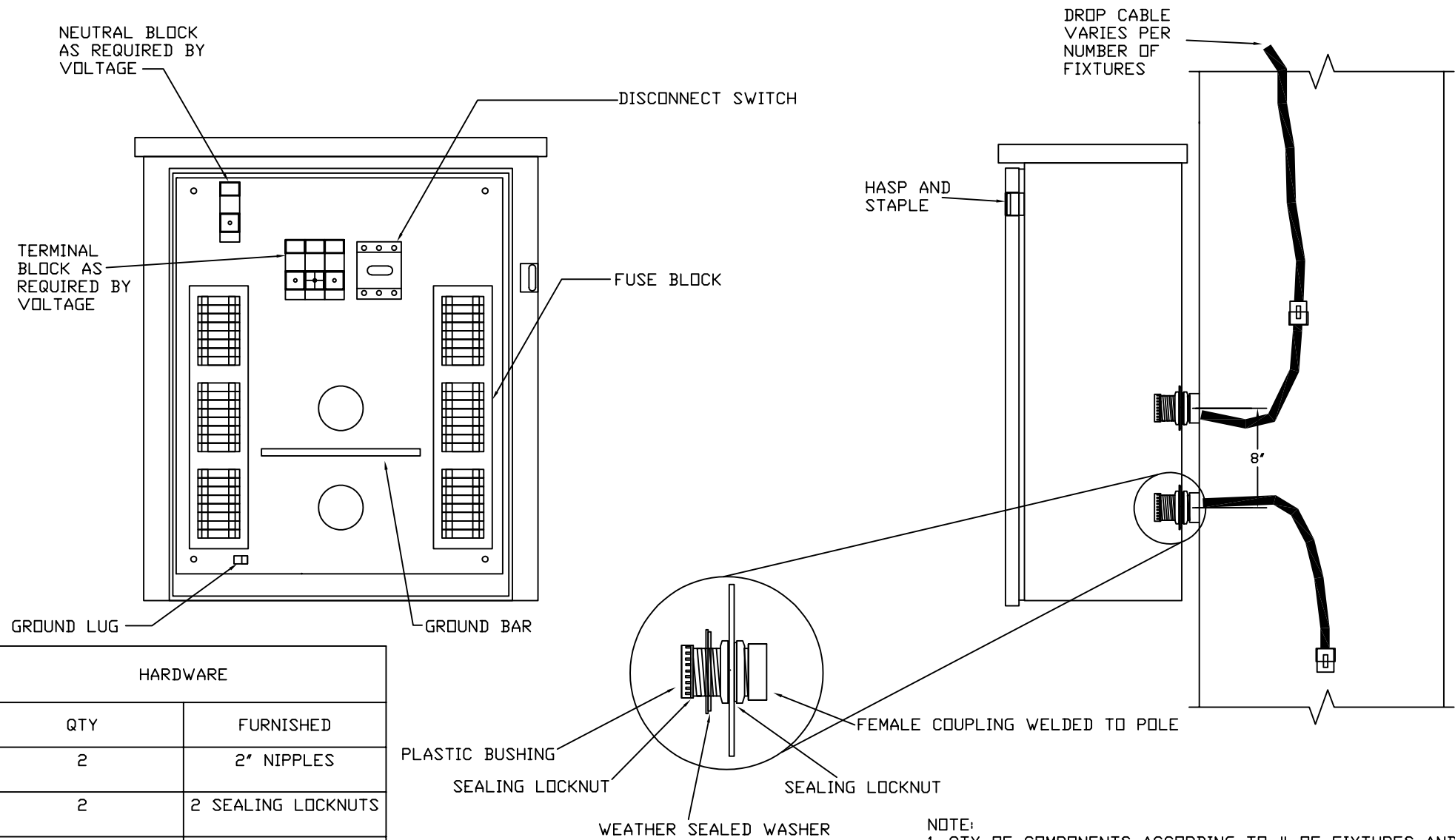
BEARING PLATE

MATERIAL SPECIFICATIONS

DATE:	REV:	CHECKED BY:	SCALE:
			NTS
DRAWING NUMBER:	DRAWN BY:	QUOTE NUMBER:	
MSP50M2EM	DR		
MSM Makers Sales and Marketing, LLC PO BOX 14537 HALTOM CITY, TX 76117 METRO (817) 834-5538 TOLL FREE (866) 724-4527 FAX (817) 831-6088			



3X5 HAND HOLE & CARABINER WIRING HOOK



HARDWARE	
QTY	FURNISHED
2	2" NIPPLES
2	2 SEALING LOCKNUTS
2	2" X 2 1/2" GASKETED REDUCING WASHERS
2	2" PLASTIC BUSHINGS
1	4" 1/2" HDG BOLT & WASHERS

NOTE:
 1. QTY OF COMPONENTS ACCORDING TO # OF FIXTURES AND VOLTAGE
 2. PREWIRED FROM FACTORY

MSM
 Makers Sales and Marketing, LLC

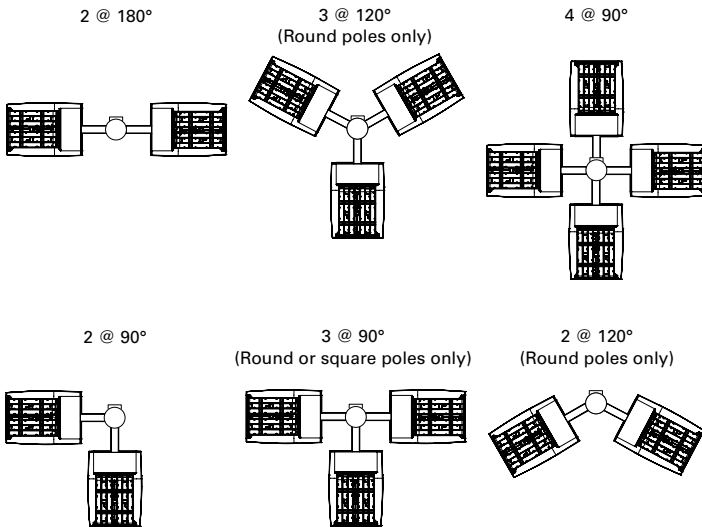
PO BOX 14537
 HALTOM CITY, TX 76117
 METRO (817) 834-5538
 TOLL FREE (866) 724-4527
 FAX (817) 831-6088

DATE:	REV.:	CHECKED BY:
DRAWING NUMBER: DIST BOX	DRAWN BY: JSV	

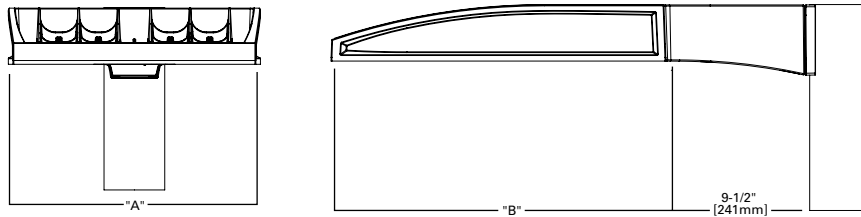
DISTRIBUTION BOX

Mounting Details

Pole Configuration Options

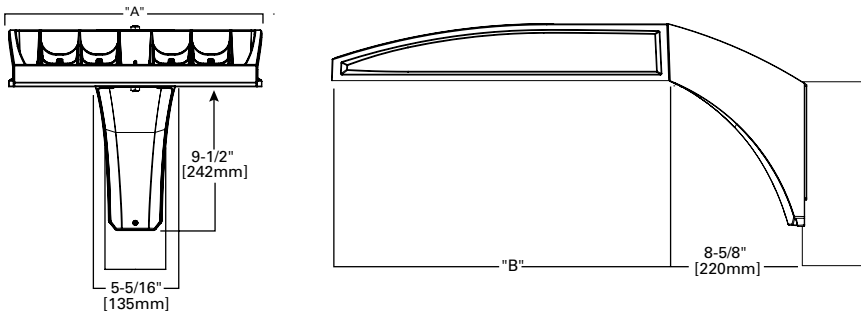


Quick Mount Arm (QM) *



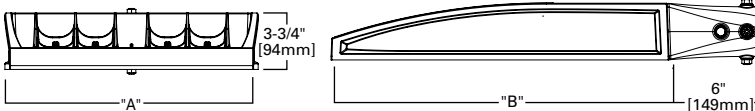
*NOTE: Use Type N drilling pattern

Upswept Arm (UP) *

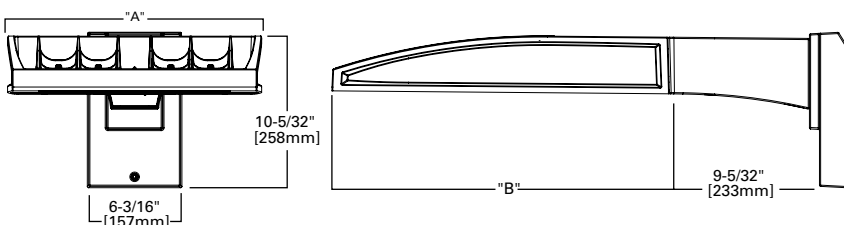


*NOTE: Use Type N, R or M drilling pattern

Mast Arm, Fixed (MA)

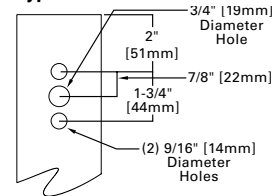


Wall Mount, Fixed (WM)

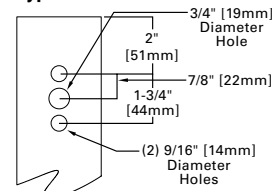


Pole Drilling Patterns

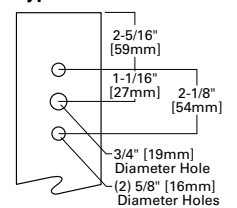
Type "N"



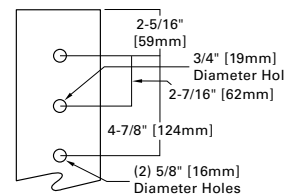
Type "N"



Type "R"



Type "M"



Project		Catalog #		Type	
Prepared by		Notes		Date	



Ephesus

LUMASPORT 8

White LED Sports & Entertainment Luminaire

Typical Applications

Pro Arenas • University & Collegiate Arenas • University & Collegiate Stadiums • Multi-Event & Convention Centers • Gymnasiums & Field Houses

Interactive Menu

- Dimensional Details [page 1](#)
- Ordering Information [page 2](#)
- Dimensional and Mounting Details [page 3](#)
- Visor (VHE) Configuration [page 4](#)
- Performance Data [page 5](#)
- Optical Performance Data [page 6](#)
- Ordering Information for Accessories [page 8](#)
- Accessory Dimensions and Part Details [page 9](#)
- Example System Topology [page 12](#)

Product Certification

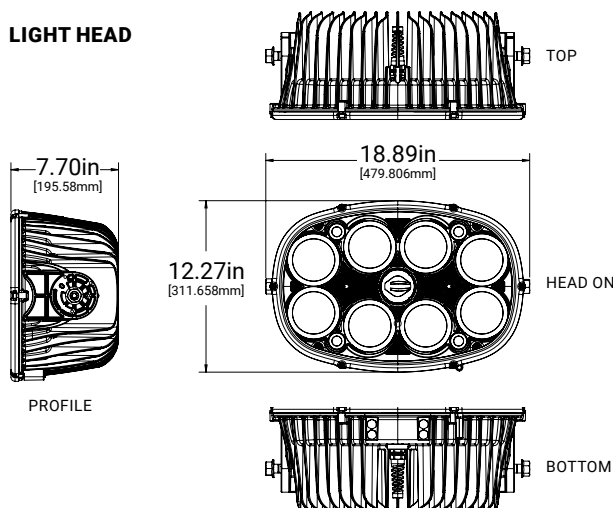


Top Product Features

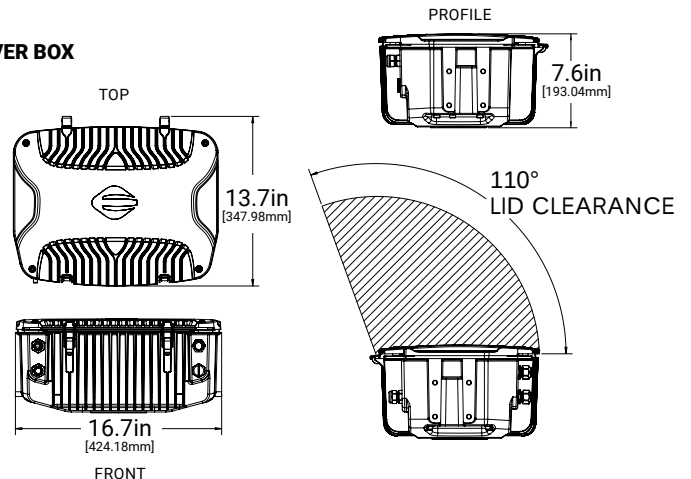
- 55,000 or 90,000 lumen output options
- Glare and cutoff control via Hybrid Reflector and TIR Optical System
- Reduce install time with pre-aimable two-piece assembly
- Virtually eliminate maintenance with power redundancy
- Industry leading light source reliability with Chip-on-Board LEDs
- Greater than 92% lumen maintenance at 55,000 hours
- Wireless AirMesh, Wired DMX or sACN controls options to suit your needs
- Impact Resistant Glass option protects from vandalization and prevents down time in the event of impact to the glass.
- Options to meet Trade Agreements Act requirements

Dimensional Details

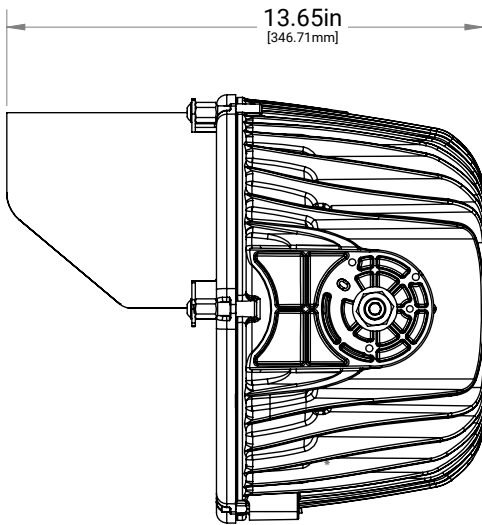
LIGHT HEAD



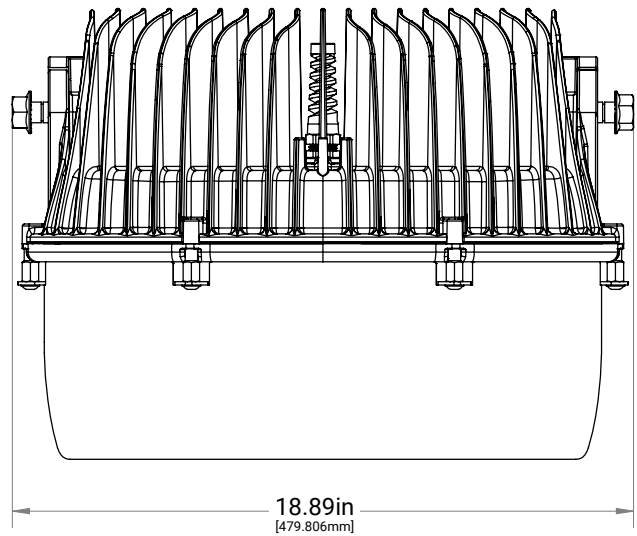
DRIVER BOX



VHE & VIR Visor Option Dimensional Details



LEFT PROFILE: VISOR

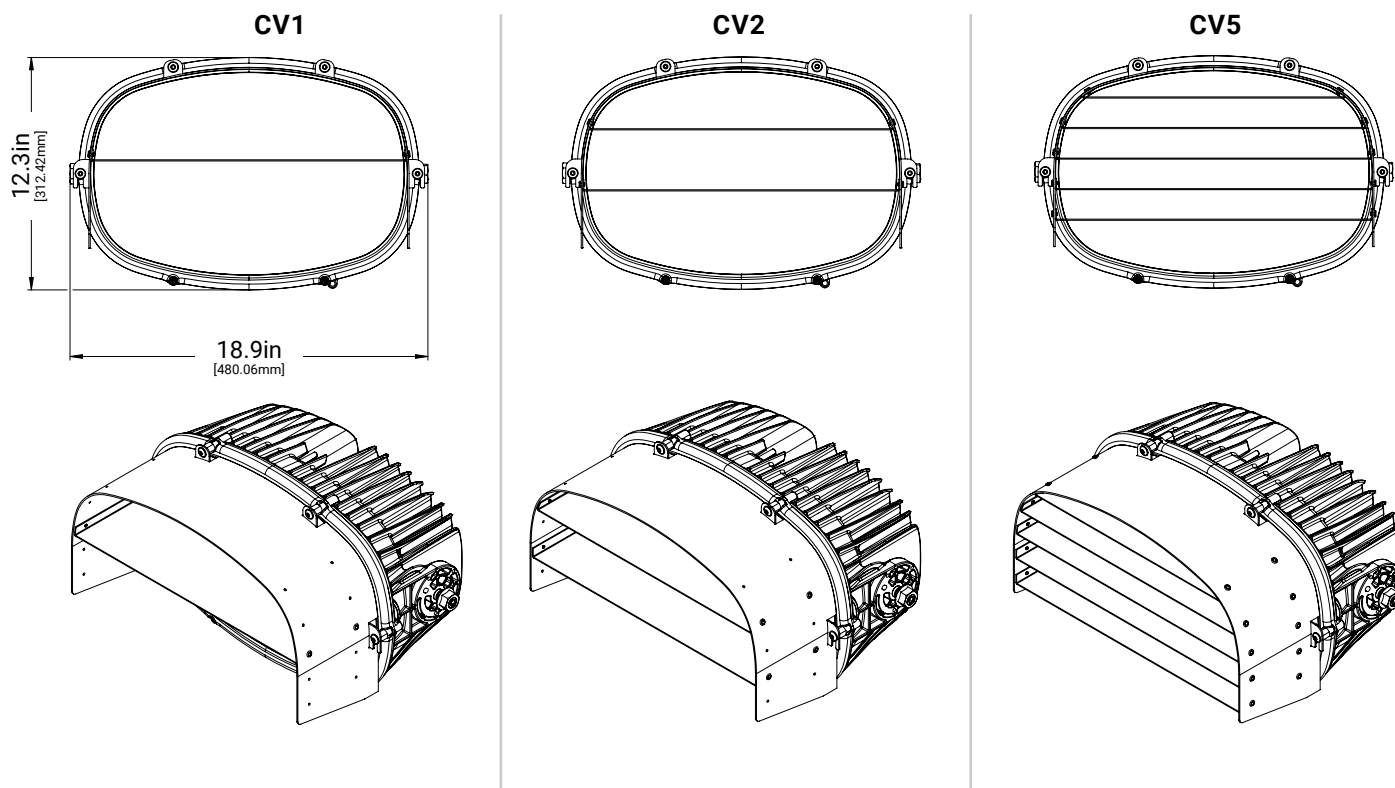


TOP: VISOR

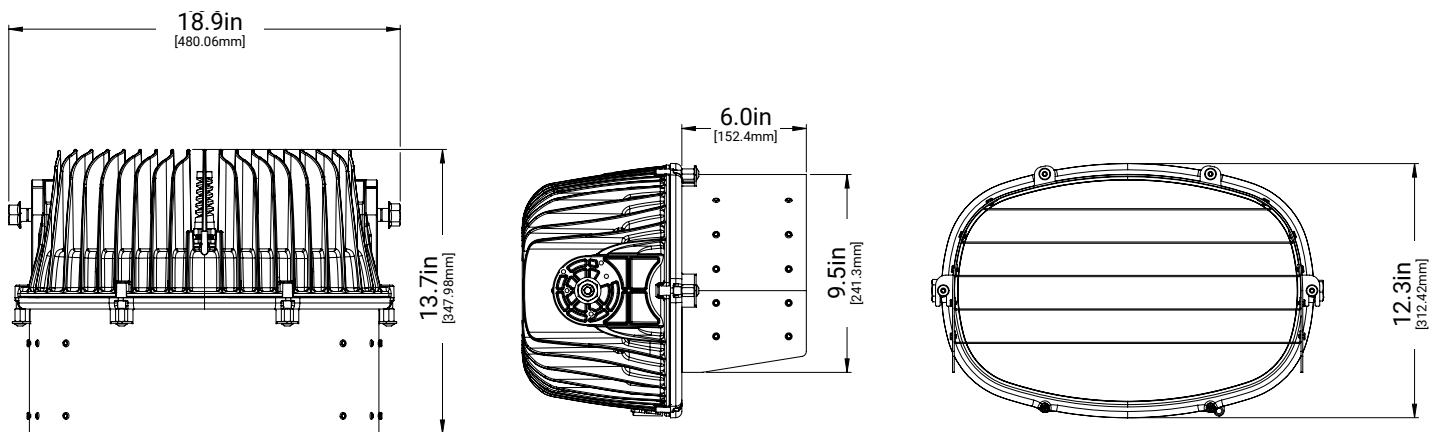
NOTES:

The addition of a visor adds 1lb of material to the luminaire weight.

CV1, CV2, CV5 Cutoff Visor Options



CV1, CV2, CV5 Cutoff Visor Option Dimensional Details



Performance Data¹

	LUMASPORT 8 (320W)	LUMASPORT 8 (640W)
Lumen Output Range ²	48,303 - 55,419lm	80,572 - 92,929lm
Nominal Power ³	340W	680W
Input Voltage (Low Voltage)	120-277VAC	120-277VAC
Input Voltage (High Voltage)	347-480VAC	347-480VAC
Efficacy Range ²	140.4 - 163.5 lm/W	117.5 - 139.3 lm/W
CRI ⁴	70, 80	70, 80
TLCI ⁵	75	75
CCT Range	4000K, 5000K, 5700K	4000K, 5000K, 5700K
Distribution (NEMA)	3-5, 7	3-5
Dimming Range	DIM TO OFF, 10%-100%	DIM TO OFF, 10%-100%
Operating Temperature Range	-40°C to +40°C	-40°C to +40°C
Usage	INDOOR, OUTDOOR ⁶	INDOOR, OUTDOOR ⁶
Mounting Options (3G RATED)	LOCAL YOKE; LOCAL PENDANT	LOCAL YOKE; LOCAL PENDANT
Electrical Certifications	FCC, UL8750, UL1598, DLC Standard (NANQSV)	FCC, UL8750, UL1598, DLC Standard (NANQSV)
Environmental Certifications	IP66, NEMA4X ⁷	IP66, NEMA4X ⁷
Vibration	ANSI C136.31-2010 3G ⁸	ANSI C136.31-2010 3G ⁸
Surge	10kV	10kV
Effective Projected Area (EPA)	1.8 (sq. ft.)	1.8 (sq. ft.)
Effective Projected Area (EPA) with Visor (VHE, CV1, CV2, CV5) ⁹	1.8 - 2.5 (sq. ft.)	1.8 - 2.5 (sq. ft.)
Approximate Weight ¹⁰	67.5 LBS	71.5 LBS
Approximate Weight with Visor (VHE, CV1, CV2, CV5) ¹⁰	71.5 LBS	75.5 LBS

NOTES:

- (1) Specifications are subject to change without notice.
- (2) Refer to Optical Performance Data.
- (3) Values are +/- 4% when fixture is operated at 25°C ambient
- (4) Values are +/- 2%
- (5) Values are +/- 3 points.
- (6) When driver box is mounted in upright position.
- (7) Light head meets NEMA4X Certification
- (8) LumaSport 8 with Visors (VHE, CV1, CV2, CV5) qualifies for ANSI C136, 31-2010 1.5G
- (9) EPA may vary depending on the aiming angle of the fixture.
- (10) Weight may vary depending on mounting bracket, VHE Visor option, light head and driver box selection.

Electrical Performance Data

Product	Input Voltage Range (VAC)	Nominal Input Power (W)	Input Current (A)	Power Factor (>60% Load)	THD (>60% Load)	Inrush (A2s)	Inrush period (ms)	Peak Inrush (A)
LS-8-320	120-277	340 (365 Max)	1.3 - 3.0 (4.0 Max)	> 0.9	< 20%	1.9	3.52	150
	347-480	340 (365 Max)	0.7 - 1.0 (1.5 Max)	> 0.9	< 20%	3.87	1.77	70
LS-8-640	120-277	680 (740 Max)	2.5 - 5.9 (8.0 Max)	> 0.9	< 20%	3.8	3.52	300
	347-480	680 (740 Max)	1.5 - 2.0 (3.0 Max)	> 0.9	< 20%	7.74	1.77	140

Optical Performance Data (HEG Configuration Option)

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	53987	346	156.0	17.5	33.3
			5000K	54903	346	158.7	17.5	33.3
			5700K	53943	346	155.9	17.5	33.3
		80	4000K	50877	346	147.0	17.5	33.3
			5000K	51822	346	149.8	17.5	33.3
			5700K	50916	346	147.2	17.5	33.3
2S	NEMA 3	70	4000K	54494	339	160.7	21.9	40.2
			5000K	55419	339	163.5	21.9	40.2
			5700K	54450	339	160.6	21.9	40.2
		80	4000K	51346	339	151.5	21.9	40.2
			5000K	52308	339	154.3	21.9	40.2
			5700K	51400	339	151.6	21.9	40.2
3S	NEMA 3	70	4000K	53275	344	154.9	25.4	45.7
			5000K	54179	344	157.5	25.4	45.7
			5700K	53232	344	154.7	25.4	45.7
		80	4000K	50200	344	145.9	25.4	45.7
			5000K	51137	344	148.7	25.4	45.7
			5700K	50209	344	146.0	25.4	45.7
4S	NEMA 4	70	4000K	53419	344	155.3	36.0	64.4
			5000K	54325	344	157.9	36.0	64.4
			5700K	53375	344	155.2	36.0	64.4
		80	4000K	50335	344	146.3	36.0	64.4
			5000K	51275	344	149.1	36.0	64.4
			5700K	50344	344	146.3	36.0	64.4
5S	NEMA 5	70	4000K	54338	344	158.0	46.6	82.6
			5000K	55260	344	160.6	46.6	82.6
			5700K	54294	344	157.8	46.6	82.6
		80	4000K	51202	344	148.8	46.6	82.6
			5000K	52158	344	151.6	46.6	82.6
			5700K	51211	344	148.9	46.6	82.6
7F	NEMA 7	70	4000K	51262	344	149.0	72.5	131.0
			5000K	52132	344	151.5	72.5	131.0
			5700K	51220	344	148.9	72.5	131.0
		80	4000K	48303	344	140.4	72.5	131.0
			5000K	49205	344	143.0	72.5	131.0
			5700K	48312	344	140.4	72.5	131.0

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	85498	686	124.6	17.5	33.3
			5000K	88248	686	128.6	17.5	33.3
			5700K	86402	686	126.0	17.5	33.3
		80	4000K	80572	686	117.5	17.5	33.3
			5000K	83295	686	121.4	17.5	33.3
			5700K	81554	686	118.9	17.5	33.3
2S	NEMA 3	70	4000K	90033	667	135.0	21.9	40.2
			5000K	92929	667	139.3	21.9	40.2
			5700K	90985	667	136.4	21.9	40.2
		80	4000K	84832	667	127.2	21.9	40.2
			5000K	87713	667	131.5	21.9	40.2
			5700K	85888	667	128.8	21.9	40.2
3S	NEMA 3	70	4000K	88702	681	130.3	25.4	45.7
			5000K	91555	681	134.4	25.4	45.7
			5700K	89640	681	131.6	25.4	45.7
		80	4000K	83582	681	122.7	25.4	45.7
			5000K	86415	681	126.9	25.4	45.7
			5700K	84550	681	124.2	25.4	45.7
4S	NEMA 4	70	4000K	88659	681	130.2	36.0	64.4
			5000K	91510	681	134.4	36.0	64.4
			5700K	89596	681	131.6	36.0	64.4
		80	4000K	83541	681	122.7	36.0	64.4
			5000K	86372	681	126.8	36.0	64.4
			5700K	84508	681	124.1	36.0	64.4
5S	NEMA 5	70	4000K	89953	681	132.1	46.6	82.6
			5000K	92846	681	136.3	46.6	82.6
			5700K	90904	681	133.5	46.6	82.6
		80	4000K	84761	681	124.5	46.6	82.6
			5000K	87633	681	128.7	46.6	82.6
			5700K	85742	681	125.9	46.6	82.6

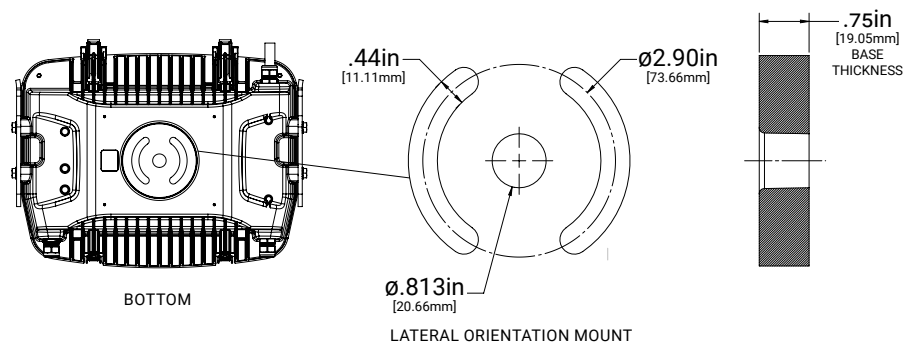
Optical Performance Data (VHE Visor Configuration Option)

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	50557	346	146.1	18.3	33.0
			5000K	51415	346	148.6	18.3	33.0
			5700K	50516	346	146.0	18.3	33.0
		80	4000K	47645	346	137.7	18.3	33.0
			5000K	48530	346	140.3	18.3	33.0
			5700K	47681	346	137.8	18.3	33.0
2S	NEMA 3	70	4000K	51545	339	152.1	22.5	38.8
			5000K	52420	339	154.6	22.5	38.8
			5700K	51504	339	151.9	22.5	38.8
		80	4000K	48568	339	143.3	22.5	38.8
			5000K	49478	339	146.0	22.5	38.8
			5700K	48619	339	143.4	22.5	38.8
3S	NEMA 3	70	4000K	50127	344	145.7	25.7	44.3
			5000K	50977	344	148.2	25.7	44.3
			5700K	50086	344	145.6	25.7	44.3
		80	4000K	47234	344	137.3	25.7	44.3
			5000K	48115	344	139.9	25.7	44.3
			5700K	47242	344	137.3	25.7	44.3
4S	NEMA 4	70	4000K	50235	344	146.0	35.1	63.7
			5000K	51087	344	148.5	35.1	63.7
			5700K	50193	344	145.9	35.1	63.7
		80	4000K	47334	344	137.6	35.1	63.7
			5000K	48218	344	140.2	35.1	63.7
			5700K	47343	344	137.6	35.1	63.7
5S	NEMA 5	70	4000K	49723	344	144.5	44.5	80.5
			5000K	50567	344	147.0	44.5	80.5
			5700K	49683	344	144.4	44.5	80.5
		80	4000K	46854	344	136.2	44.5	80.5
			5000K	47728	344	138.7	44.5	80.5
			5700K	46862	344	136.2	44.5	80.5
7F	NEMA 7	70	4000K	43036	344	125.1	66.7	121.6
			5000K	43767	344	127.2	66.7	121.6
			5700K	43001	344	125.0	66.7	121.6
		80	4000K	40552	344	117.9	66.7	121.6
			5000K	41309	344	120.1	66.7	121.6
			5700K	40560	344	117.9	66.7	121.6

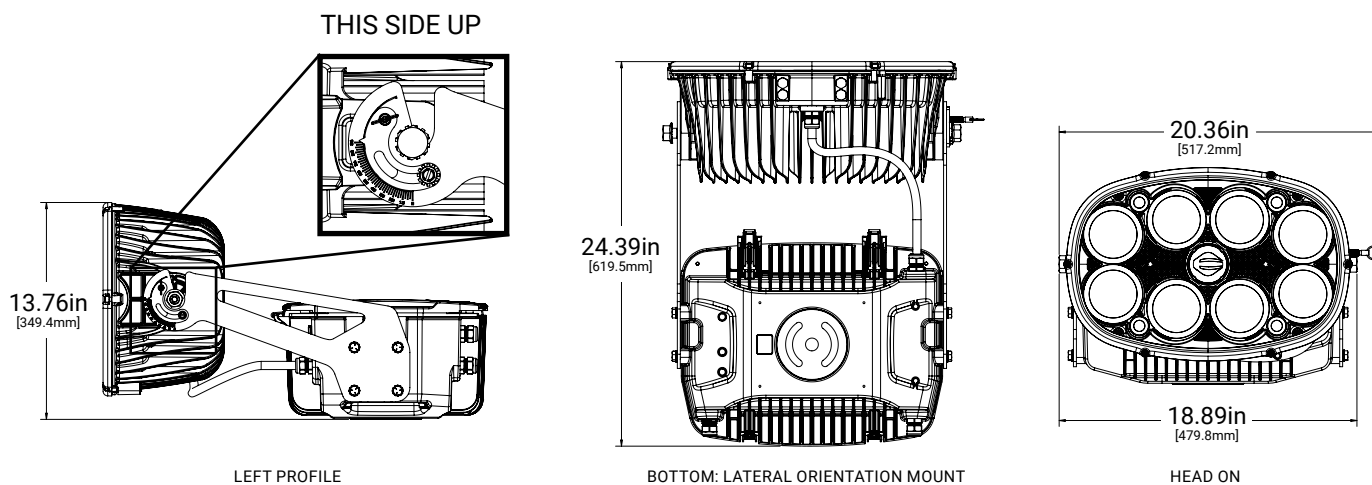
LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	80066	686	116.7	18.3	33.0
			5000K	82642	686	120.5	18.3	33.0
			5700K	80913	686	117.9	18.3	33.0
		80	4000K	75453	686	110.0	18.3	33.0
			5000K	78003	686	113.7	18.3	33.0
			5700K	76373	686	111.3	18.3	33.0
2S	NEMA 3	70	4000K	85162	667	127.7	22.5	38.8
			5000K	87901	667	131.8	22.5	38.8
			5700K	86062	667	129.0	22.5	38.8
		80	4000K	80242	667	120.3	22.5	38.8
			5000K	82967	667	124.4	22.5	38.8
			5700K	81241	667	121.8	22.5	38.8
3S	NEMA 3	70	4000K	83460	681	122.6	25.7	44.3
			5000K	86145	681	126.5	25.7	44.3
			5700K	84343	681	123.9	25.7	44.3
		80	4000K	78643	681	115.5	25.7	44.3
			5000K	81309	681	119.4	25.7	44.3
			5700K	79554	681	116.8	25.7	44.3
4S	NEMA 4	70	4000K	83374	681	122.4	35.1	63.7
			5000K	86055	681	126.4	35.1	63.7
			5700K	84255	681	123.7	35.1	63.7
		80	4000K	78561	681	115.4	35.1	63.7
			5000K	81223	681	119.3	35.1	63.7
			5700K	79470	681	116.7	35.1	63.7
5S	NEMA 5	70	4000K	82314	681	120.9	44.5	80.5
			5000K	84961	681	124.8	44.5	80.5
			5700K	83184	681	122.1	44.5	80.5
		80	4000K	77563	681	113.9	44.5	80.5
			5000K	80191	681	117.8	44.5	80.5
			5700K	78460	681	115.2	44.5	80.5

Dimensional and Mounting Details

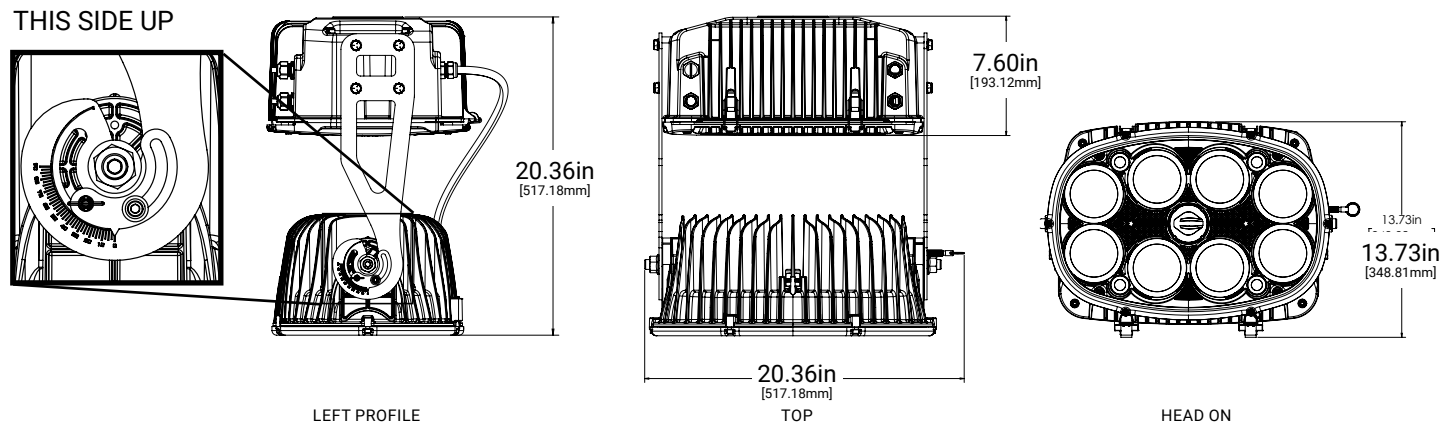
MOUNTING: DRIVER BOX



MOUNTING CONFIGURATION: LOCAL YOKE



MOUNTING CONFIGURATION: LOCAL PENDANT



Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

Product Family ^{1,2}	Light Engine		Color Temperature	Voltage	Distribution	Mounting	Finish
	Configuration	Drive Current					
GALN =Galleon II BAA-GALN =Galleon II Buy American Act Compliant ²⁷ TAA-GALN =Galleon II Trade Agreements Act Compliant ²⁷	SA1 =1 Square SA2 =2 Squares SA3 =3 Squares SA4 =4 Squares SA5 =5 Squares SA6 =6 Squares SA7 =7 Squares SA8 =8 Squares SA9 =9 Squares	A =600mA B =800mA C =1000mA D =1200mA ^{4,17}	722 =70CRI, 2200K 727 =70CRI, 2700K 730 =70CRI, 3000K 735 =70CRI, 3500K 740 =70CRI, 4000K 750 =70CRI, 5000K 760 =70CRI, 6000K 827 =80CRI, 2700K 830 =80CRI, 3000K AMB =Amber, 590nm ^{15,17}	U =120-277V H =347V-480V ^{7,30} 1 =120V 2 =208V 3 =240V 4 =277V 8 =480V ⁷ 9 =347V ^{7,30} DV =277V-480V DuraVolt Drivers ^{29,30,31}	T2 =Type II T2R =Type II Roadway T3 =Type III T3R =Type III Roadway T4FT =Type IV Forward Throw T4W =Type IV Wide SNQ =Type V Narrow SMQ =Type V Square Medium SWQ =Type V Square Wide SL2 =Type II w/Spill Control SL3 =Type III w/Spill Control SL4 =Type IV w/Spill Control SLL =90° Spill Light Eliminator Left SLR =90° Spill Light Eliminator Right RW =Rectangular Wide Type I AFL =Automotive Frontline	[Blank] =Standard Pole Mount Arm QM =Standard Pole Mount Arm with Quick Mount Adaptor PA =Pole Mount, Adjustable SP =Slipfitter, Adjustable ⁸ MA =Mast Arm, Fixed WM =Wall Mount, Fixed WA =Wall Mount, Adjustable UP =Upswept Arm	AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White RALXX =Custom Color

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately) ²⁸
DIM =External 0-10V Dimming Leads ²⁰ F =Single Fuse (120, 277 or 347V Specify Voltage) FF =Double Fuse (208, 240 or 480V Specify Voltage) 20K =20kV UL 1449 fused surge protective device ¹⁰ 2L =Two Circuits ¹⁰ HA =50°C High Ambient HSS =Installed House Side Shield ¹⁸ GRSBK =Glare Reducing Shield, Black ²³ GRSWH =Glare Reducing Shield, White ²³ LCF =Light Square Trim Painted to Match Housing ²⁶ TH =Tool-less Door Hardware ⁵ CC =Coastal Construction finish ³ L90 =Optics Rotated 90° Left R90 =Optics Rotated 90° Right AHD145 =After Hours Dim, 5 Hours ²² AHD245 =After Hours Dim, 6 Hours ²² AHD255 =After Hours Dim, 7 Hours ²² AHD355 =After Hours Dim, 8 Hours ²² DALI =DALI Drivers	BPC =Button Type Photocontrol ⁶ PR =NEMA 3-PIN Photocontrol Receptacle PR7 =NEMA 7-PIN Photocontrol Receptacle ²¹ FADC =Field Adjustable Dimming Controller ³² SPB2 =Dimming Motion Sensor, 9'-20' mounting ²⁴ SPB4 =Dimming Motion Sensor, 21'-40' mounting ²⁴ SPB2/X =Dimming Motion Sensor, limited square count, 9'-20' mounting ²⁴ SPB4/X =Dimming Motion Sensor, limited square count, 21'-40' mounting ²⁴ ZW =WaveLinX-enabled 4-PIN Twistlock Receptacle ¹⁹ ZD =SR Driver-enabled 4-PIN Twistlock Receptacle ¹⁹ ZW-WOBXX =WaveLinX Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{19,12,13} ZW-WOFXX =WaveLinX Lite, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{19,12,13} ZD-WOBXX =WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{19,12,13} ZD-WOFXX =WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{19,12,13} ZW-SWPD4XX =WaveLinX Pro, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{19,12,13} ZW-SWPD5XX =WaveLinX Pro, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{19,12,13} ZD-SWPD4XX =WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{19,12,13} ZD-SWPD5XX =WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{19,12,13} DIM10-MS/DIM-L20 =Synapse Occupancy Sensor (9'-20' Mounting) ¹⁹ DIM10-MS/DIM-L40 =Synapse Occupancy Sensor (21'-40' Mounting) ¹⁹	OA/RA1016 =NEMA Photocontrol Multi-Tap - 105-285V OA/RA1027 =NEMA Photocontrol - 480V OA/RA1201 =NEMA Photocontrol - 347V OA/RA1013 =Photocontrol Shorting Cap OA/RA1014 =120V Photocontrol MA1252 =10kV Surge Module Replacement MA1036-XX =Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX =2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX =3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX =4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX =2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX =3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX =2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX =Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX =2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX =3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX =4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX =2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX =3@90° Tenon Adapter for 3-1/2" O.D. Tenon SRA238 =Adapter kit for mounting to 2-3/8" O.D. Tenon LS/HSS =Field Installed House Side Shield ^{5,18} LS/GRSBK-2PK =Glare Reducing Shield, Black ^{8,23} LS/GRSWH-2PK =Glare Reducing Shield, White ^{8,23} LS/PFS =Perimeter Shield, Black ¹⁶ WOLC-7P-10A =WaveLinX Outdoor Control Module ^{11,19} WOB-XX =WaveLinX Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{12,13,14,19} WOF-XX =WaveLinX Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{12,13,14,19} SWPD4-XX =WaveLinX Sensor, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{12,13,14,19} SWPD5-XX =WaveLinX Sensor, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{12,13,14,19}

NOTES: 1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with TH option. 4. Drive current 1200mA not available with color temperatures 722, 727 or 830 when either HA or HSS options are selected. 5. TH option not 3G rated. Not available with Coastal Construction (CC) option. 6. Not available with voltage options H, 8 or 9. 7. Requires the use of an internal step down transformer when combined with sensor options. Not available in combination with the HA high ambient and sensor options at 1A. 8. Adjustable Slipfitter arm limited to vertical 3" tenon. For mounting to 2-3/8" O.D. tenons, order accessory SRA238. 9. One required for each Light Square. 10. 2L is not available with SPB at 347V or 480V. Not available with WaveLinX or Enlightened sensors, or 20kV surge option. 11. Requires PR7. 12. Replace XX with sensor color (WH, BZ or BK.) 13. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors. 14. Requires ZW or ZD receptacle. 15. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 16. Set of 4 pcs. One set required per Light Square.		17. Not available with HA option. 18. Not for use with 5NQ, 5MQ, 5WQ or RW optics. 19. Cannot be used with other control options. 20. Low voltage control lead brought out 18" outside fixture. Not available with DALI or integrated controls options. 21. Not available if any SPB, LWR, or WaveLinX sensor is selected. Motion sensor has an integral photocell. 22. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. 23. Not for use with T4FT, T4W or SL4 optics. See IES files for details. 24. Sensor configuration mobile application required for configuration. See controls page for details. 25. Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page. 26. Not available with HSS, GRSWH or GRSBK. 27. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 28. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 29. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information. 30. 480V not to be used with ungrounded or impedance grounded systems. 31. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB. 32. Cannot be used with PR7 or other motion response control options.
--	--	--

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L =LumenSafe Technology 	D =Standard Dome Camera H =Hi-Res Dome Camera Z =Remote PTZ Camera	C =Cellular, No SIM A =Cellular, AT&T V =Cellular, Verizon S =Cellular, Sprint R =Cellular, Rogers W =Wi-Fi Networking w/ Omni-Directional Antenna E =Ethernet Networking

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features



Interactive Menu

- Ordering Information [page 2](#)
- Mounting Details [page 3](#)
- Optical Distributions [page 5](#)
- Product Specifications [page 5](#)
- Energy and Performance Data [page 6](#)
- Control Options [page 10](#)

Product Certifications



Quick Facts

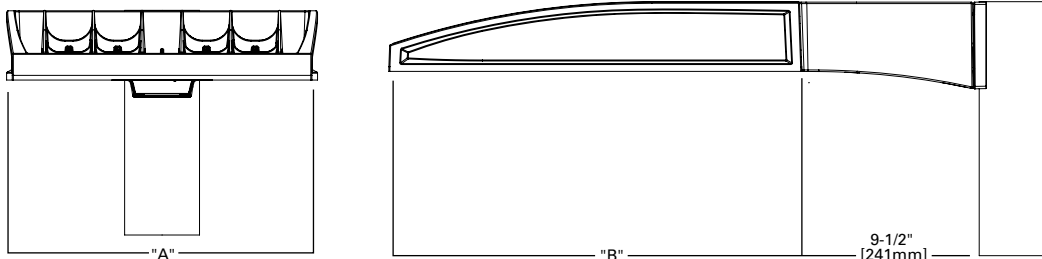
- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Connected Systems

- WaveLinx Lite
- WaveLinx

Dimensional Details

Standard Arm

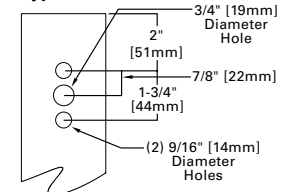


Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

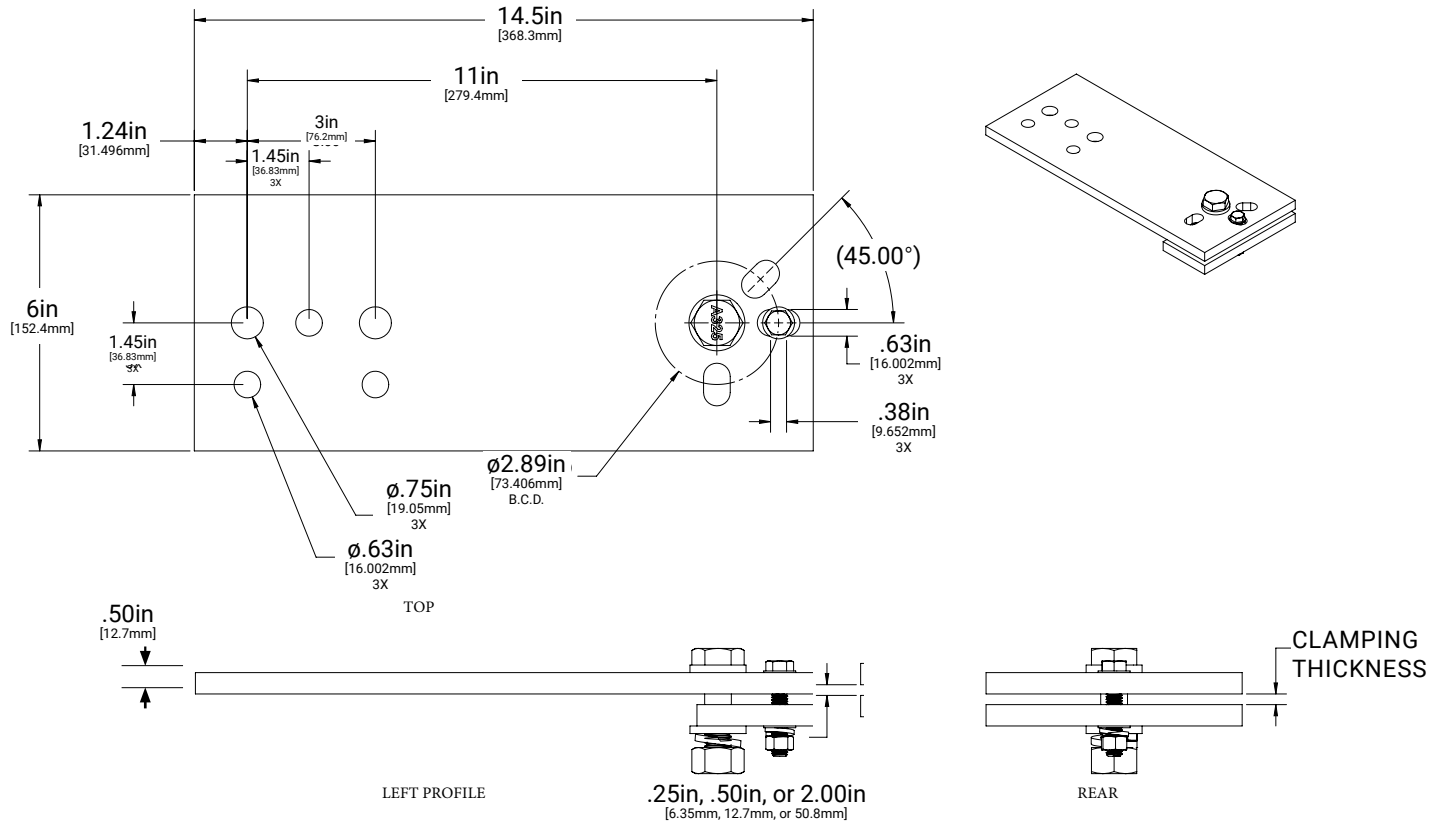
Pole Drilling Patterns

Type "N"



NOTES:
1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified (3000K CCT and warmer only, fixed mounting options)

Extension Plate (EXTPLT) Dimension and Part Details:



Extension Plate Data

MODEL #	WEIGHT (LBS)
EXTPLT	14.63
EXTPLT + HRDM58-050	15.28

Extension Plate Kit Parts

DESCRIPTION	QUANTITY
Extension Plate	1
Washer Plate	1
5/8in Hex Bolt	1
5/8in Washer	2
5/8in-11 Hex Nut	1
5/8in Split Washer	1
3/8in Washer	2
3/8in Hex Bolt	1
3/8in Split Washer	1
3/8in-16 Hex Nut	1

Ordering Information for Accessories

NOTE: A complete accessory order requires a selection entry for **Brand, Accessory, Option**.

SAMPLE ORDER NUMBER: **EPH-HRDM34-025**

Brand	Accessory	Option	
Brand	Accessory	Option	Intended Use
EPH = Ephesus	EXTPLT = Extension Plate ¹	025 = .25in 050 = .5in 200 = 2.0in	Extension Plate Kit to mount to structures .25in, .5in, or 2.00in thick. Designed to be used with the LUMASPORT 8, LUMADAPT 8, PRISM RGBA & ALL FIELD luminaires only.
	DVGBRD = Diving Board ²		Diving Board to mount to 2in x 4in steel cross arms. Designed to be used with the LUMASPORT 8, LUMASPORT 16, LUMADAPT 8 & PRISM RGBA luminaires only.
	HRDM58 = Mounting Hardware 5/8in diameter	050 = .375in - .50in Range of Clamping Thickness ³ 200 = 2in Clamping Thickness ³	HRDM58-050: .375-.500in clamping thickness, Use for Extension Plate (EXTPLT) or other flat surfaces drilled for 5/8in hardware HRDM58-200: 2.00in clamping thickness, use for 2in x 4in Cross arms that are drilled for 5/8in hardware
	HRDM34 = Mounting Hardware 3/4in diameter	025 = .25in ⁴ 075 = .75in ⁴ 200 = 2in ⁴	HRDM34-025: .25-.50in clamping thickness, use for diving board (DVGBRD) or other flat surfaces drilled for 3/4in hardware HRDM34-075: .50-.75in clamping thickness, flat surfaces drilled for 3/4in hardware HRDM34-200: 2.00in clamping thickness, use for 2in x 4in Cross arms that are drilled for 3/4in hardware
	Notes: (1) Additional mounting fastener hardware kit needed to attach a fixture to the EXTPLT = Extension Plate (2) Additional mounting fastener hardware kit needed to attach a fixture to the DVGBRD = Diving Board	Notes: (3) Option only available for use with HRDM58 (4) Option only available for use with HRDM34	

Optical Performance Data (CV5 Configuration Option)

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	35182	354	99.4	17.1	32.0
			5000K	35779	354	101.1	17.1	32.0
			5700K	35153	354	99.3	17.1	32.0
		80	4000K	33155	354	93.7	17.1	32.0
			5000K	33771	354	95.4	17.1	32.0
			5700K	33180	354	93.7	17.1	32.0
2S	NEMA 3	70	4000K	34584	347	99.7	21.3	38.4
			5000K	35171	347	101.4	21.3	38.4
			5700K	34556	347	99.6	21.3	38.4
		80	4000K	32586	347	93.9	21.3	38.4
			5000K	33197	347	95.7	21.3	38.4
			5700K	32620	347	94.0	21.3	38.4
3S	NEMA 3	70	4000K	33745	352	95.9	24.0	43.8
			5000K	34317	352	97.5	24.0	43.8
			5700K	33717	352	95.8	24.0	43.8
		80	4000K	31797	352	90.3	24.0	43.8
			5000K	32391	352	92.0	24.0	43.8
			5700K	31803	352	90.3	24.0	43.8
4S	NEMA 4	70	4000K	30818	352	87.6	33.1	58.6
			5000K	31341	352	89.0	33.1	58.6
			5700K	30793	352	87.5	33.1	58.6
		80	4000K	29039	352	82.5	33.1	58.6
			5000K	29581	352	84.0	33.1	58.6
			5700K	29044	352	82.5	33.1	58.6
5S	NEMA 5	70	4000K	27810	352	79.0	41.9	74.8
			5000K	28282	352	80.3	41.9	74.8
			5700K	27787	352	78.9	41.9	74.8
		80	4000K	26205	352	74.4	41.9	74.8
			5000K	26694	352	75.8	41.9	74.8
			5700K	26210	352	74.5	41.9	74.8
7F	NEMA 7	70	4000K	19710	352	56.0	58.6	109.0
			5000K	20044	352	56.9	58.6	109.0
			5700K	19694	352	55.9	58.6	109.0
		80	4000K	18572	352	52.8	58.6	109.0
			5000K	18919	352	53.7	58.6	109.0
			5700K	18575	352	52.8	58.6	109.0

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	55716	700	79.6	17.1	32.0
			5000K	57509	700	82.2	17.1	32.0
			5700K	56306	700	80.4	17.1	32.0
		80	4000K	52506	700	75.0	17.1	32.0
			5000K	54281	700	77.5	17.1	32.0
			5700K	53146	700	75.9	17.1	32.0
2S	NEMA 3	70	4000K	57138	683	83.7	21.3	38.4
			5000K	58976	683	86.3	21.3	38.4
			5700K	57742	683	84.5	21.3	38.4
		80	4000K	53837	683	78.8	21.3	38.4
			5000K	55666	683	81.5	21.3	38.4
			5700K	54508	683	79.8	21.3	38.4
3S	NEMA 3	70	4000K	56184	697	80.6	24.0	43.8
			5000K	57992	697	83.2	24.0	43.8
			5700K	56779	697	81.5	24.0	43.8
		80	4000K	52941	697	76.0	24.0	43.8
			5000K	54736	697	78.5	24.0	43.8
			5700K	53555	697	76.8	24.0	43.8
4S	NEMA 4	70	4000K	51149	697	73.4	33.1	58.6
			5000K	52793	697	75.7	33.1	58.6
			5700K	51689	697	74.2	33.1	58.6
		80	4000K	48196	697	69.1	33.1	58.6
			5000K	49829	697	71.5	33.1	58.6
			5700K	48754	697	69.9	33.1	58.6
5S	NEMA 5	70	4000K	46038	697	66.1	41.9	74.8
			5000K	47518	697	68.2	41.9	74.8
			5700K	46524	697	66.7	41.9	74.8
		80	4000K	43380	697	62.2	41.9	74.8
			5000K	44850	697	64.3	41.9	74.8
			5700K	43882	697	63.0	41.9	74.8

Optical Performance Data (CV2 Configuration Option)

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	40742	354	115.1	17.2	32.2
			5000K	41433	354	117.0	17.2	32.2
			5700K	40709	354	115.0	17.2	32.2
		80	4000K	38395	354	108.5	17.2	32.2
			5000K	39108	354	110.5	17.2	32.2
			5700K	38424	354	108.5	17.2	32.2
2S	NEMA 3	70	4000K	40915	347	117.9	21.6	38.4
			5000K	41609	347	119.9	21.6	38.4
			5700K	40882	347	117.8	21.6	38.4
		80	4000K	38551	347	111.1	21.6	38.4
			5000K	39273	347	113.2	21.6	38.4
			5700K	38592	347	111.2	21.6	38.4
3S	NEMA 3	70	4000K	40894	352	116.2	24.1	43.9
			5000K	41588	352	118.1	24.1	43.9
			5700K	40861	352	116.1	24.1	43.9
		80	4000K	38534	352	109.5	24.1	43.9
			5000K	39253	352	111.5	24.1	43.9
			5700K	38541	352	109.5	24.1	43.9
4S	NEMA 4	70	4000K	38643	352	109.8	33.2	58.7
			5000K	39298	352	111.6	33.2	58.7
			5700K	38611	352	109.7	33.2	58.7
		80	4000K	36412	352	103.4	33.2	58.7
			5000K	37092	352	105.4	33.2	58.7
			5700K	36419	352	103.5	33.2	58.7
5S	NEMA 5	70	4000K	36037	352	102.4	41.7	74.9
			5000K	36648	352	104.1	41.7	74.9
			5700K	36008	352	102.3	41.7	74.9
		80	4000K	33957	352	96.5	41.7	74.9
			5000K	34591	352	98.3	41.7	74.9
			5700K	33963	352	96.5	41.7	74.9
7F	NEMA 7	70	4000K	26508	352	75.3	58.6	108.9
			5000K	26958	352	76.6	58.6	108.9
			5700K	26486	352	75.2	58.6	108.9
		80	4000K	24978	352	71.0	58.6	108.9
			5000K	25444	352	72.3	58.6	108.9
			5700K	24983	352	71.0	58.6	108.9

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	64522	700	92.2	17.2	32.2
			5000K	66598	700	95.1	17.2	32.2
			5700K	65204	700	93.1	17.2	32.2
		80	4000K	60805	700	86.9	17.2	32.2
			5000K	62860	700	89.8	17.2	32.2
			5700K	61546	700	87.9	17.2	32.2
2S	NEMA 3	70	4000K	67598	683	99.0	21.6	38.4
			5000K	69772	683	102.2	21.6	38.4
			5700K	68312	683	100.0	21.6	38.4
		80	4000K	63693	683	93.3	21.6	38.4
			5000K	65856	683	96.4	21.6	38.4
			5700K	64485	683	94.4	21.6	38.4
3S	NEMA 3	70	4000K	68089	697	97.7	24.1	43.9
			5000K	70278	697	100.8	24.1	43.9
			5700K	68809	697	98.7	24.1	43.9
		80	4000K	64158	697	92.0	24.1	43.9
			5000K	66333	697	95.2	24.1	43.9
			5700K	64901	697	93.1	24.1	43.9
4S	NEMA 4	70	4000K	64135	697	92.0	33.2	58.7
			5000K	66198	697	95.0	33.2	58.7
			5700K	64813	697	93.0	33.2	58.7
		80	4000K	60433	697	86.7	33.2	58.7
			5000K	62481	697	89.6	33.2	58.7
			5700K	61133	697	87.7	33.2	58.7
5S	NEMA 5	70	4000K	59657	697	85.6	41.7	74.9
			5000K	61575	697	88.3	41.7	74.9
			5700K	60287	697	86.5	41.7	74.9
		80	4000K	56213	697	80.6	41.7	74.9
			5000K	58118	697	83.4	41.7	74.9
			5700K	56864	697	81.6	41.7	74.9

Order Information

NOTE: A complete fixture order requires a selection entry for **Brand, Family, Model, Power Configuration, Color, CCT, CRI, Optic, Light Head Cable (DC), Voltage, Control, Mount Configuration, Power Cable (AC), Options, Packaging, & International Option.**

SAMPLE ORDER NUMBER: EPH-LS-08-0320L-BLK-40-70-1S-C04-HV-LB-LY-A00-HEG-BP-ST

Brand	Family	Model	Power Configuration	Color	CCT	CRI	Optic	Light Head Cable (DC)
Brand	Family	Model	Power Configuration	Color ³	CCT	CRI	Optic ⁴	Light Head Cable (DC) ⁶
EPH = Ephesus, Standard TAA=Trade Agreements Act ¹	LS = Lumasport	08 = 8 Optics	0320L = 320W Local Power ² 0640L = 640W Local Power ²	BLK = Black WHT = White	40 = 4000K 50 = 5000K 57 = 5700K	70 = 70 CRI 80 = 80 CRI	1S = NEMA 3 17.5 33.3 2S = NEMA 3 21.9 40.2 3S = NEMA 3 25.4 45.7 4S = NEMA 4 36.0 64.4 5S = NEMA 5 46.6 82.6 7F ⁵ = NEMA 7 72.5 131.0	C04 = 4ft Cable, Standard C10 ⁷ = 10ft Cable, Catwalk Bracket
Notes: (1) Only product configurations with this designated prefix are built to be compliant with the Trade Agreements Act of 1979 (TAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.			Notes: (2) Local Power means that the light head is attached to the driver box with the yoke or pendant mount.	Notes: (3) Not coastal rated. Contact Ephesus for coastal fixture options.			Notes: (4) Optic = NEMA TYPE; BEAM ANGLE; FIELD ANGLE. Additional optical performance data within spec sheet. (5) 7F = NEMA 7 Optic only available with 0320L = 320W Local Power configuration.	Notes: (6) DC Cable connecting the light head to the driver box. (7) C10 = 10ft Cable is intended to be used with the Ephesus Catwalk Bracket

Voltage	Control	Mount Configuration	Power Cable (AC)	Options	Packaging	International Option
Voltage	Control	Mount	Power Cable (AC) ⁸	Options ⁹	Packaging	International Option
LV = Low Voltage HV = High Voltage	NC = No Control AM = Wireless AirMesh LB = Wired DMX	LY = Local Yoke LP = Local Pendant	A00 = No Cable, Standard A04 = 4ft Cable A10 = 10ft Cable A15 = 15ft Cable	HEG = No Visor High Efficiency Glass Lens VHE = Visor High Efficiency Glass Lens IRG = No Visor Impact Resistant Glass Lens VIR = Visor Impact Resistant Glass Lens CV1 = 1 Louver Cutoff Visor CV2 = 2 Louver Cutoff Visor CV5 = 5 Louver Cutoff Visor	BP = Bulk Pack	ST = Standard
			Notes: (8) AC Cable connecting the Driver Box to the electrical power source.	Notes: (9) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.		

DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details

Optical Performance Data (CV1 Configuration Option)

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	43530	354	123.0	17.3	32.0
			5000K	44268	354	125.1	17.3	32.0
			5700K	43494	354	122.9	17.3	32.0
		80	4000K	41022	354	115.9	17.3	32.0
			5000K	41784	354	118.0	17.3	32.0
			5700K	41053	354	116.0	17.3	32.0
2S	NEMA 3	70	4000K	43533	347	125.5	21.6	38.4
			5000K	44272	347	127.6	21.6	38.4
			5700K	43498	347	125.4	21.6	38.4
		80	4000K	41018	347	118.2	21.6	38.4
			5000K	41786	347	120.4	21.6	38.4
			5700K	41061	347	118.3	21.6	38.4
3S	NEMA 3	70	4000K	43468	352	123.5	24.3	43.9
			5000K	44206	352	125.6	24.3	43.9
			5700K	43433	352	123.4	24.3	43.9
		80	4000K	40959	352	116.4	24.3	43.9
			5000K	41724	352	118.5	24.3	43.9
			5700K	40966	352	116.4	24.3	43.9
4S	NEMA 4	70	4000K	42009	352	119.3	33.1	59.2
			5000K	42722	352	121.4	33.1	59.2
			5700K	41975	352	119.2	33.1	59.2
		80	4000K	39584	352	112.5	33.1	59.2
			5000K	40323	352	114.6	33.1	59.2
			5700K	39591	352	112.5	33.1	59.2
5S	NEMA 5	70	4000K	39742	352	112.9	39.9	74.0
			5000K	40416	352	114.8	39.9	74.0
			5700K	39709	352	112.8	39.9	74.0
		80	4000K	37448	352	106.4	39.9	74.0
			5000K	38147	352	108.4	39.9	74.0
			5700K	37455	352	106.4	39.9	74.0
7F	NEMA 7	70	4000K	30408	352	86.4	57.7	107.8
			5000K	30924	352	87.9	57.7	107.8
			5700K	30383	352	86.3	57.7	107.8
		80	4000K	28653	352	81.4	57.7	107.8
			5000K	29188	352	82.9	57.7	107.8
			5700K	28658	352	81.4	57.7	107.8

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	68937	700	98.5	17.3	32.0
			5000K	71154	700	101.6	17.3	32.0
			5700K	69666	700	99.5	17.3	32.0
		80	4000K	64965	700	92.8	17.3	32.0
			5000K	67161	700	95.9	17.3	32.0
			5700K	65757	700	93.9	17.3	32.0
2S	NEMA 3	70	4000K	71923	683	105.3	21.6	38.4
			5000K	74237	683	108.7	21.6	38.4
			5700K	72684	683	106.4	21.6	38.4
		80	4000K	67768	683	99.2	21.6	38.4
			5000K	70070	683	102.6	21.6	38.4
			5700K	68612	683	100.5	21.6	38.4
3S	NEMA 3	70	4000K	72373	697	103.8	24.3	43.9
			5000K	74701	697	107.2	24.3	43.9
			5700K	73139	697	104.9	24.3	43.9
		80	4000K	68196	697	97.8	24.3	43.9
			5000K	70507	697	101.2	24.3	43.9
			5700K	68986	697	99.0	24.3	43.9
4S	NEMA 4	70	4000K	69722	697	100.0	33.1	59.2
			5000K	71964	697	103.2	33.1	59.2
			5700K	70459	697	101.1	33.1	59.2
		80	4000K	65698	697	94.3	33.1	59.2
			5000K	67924	697	97.5	33.1	59.2
			5700K	66458	697	95.3	33.1	59.2
5S	NEMA 5	70	4000K	65790	697	94.4	39.9	74.0
			5000K	67905	697	97.4	39.9	74.0
			5700K	66485	697	95.4	39.9	74.0
		80	4000K	61992	697	88.9	39.9	74.0
			5000K	64093	697	92.0	39.9	74.0
			5700K	62710	697	90.0	39.9	74.0

Optical Performance Data (VIR Configuration Option)

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	46650	346	134.8	18.3	33.0
			5000K	47442	346	137.1	18.3	33.0
			5700K	46612	346	134.7	18.3	33.0
		80	4000K	43963	346	127.1	18.3	33.0
			5000K	44780	346	129.4	18.3	33.0
			5700K	43997	346	127.2	18.3	33.0
2S	NEMA 3	70	4000K	47562	339	140.3	22.5	38.8
			5000K	48369	339	142.7	22.5	38.8
			5700K	47524	339	140.2	22.5	38.8
		80	4000K	44815	339	132.2	22.5	38.8
			5000K	45654	339	134.7	22.5	38.8
			5700K	44862	339	132.3	22.5	38.8
3S	NEMA 3	70	4000K	46253	344	134.5	25.7	44.3
			5000K	47038	344	136.7	25.7	44.3
			5700K	46216	344	134.3	25.7	44.3
		80	4000K	43583	344	126.7	25.7	44.3
			5000K	44397	344	129.1	25.7	44.3
			5700K	43591	344	126.7	25.7	44.3
4S	NEMA 4	70	4000K	46353	344	134.7	35.1	63.7
			5000K	47139	344	137.0	35.1	63.7
			5700K	46314	344	134.6	35.1	63.7
		80	4000K	43677	344	127.0	35.1	63.7
			5000K	44492	344	129.3	35.1	63.7
			5700K	43684	344	127.0	35.1	63.7
5S	NEMA 5	70	4000K	45881	344	133.4	44.5	80.5
			5000K	46659	344	135.6	44.5	80.5
			5700K	45844	344	133.3	44.5	80.5
		80	4000K	43233	344	125.7	44.5	80.5
			5000K	44040	344	128.0	44.5	80.5
			5700K	43241	344	125.7	44.5	80.5
7F	NEMA 7	70	4000K	39710	344	115.4	66.7	121.6
			5000K	40384	344	117.4	66.7	121.6
			5700K	39678	344	115.3	66.7	121.6
		80	4000K	37418	344	108.8	66.7	121.6
			5000K	38117	344	110.8	66.7	121.6
			5700K	37425	344	108.8	66.7	121.6

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	73879	686	107.7	18.3	33.0
			5000K	76255	686	111.2	18.3	33.0
			5700K	74660	686	108.8	18.3	33.0
		80	4000K	69622	686	101.5	18.3	33.0
			5000K	71975	686	104.9	18.3	33.0
			5700K	70471	686	102.7	18.3	33.0
2S	NEMA 3	70	4000K	78580	667	117.8	22.5	38.8
			5000K	81108	667	121.6	22.5	38.8
			5700K	79411	667	119.1	22.5	38.8
		80	4000K	74041	667	111.0	22.5	38.8
			5000K	76555	667	114.8	22.5	38.8
			5700K	74963	667	112.4	22.5	38.8
3S	NEMA 3	70	4000K	77011	681	113.1	25.7	44.3
			5000K	79488	681	116.7	25.7	44.3
			5700K	77825	681	114.3	25.7	44.3
		80	4000K	72566	681	106.6	25.7	44.3
			5000K	75025	681	110.2	25.7	44.3
			5700K	73406	681	107.8	25.7	44.3
4S	NEMA 4	70	4000K	76931	681	113.0	35.1	63.7
			5000K	79405	681	116.6	35.1	63.7
			5700K	77744	681	114.2	35.1	63.7
		80	4000K	72490	681	106.4	35.1	63.7
			5000K	74946	681	110.1	35.1	63.7
			5700K	73329	681	107.7	35.1	63.7
5S	NEMA 5	70	4000K	75953	681	111.5	44.5	80.5
			5000K	78395	681	115.1	44.5	80.5
			5700K	76756	681	112.7	44.5	80.5
		80	4000K	71569	681	105.1	44.5	80.5
			5000K	73994	681	108.7	44.5	80.5
			5700K	72397	681	106.3	44.5	80.5

Optical Performance Data (IRG Configuration Option)

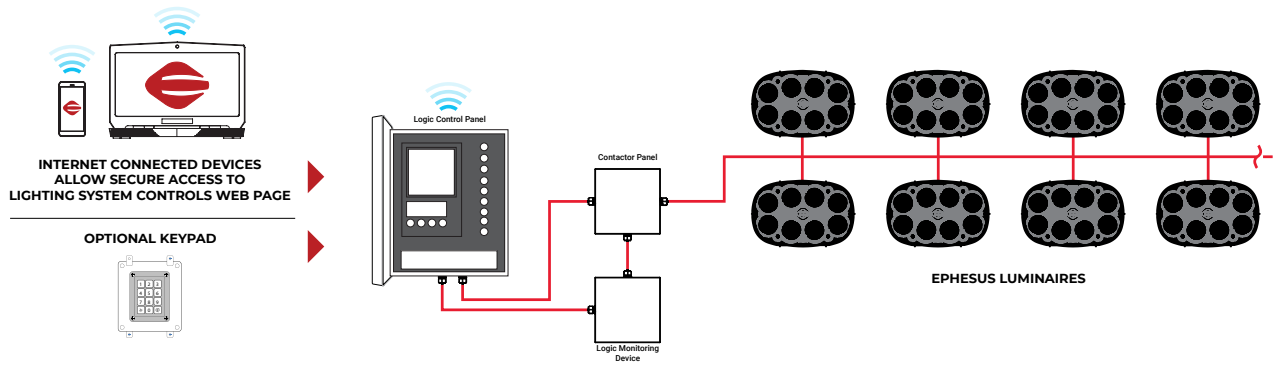
LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	49815	346	144.0	17.5	33.3
			5000K	50660	346	146.4	17.5	33.3
			5700K	49774	346	143.9	17.5	33.3
		80	4000K	46945	346	135.7	17.5	33.3
			5000K	47817	346	138.2	17.5	33.3
			5700K	46981	346	135.8	17.5	33.3
2S	NEMA 3	70	4000K	50283	339	148.3	21.9	40.2
			5000K	51136	339	150.8	21.9	40.2
			5700K	50242	339	148.2	21.9	40.2
		80	4000K	47378	339	139.8	21.9	40.2
			5000K	48266	339	142.4	21.9	40.2
			5700K	47428	339	139.9	21.9	40.2
3S	NEMA 3	70	4000K	49158	344	142.9	25.4	45.7
			5000K	49992	344	145.3	25.4	45.7
			5700K	49118	344	142.8	25.4	45.7
		80	4000K	46321	344	134.7	25.4	45.7
			5000K	47185	344	137.2	25.4	45.7
			5700K	46329	344	134.7	25.4	45.7
4S	NEMA 4	70	4000K	49291	344	143.3	36.0	64.4
			5000K	50127	344	145.7	36.0	64.4
			5700K	49250	344	143.2	36.0	64.4
		80	4000K	46445	344	135.0	36.0	64.4
			5000K	47313	344	137.5	36.0	64.4
			5700K	46454	344	135.0	36.0	64.4
5S	NEMA 5	70	4000K	50139	344	145.8	46.6	82.6
			5000K	50990	344	148.2	46.6	82.6
			5700K	50098	344	145.6	46.6	82.6
		80	4000K	47245	344	137.3	46.6	82.6
			5000K	48127	344	139.9	46.6	82.6
			5700K	47254	344	137.4	46.6	82.6
7F	NEMA 7	70	4000K	47301	344	137.5	72.5	131.0
			5000K	48103	344	139.8	72.5	131.0
			5700K	47262	344	137.4	72.5	131.0
		80	4000K	44570	344	129.6	72.5	131.0
			5000K	45403	344	132.0	72.5	131.0
			5700K	44579	344	129.6	72.5	131.0

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	78891	686	115.0	17.5	33.3
			5000K	81428	686	118.7	17.5	33.3
			5700K	79725	686	116.2	17.5	33.3
		80	4000K	74346	686	108.4	17.5	33.3
			5000K	76858	686	112.0	17.5	33.3
			5700K	75252	686	109.7	17.5	33.3
2S	NEMA 3	70	4000K	83075	667	124.6	21.9	40.2
			5000K	85748	667	128.6	21.9	40.2
			5700K	83954	667	125.9	21.9	40.2
		80	4000K	78276	667	117.4	21.9	40.2
			5000K	80935	667	121.3	21.9	40.2
			5700K	79251	667	118.8	21.9	40.2
3S	NEMA 3	70	4000K	81847	681	120.2	25.4	45.7
			5000K	84480	681	124.1	25.4	45.7
			5700K	82713	681	121.5	25.4	45.7
		80	4000K	77123	681	113.2	25.4	45.7
			5000K	79737	681	117.1	25.4	45.7
			5700K	78016	681	114.6	25.4	45.7
4S	NEMA 4	70	4000K	81808	681	120.1	36.0	64.4
			5000K	84438	681	124.0	36.0	64.4
			5700K	82672	681	121.4	36.0	64.4
		80	4000K	77085	681	113.2	36.0	64.4
			5000K	79697	681	117.0	36.0	64.4
			5700K	77977	681	114.5	36.0	64.4
5S	NEMA 5	70	4000K	83002	681	121.9	46.6	82.6
			5000K	85671	681	125.8	46.6	82.6
			5700K	83879	681	123.2	46.6	82.6
		80	4000K	78211	681	114.8	46.6	82.6
			5000K	80861	681	118.7	46.6	82.6
			5700K	79116	681	116.2	46.6	82.6

Example System Topology (Contactor Controls)

Example system topology showing the LUMASPORT 8 System in a Wired Contactor Controls Installation.

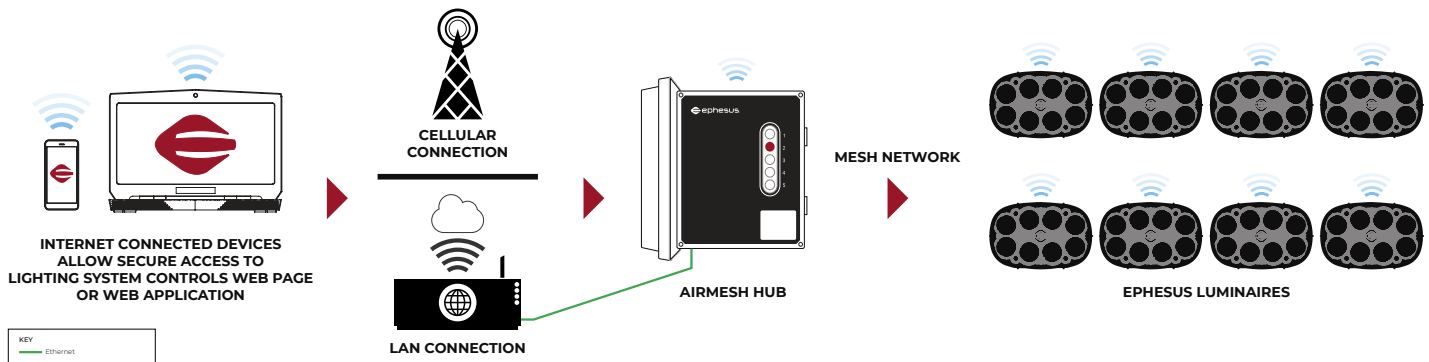
Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.



Example System Topology (Wireless AirMesh Controls)

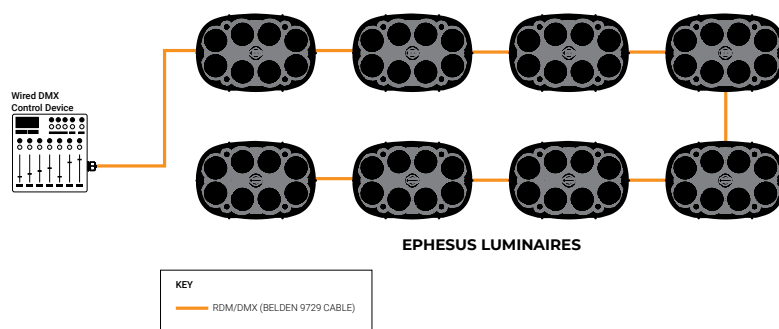
Example system topology showing the LUMASPORT 8 System in a Wireless AirMesh Control Installation.

Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.



Example System Topology (Wired DMX Controls)

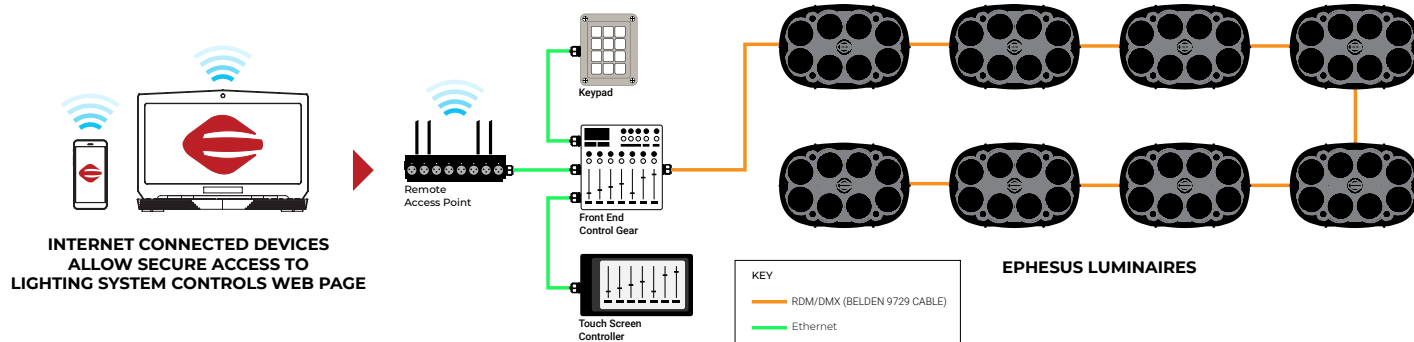
Example system topology showing the LUMASPORT 8 System in a commonly used wired DMX Control Installation. Refer to the specifications and limitations of your wired DMX control device before installing this configuration.



Example System Topology (Remote Access Point With Wired DMX Controls)

Example system topology showing the LUMASPORT 8 System in a commonly used remote access point with wired DMX Control Installation. Refer to the specifications and limitations of your wired DMX control device before installing this configuration. Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.

REMOTE ACCESS POINT TO DMX SYSTEM CONTROLS



NOTES:

Remote Access Point requires either a wired Internet connection at the lighting system site or through a cellular carrier network connection plan.

HRDM58 Dimension and Part Details:

HRDM58-050:

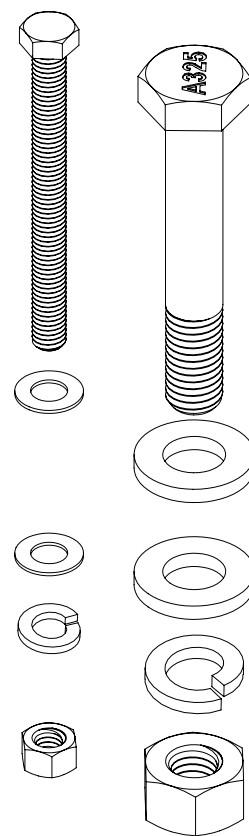
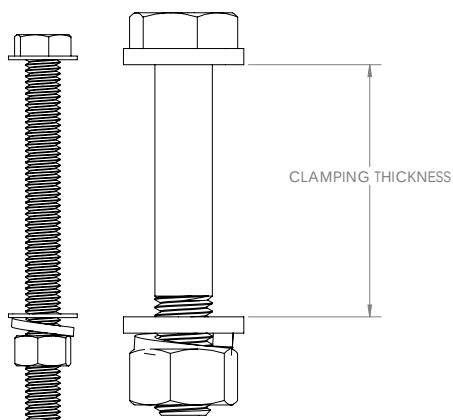
.375-.500in clamping thickness, Use for Extension Plate (EXTPLT) or other flat surfaces drilled for 5/8in hardware

HRDM58-200:

2.00in clamping thickness, use for 2in x 4in Cross arms that are drilled for 5/8in hardware

HRDM58 Data

MODEL #	WEIGHT (LBS)
HRDM58-050	.65
HRDM58-200	.84



HRDM34 Dimension and Part Details:

HRDM34-025:

.25-.50in clamping thickness, use for diving board (DVGBRD) or other flat surfaces drilled for 3/4in hardware

HRDM34-075:

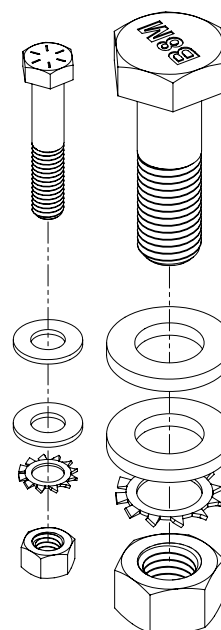
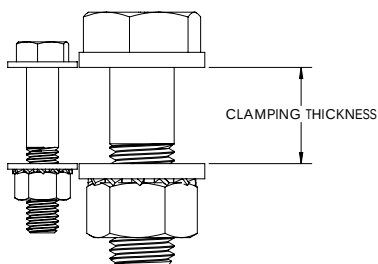
.50-.75in clamping thickness, flat surfaces drilled for 3/4in hardware

HRDM34-200:

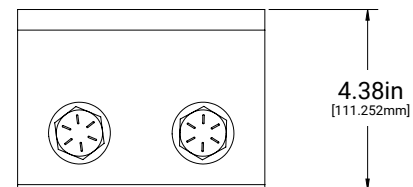
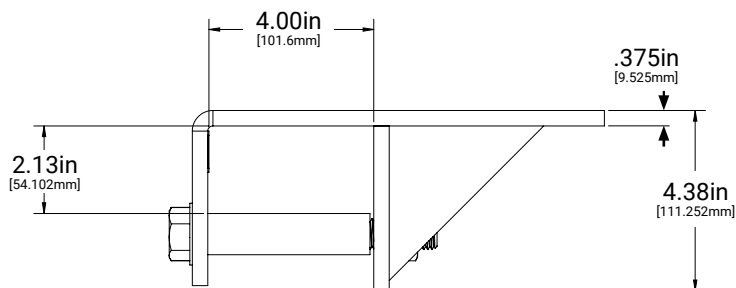
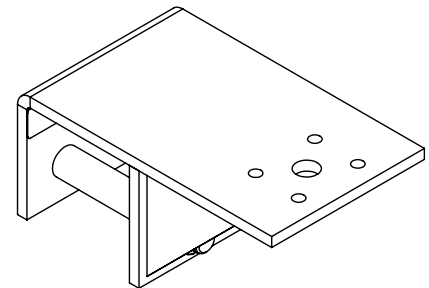
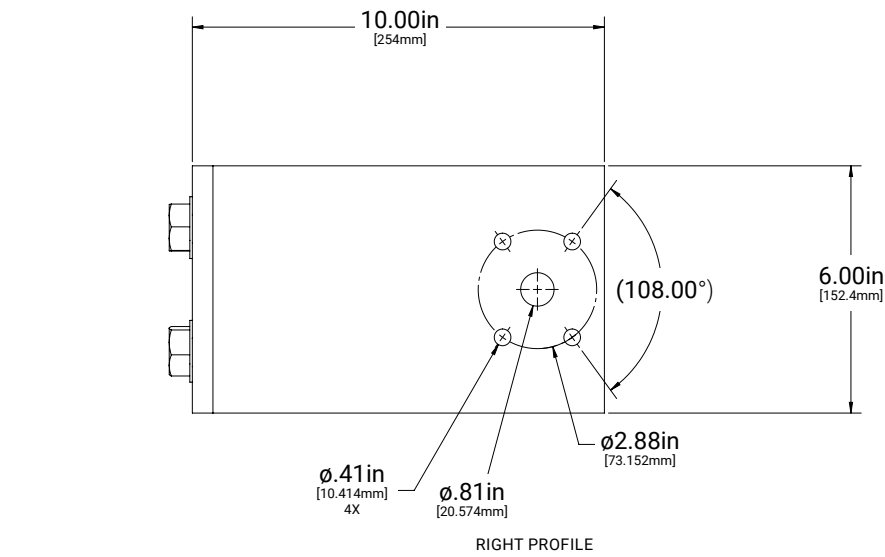
2.00in clamping thickness, use for 2in x 4in Cross arms that are drilled for 3/4in hardware

HRDM34 Data

MODEL #	WEIGHT (LBS)
HRDM34-025	1
HRDM34-075	1.5
HRDM34-200	2



Diving Board (DVGBRD) Dimension and Part Details:

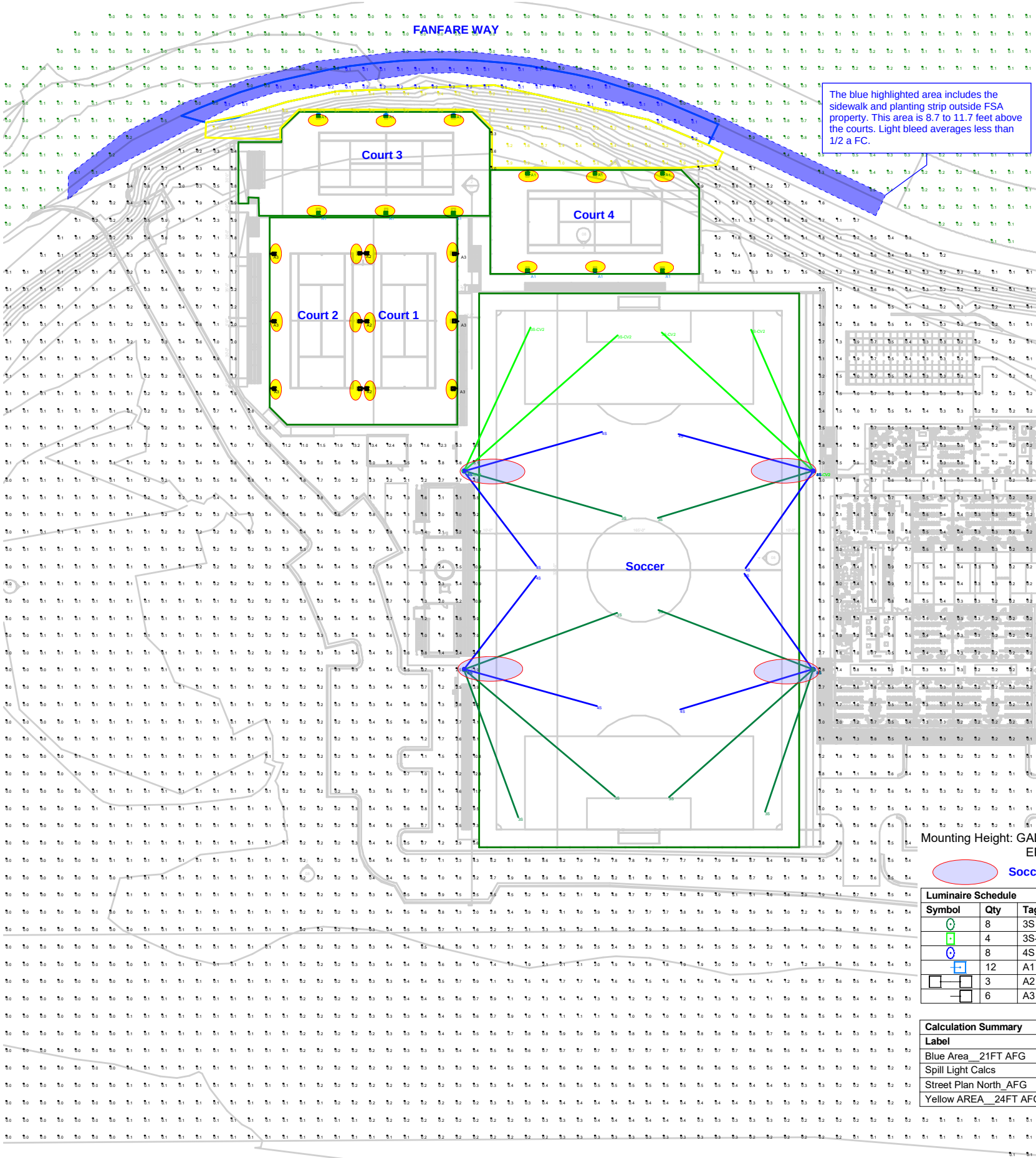


Diving Board Data

MODEL #	WEIGHT (LBS)
DVGBRD	15.1
DVGBRD + HRDM34-025	16.1

Diving Board Parts

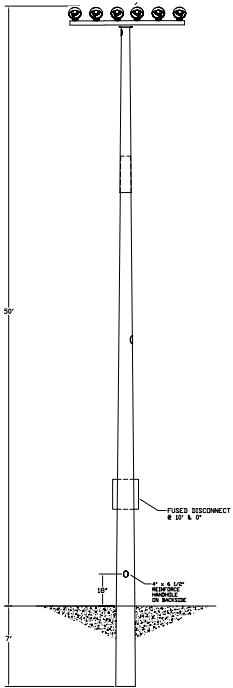
DESCRIPTION	QUANTITY
Welded Bracket	1
Bolt Sleeve	2
3/4in-10 X 6in Structural Hex Bolt, Hot Dip Galvanized	2
3/4in Steel Flat Washer, Hot Dip Galvanized	2
3/4in Ext Tooth Washer, Steel, Magni-565 Grey Polycoat	2
3/4in-10 Structural Steel Hex Nut, Hot Dip Galvanized	2
Stainless Shim	1



Soccer Field Fixture:
6 per pole



Tennis Court Lights on 19' Poles
(fixture matches fixture in existing
FSA parking areas)



Soccer Field Light Pole

Mounting Height: GALN: 19'-0" AFG
EPH: 50'-0" AFG

Berms: Blue: 21.11' AFG, Yellow: 20.41' AFG
Calculation Height: Spill Light/Street: 0'-0" AFG, Berms: 21.11' AFG (blue) and 24.41' AFG (yellow)

Soccer Lighting Tennis Lighting

Luminaire Schedule								
Symbol	Qty	Tag	Label	Arrangement	LLF	Lum Lumens	Description	Total Watts
	8	3S	EPH- 3S	SINGLE	0.900	89640	EPH-08-0640L-57-70-3S-HEG	5448
	4	3S-CV2	EPH-3S-CV2	Single	0.900	68809	EPH-LS-08-0640L-57-70-3S-CV2	2788
	8	4S	EPH- 4S	SINGLE	0.900	89596	EPH-08-0640L-57-70-4S-HEG	5448
	12	A1	GALN-SA9D-T4W-HSS	SINGLE	0.900	50733	GALN-SA9D-750-U-T4W-HSS	6624
	3	A2	GALN-SA8D-T4FT-HSS-2	Back-Back	0.900	44982	GALN-SA8D-750-U-T4FT-HSS-b2b	2958
	6	A3	GALN-SA8D-T4FT-HSS	Single	0.900	44982	GALN-SA8D-750-U-T4FT-HSS	2958

Calculation Summary									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpLr	PtSpTb
Blue Area _21FT AFG	Illuminance	Fc	0.12	0.2	0.1	1.20	2.00	10	10
Spill Light Calcs	Illuminance	Fc	0.32	13.4	0.0	N.A.	N.A.	10	10
Street Plan North_AFG	Illuminance	Fc	0.08	1.4	0.0	N.A.	N.A.	10	10
Yellow AREA _24FT AFG	Illuminance	Fc	2.20	10.9	0.1	22.00	109.00	10	10

Does Not Occur off FSA Property. Spill light
off FSA property averages under 1/2 FC,

Control Options

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)

Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB)

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

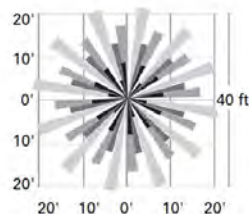
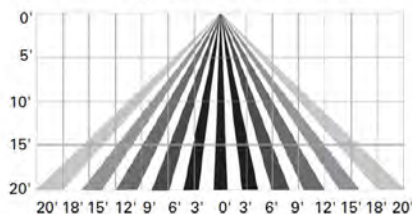
SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

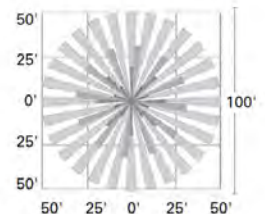
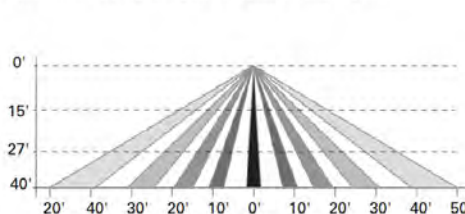
WaveLinX Wireless Control and Monitoring System

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinX and WaveLinX Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WOLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinX sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinX sensors, power monitoring, and advanced functionality. WaveLinX (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinX Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX Lite mobile application for set-up and configuration. WAC not required. WaveLinX Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (SWPD4 and WOB)



For mounting heights up to 40' (SWPD5 and WOF)



LumenSafe Integrated Network Security Camera (LD)

Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

Synapse (DIM10)

SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and MS/DC motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.082	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,530
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,810	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,568	23,110	30,625	38,769	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,354	70,003
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,228	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
5NQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
5MQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
5WQ	4000K Lumens	8,192	16,282	24,170	32,029	40,546	48,011	56,393	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,320	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	269	321	377	429	481
Input Current @ 120V		0.478	0.905	1.338	1.810	2.244	2.675	3.150	3.584	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T2	4000K Lumens	7,154	14,219	21,107	27,970	35,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	4000K Lumens	7,250	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,029	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,130	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,386
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
5NQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,508	51,104	59,247	66,515
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
5MQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,359	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
5WQ	4000K Lumens	7,445	14,797	21,966	29,108	36,849	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	4000K Lumens	6,132	12,187	18,091	23,973	30,348	35,936	42,210	48,935	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,757
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.782
Input Current @ 240V		0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T2	4000K Lumens	5,790	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,303	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,710	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	145
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,762	11,451	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
5NQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
5MQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,103
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
5WQ	4000K Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,153	22,730	28,775	34,073	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	215	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.089	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.078	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.738	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,034	37,138	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,587	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,436	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	146	149	148	149	148	151	151
T4W	4000K Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,488
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,586	9,115	13,531	17,931	22,699	26,879	31,571	36,602	41,091
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,708	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
5NQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
5MQ	4000K Lumens	4,853	9,645	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
5WQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	158	158
SLL/ SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,456	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards

** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

FADC Settings

SA1-SA3 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

FADC Settings

SA4-SA6 (A, B, C, D Drive Current)

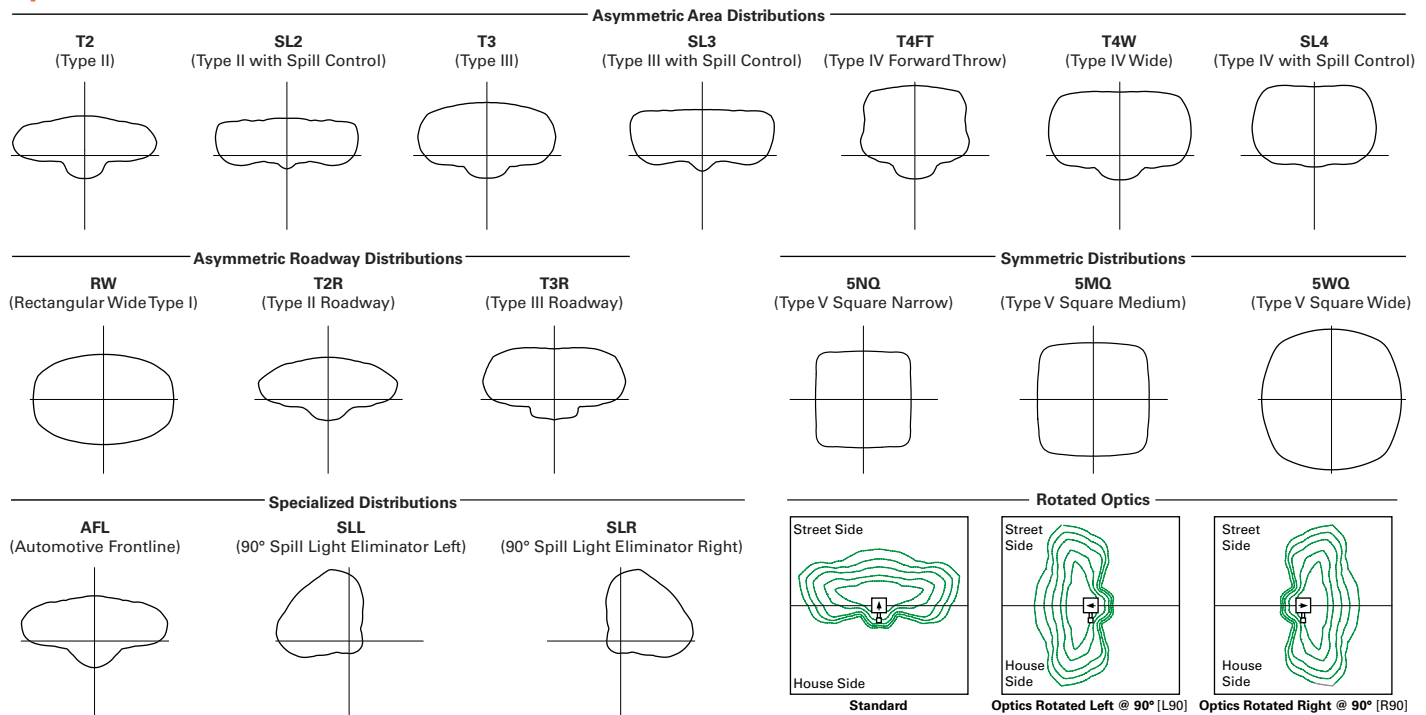
FADC Position	Percent of Typical Lumen Output
1	14%
2	25%
3	32%
4	43%
5	49%
6	57%
7	65%
8	72%
9	80%
10	100%

FADC Settings

SA7-SA9 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Optical Distributions



Product Specifications

Construction

- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics

- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)

Electrical

- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module

- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting

- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Typical Applications

- Outdoor, Parking Lots, Walkways, Roadways, Building Areas

Warranty

- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

Lumen Multiplier

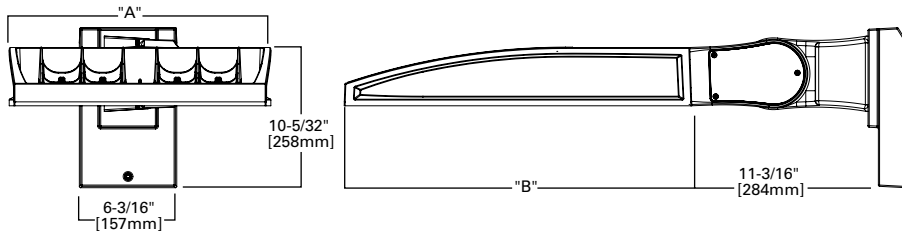
Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

* Supported by IES TM-21 standards

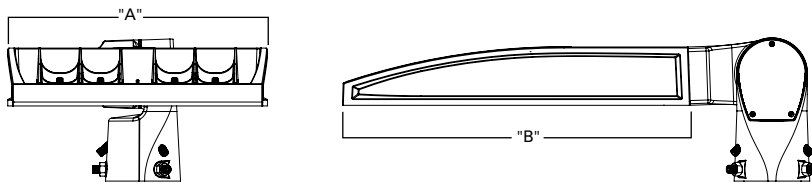
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Mounting Details

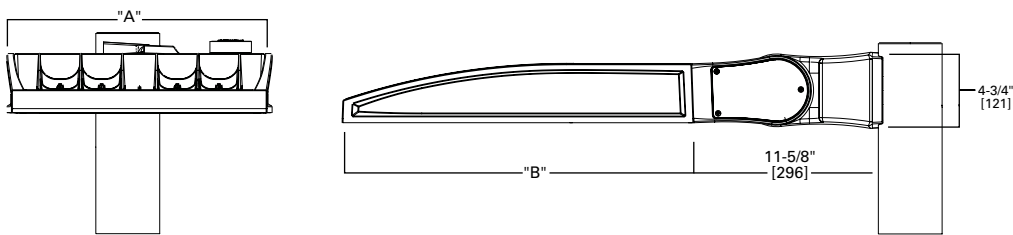
Wall Mount, Adjustable (WA)



Slipfitter, Adjustable (SP)

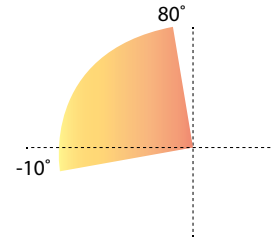


Pole Mount, Adjustable Arm (PA)



Adjustable Arm Range of Motion

- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40



STAFF REPORT

Department: Public Works
Submitted By: Arash Moradkhani
Meeting Date: July 17, 2023

AGENDA ITEM:

Invitation to Bid 23-010: Construction of Pedestrian Safety Barriers on the Town Green

Consideration of approval of the award ITB 23-010 to Tri Scapes, Inc. for an amount totaling \$206,584.31 and authorize the Mayor to execute all necessary documents.

STAFF RECOMMENDATION:

Approve the award ITB 23-010 to Tri Scapes, Inc. for an amount totaling \$206,584.31 and authorize the Mayor to execute all necessary documents.

BUDGET & PROCUREMENT:

BUDGETED ITEM: YES

FISCAL IMPACT: YES

INCLUDED IN CURRENT FY CPTL BUDGET: YES

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST: \$206,584.31

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
Pedestrian Safety Barrier at City Center / 30161150-541500-C2030	\$206,584.31

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
N/A	\$0.00

ITEM DESCRIPTION:

The award of ITB #23-010 is for the construction of safety barrier walls along Highway 9 adjacent to the Town Green. The project will include:

- Construction of 3 brick walls along Highway 9 sidewalk adjacent to the Town Green
- Patching the existing synthetic turf
- Removal of two existing light poles and foundations
- Installation of LED lights on three brick walls
- 6 trash receptacles

The project design was awarded to Moffatt and Nichol, through RFQ 22-1007. When the project design was complete, ITB # 23-010 was issued for the project construction on 5/18/2023. On June 29, 2023, the City received a total of three bids:

Bidder	Submitted Bid
Tri Scapes, Inc.	\$206,584.31

P.E. Structures & Associates, LLC	\$241,658.85
Sol Construction LLC	\$256,386.00

The apparent low bidder, Tri Scapes, Inc. (Tri Scapes) is an experienced contractor that has worked on several projects with similar elements in Georgia for multiple government agencies. Tri Scapes was recently awarded a contract for Mid Broadwell Park site improvements and holds the "Landscape Maintenance and On-call Construction Services for Parks Level 2 Services" contract with the City of Alpharetta and was awarded the City Center Tree Well Repair contract in March 2023.

A pre-award meeting for ITB 23-010 was held with Tri Scapes on July 5, 2023. The project scope, schedule, and expectations were discussed with Tri Scapes.

Once a contract with Tri Scapes, Inc. has been finalized and executed, construction may begin immediately. The anticipated completion date is no more than September 29, 2023.

ALTERNATIVES:

Do not award the project and the project construction could be considered at another time in the future.

ATTACHMENTS:

1. 23-010 Pedestrian Safety Barrier at City Center TriScapes Contract
2. ITB 23-010 Ped Safety Barrier_Tri Scapes Cost
3. Ped Safety Barrier at City Center_Final Engineering Plan Set

CONSTRUCTION SERVICES AGREEMENT

PEDESTRIAN SAFETY BARRIER AT CITY CENTER

This Construction Services Agreement (the “Agreement”) is made and entered into on _____ (date) (the “Effective Date”), by and between the **CITY OF ALPHARETTA, GEORGIA**, a municipal corporation of the State of Georgia, acting by and through its governing authority, the Mayor and Alpharetta City Council (hereinafter referred to as the “City”), and TRI SCAPES, INC, a Georgia limited liability corporation (hereinafter referred to as the “Contractor”), collectively referred to herein as the “Parties”.

W I T N E S S E T H:

WHEREAS, the City desires to retain a contractor to perform services for the construction of a Project, as defined below; and

WHEREAS, the City solicited bids from qualified proponents for construction of the Project pursuant to Invitation to Bid (“ITB”) 23-010, copy of which is attached hereto as **Exhibit A** and incorporated herein by reference; and

WHEREAS, the Contractor submitted a complete and timely bid in response to ITB 23-010, a copy of which is attached hereto as **Exhibit B** and incorporated herein by reference, which bid was determined by the City to meet all bid requirements such that the City awarded ITB 23-010 to the Contractor; and

WHEREAS, the City finds that specialized knowledge, skills, and training are necessary to perform the Work (defined below) contemplated under this Agreement; and

WHEREAS, the Contractor has represented that it is qualified by training and experience to perform the Work; and

WHEREAS, based upon the Contractor’s bid, the City has selected the Contractor as the successful proponent, and

WHEREAS, the Contractor desires to perform the Work as set forth in this Agreement under the terms and conditions provided in this Agreement; and

WHEREAS, the public interest will be served by this Agreement; and

WHEREAS, the Contractor has familiarized itself with the nature and extent of the Contract Documents, the Project, and the Work, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of Work, and the Contractor is aware that it must be licensed to do business in the State of Georgia.

NOW THEREFORE, for and in consideration of the mutual promises, the public purposes, and the acknowledgements and agreements contained herein and other good and adequate consideration, the sufficiency of which is hereby acknowledged, the Parties hereto do mutually agree as follows:

Section 1. Contract Documents

This Agreement along with the following documents, attached hereto (except as expressly noted otherwise below) and incorporated herein by reference, constitute the “Contract Documents”:

- A. City’s ITB 23-010, attached hereto as **Exhibit A**;
 - 1. Forms of Performance Bond and Payment Bond, included within **Exhibit A**;
 - 2. Forms of Subcontractor Affidavits (E-Verify), included within **Exhibit A**;
- B. Bid Response Documents from Contractor, attached hereto as **Exhibit B**;
 - 1. Completed Contractor Affidavit (E-Verify), included within **Exhibit B**;
- C. Scope of Work, included in **Exhibit C**;
- D. Additional Payment/Retainage Requirements, attached hereto as **Exhibit D**;
- E. The following, which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Change Orders (defined in Section 6 below), other written amendments, and other documents amending, modifying, or supplementing the Contract Documents if properly adopted in writing and executed by the Parties.

Section 2. Project Description; Contract Administrator

- A. Project. A general description of the Project is as follows: **PEDESTRIAN SAFETY BARRIER AT CITY CENTER**, including, but not limited to, construction of brick walls, removal of existing light poles and foundations, installation of LED lights on the brick walls, patching the synthetic turf, and related work --- within the City of Alpharetta, Georgia.
- B. Contract Administrator; Project Manager. The City shall be the Contract Administrator for this Agreement. The City’s Project and Construction Manager for this contract is Jared Wilson.

Section 3. The Work

- A. The Work. The Work to be completed under this Agreement (the “Work”) includes, but shall not be limited to, the work described in the Scope of Work

provided in Contract Documents, attached hereto and incorporated herein by reference. The Work includes all material, labor, insurance, tools, equipment, machinery, water, heat, utilities, transportation, facilities, services and any other miscellaneous items and work reasonably inferable from the Contract Documents. The term “reasonably inferable” takes into consideration the understanding of the Parties that some details necessary for proper execution and completion of the Work may not be shown on the drawings or included in the specifications or Scope of Work, but they are a requirement of the Work if they are a usual and customary component of the Work or are otherwise necessary for proper and complete installation and operation of the Work. Contractor shall complete the Work in strict accordance with the Contract Documents. In the event of any discrepancy among the terms of the various Contract Documents, the provision most beneficial to the City, as determined by the City in its sole discretion, shall govern.

- B. Notice to Proceed. The City will issue a Notice to Proceed, which Notice to Proceed shall state the dates for beginning Work (“Commencement Date”) and the Expected Date of Final Completion (defined in Section 4(A) below). Unless otherwise approved, the Contractor shall perform its obligations under this Agreement as expeditiously as is consistent with reasonable skill and care and the orderly progress of the Work.
- C. Shop Drawings, Product Data, and Samples. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents, but must be in conformity therewith. The purpose of their submittal is to demonstrate, for those portions of the Work for which submittals are required by the Contract Documents, the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents.
 - (i) “Shop Drawings” are drawings, diagrams, schedules and other data specifically prepared for the Work by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
 - (ii) “Product Data” are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
 - (iii) “Samples” are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

The Contractor shall review for compliance with the Contract Documents and shall approve and submit to the Contract Administrator Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the City or of separate contractors. By approving and submitting

Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Contract Administrator without action. The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved in writing by the Contract Administrator, provided that submittals that are not required by the Contract Documents may be returned without action.

The Work shall be completed in accordance with approved submittals, provided that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Contract Administrator's approval of Shop Drawings, Product Data, Samples or similar submittals, unless the Contractor has specifically informed the Contract Administrator in writing of such deviation at the time of submittal and (1) the Contract Administrator has given written approval to the specific deviation as a minor change in the Work, or (2) a written Change Order has been issued and approved to authorize the deviation. The Contract Administrator's approval of the Shop Drawings, Product Data, Samples or similar submittals shall not relieve the Contractor of responsibility for errors or omissions therein.

The Contractor shall, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, direct the Contract Administrator's attention to any additional revisions included other than those requested by the Contract Administrator on previous submittals. In the absence of such written notice drawing the Contract Administrator's attention to such additional revisions, the Contract Administrator's approval of a resubmission shall not apply to such additional revisions.

The Contractor shall maintain at the Project site(s) one record copy of the Contract Documents in good order and marked currently to record field changes and selections made during construction and one record copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These documents shall be available to the City and Contract Administrator and shall be delivered to the Contract Administrator or City upon completion of the Work.

Section 4. Contract Term; Liquidated Damages; Expedited Completion; Partial Occupancy or Use

- A. Contract Term. Contractor shall promptly commence the Work with adequate force and equipment within ten (10) calendar days from receipt of the Notice to Proceed, or as otherwise specified in the Notice to Proceed, continuously pursue the Work

without interruption to completion, and fully complete the Work (i.e., achieve final completion) by October 2, 2023, following Contractor's receipt of the Notice to Proceed (the "Expected Date of Final Completion").

The Parties agree that this Agreement, as required by O.C.G.A. § 36-60-13, shall terminate absolutely and without further obligation on the part of the City on December 31 each calendar year of the Term, and further, that this Agreement shall automatically renew on January 1 of each subsequent calendar year absent the City's provision of written notice of non-renewal to Contractor at least five (5) calendar days prior to the end of the then current calendar year. Title to any supplies, materials, equipment, or other personal property shall remain in Contractor until fully paid for by the City.

- B. Time is of the Essence; Liquidated Damages. Contractor specifically acknowledges that TIME IS OF THE ESSENCE of this Agreement and that City will suffer financial loss if the Work is not completed in accordance with the deadlines specified in Section 4(A) above and within the Contract Documents. The City and Contractor also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the City if the Work is not completed within the specified times. In accordance with Georgia Department of Transportation Standard Specifications Construction 2021, Section 108.08, if Contractor fails to achieve Substantial Completion and/or Final Completion by October 2, 2023, Contractor shall be liable to the City for the sum of **\$213.00 per day** for each and every calendar day of unexcused delay in achieving Substantial Completion beyond October 2, 2023; and **\$213.00 per day** for each and every calendar day of unexcused delay in achieving Final Completion beyond October 2, 2023, as applicable. Any sums due and payable hereunder by Contractor shall be payable, not as a penalty, but as liquidated damages representing a reasonable pre-estimate of delay damages likely to be sustained by the City for any such breach, as it is mutually agreed that any such actual and consequential damages incurred by the City for such breach would otherwise be difficult to ascertain.
- C. Expediting Completion. The Contractor is accountable for completing the Work within the time period provided in the Contract Documents. If, in the judgment of the City, the Work is behind schedule and the rate of placement of work is inadequate to regain scheduled progress to ensure timely completion of the entire Work or a separable portion thereof, the Contractor, when so informed by the City, shall immediately take action to increase the rate of work placement by:
- (1) An increase in working forces;
 - (2) An increase in equipment or tools;
 - (3) An increase in hours of work or number of shifts;
 - (4) Expediting delivery of materials; and/or
 - (5) Other action proposed if acceptable to City.

Within five (5) calendar days after such notice from City that the Work is behind schedule, the Contractor shall notify the City in writing of the specific measures taken and/or planned to increase the rate of progress. The Contractor shall include an estimate as to the date of scheduled progress recovery. Should the City deem the plan of action inadequate, the Contractor shall take additional steps to make adjustments as necessary to its plan of action until it meets with the City's approval and such approval is provided in writing by the City.

- D. Partial Occupancy or Use. The City may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement between the City and Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the City and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the City, Contractor and Contract Administrator shall jointly inspect the area to be occupied, or portion of the Work to be used, in order to determine and record the condition of the Work. Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

Section 5. Contractor's Compensation; Time and Method of Payment

- A. Maximum Contract Price. For Contractor's performance and completion of the Project, the City shall pay Contractor a fee in accordance with the unit costs established in Contractor's Bid and as finally awarded by the City for a total sum not to exceed **TWO HUNDRED SIX THOUSAND FIVE HUNDRED AND EIGHTY-FOUR DOLLARS AND 31/100 (\$206,584.31)** (the "Maximum Contract Price"). At Contractor's own cost and expense, Contractor shall furnish all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary or convenient to the successful completion of the Project and the carrying out of all duties and obligations in accordance with the terms and conditions set forth in ITB 23-010, including any addenda thereto, Contractor's bid response, the General Conditions, as modified by the Supplementary Conditions, the Plans and Specifications and/or Technical Specifications, including all explanatory matter thereof, as prepared by the City, and any other documents forming the Contract Documents as enumerated in the General Conditions, all of which are made a part hereof and collectively constitute the Contract (the "Work"). Contractor represents that the Maximum Contract Price is sufficient to perform all of the Work set forth in and contemplated by this Agreement.

- B. Additional Payment/Retainage Requirements. Additional payment and retainage requirements are included as **Exhibit D**, attached hereto and incorporated herein by reference.
- C. Material Deviations. Any material deviations in tests or inspections performed, or times or locations required to complete such tests or inspections, and like deviations from the Work described in this Agreement shall be clearly communicated to the City *before* charges are incurred and shall be handled through written Change Orders, as described in Section 6 below. Whenever the Contract Administrator considers it necessary or advisable, it shall have authority to require inspection or testing of the Work. However, neither this authority of the Contract Administrator nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Contract Administrator to the Contractor, subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.
- D. Taxes. The City is a governmental tax-exempt entity and shall not be responsible for paying any taxes on any materials or services provided for herein. At Contractor's request, City shall provide evidence of its tax-exempt status. To the extent, if any, that the City furnishes tangible personal property to Contractor for incorporation into the Project, Contractor shall be responsible for paying the amount of tax owed for such tangible personal property.

Section 6. Change Orders

- A. Change Order Defined. A "Change Order" means a written modification of the Contract Documents, signed by representatives of the City and the Contractor with appropriate authorization.
- B. Right to Order Changes. The City reserves the right to order changes in the Work to be performed under this Agreement by altering, adding to, or deducting from the Work. All such changes shall be incorporated in written Change Orders and executed by the Contractor and the City. Such Change Orders shall specify the changes ordered and any necessary adjustment of compensation and completion time. If the Parties cannot reach an agreement on the terms for performing the changed work within a reasonable time to avoid delay or other unfavorable impacts as determined by the City in its sole discretion, the City shall have the right to determine reasonable terms, and the Contractor shall proceed with the changed work.
- C. Change Order Requirement. Any work added to the scope of this Agreement by a Change Order shall be executed under all the applicable conditions of this Agreement. No claim for additional compensation or extension of time shall be recognized, unless contained in a written Change Order duly executed on behalf of the City and the Contractor.

- D. Authority to Execute Change Order. The authority to execute a change order on behalf of the City shall be in accordance with the City's Procurement Policy, as may be amended from time to time.
- E. Minor Changes in the Work. The Contract Administrator will have the authority to order minor changes in the Work not involving adjustment in the Maximum Contract Price or extension of the Term and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order signed by the Contract Administrator. The Contractor shall carry out such written orders promptly. If the minor changes subsequently may affect adjustments in the Maximum Contract Price or the Term, the changes shall then be converted to a written Change Order by the requesting Party.

Section 7. Covenants of Contractor

- A. Ethics Code; Conflict of Interest.
 - (i) Contractor agrees that it shall not engage in any activity or conduct that would result in a violation of the City of Alpharetta Code of Ethics or any other similar law or regulation. Contractor certifies that to the best of his knowledge no circumstances exist which will cause a conflict of interest in performing the Work. Should Contractor become aware of any circumstances that may cause a conflict of interest during the Term of this Agreement, Contractor shall immediately notify the City. If the City determines that a conflict of interest exists, the City may require that Contractor take action to remedy the conflict of interest or terminate the Agreement without liability. The City shall have the right to recover any fees paid for services rendered by Contractor when such services were performed while a conflict of interest existed if Contractor had knowledge of the conflict of interest and did not notify the City within five (5) business days of becoming aware of the existence of the conflict of interest.
 - (ii) Contractor and the City acknowledge that it is prohibited for any person to offer, give, or agree to give any City employee or official, or for any City employee or official to solicit, demand, accept, or agree to accept from another person, a gratuity of more than nominal value or rebate or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or bid therefor. The Contractor and the City further acknowledge that it is prohibited for any payment, gratuity, or offer of employment to be made by or on behalf of a sub-

consultant under a contract to the prime Contractor or higher tier sub-consultant, or any person associated therewith, as an inducement for the award of a subcontract or order.

- B. Meetings. The Contractor is required to meet with the City's personnel, or designated representatives, to resolve technical or contractual problems that may occur during the Term of this Agreement at no additional cost to the City. Meetings will occur as problems arise and will be coordinated by the City or the Contract Administrator. The Contractor will be given a minimum of three (3) full business days' notice of meeting date, time, and location. Face-to-face meetings are desired. However, at the Contractor's option and expense, a conference call meeting may be substituted. Consistent failure to participate in problem resolution meetings, two consecutive missed or rescheduled meetings, or failure to make a good faith effort to resolve problems, may result in termination of the contract for cause.
- C. Expertise of Contractor. Contractor accepts the relationship of trust and confidence established between it and the City, recognizing that the City's intention and purpose in entering into this Agreement is to engage an entity with the requisite capacity, experience, and professional skill and judgment to provide the Work in pursuit of the timely and competent completion of the Work undertaken by Contractor under this Agreement. The Contractor agrees to use its best efforts, skill, judgment, and abilities to perform its obligations and to further the interests of City and the Project in accordance with City's requirements and procedures, and Contractor shall employ only persons duly qualified in the appropriate area of expertise to perform the Work described in this Agreement.
- D. Proper Execution by Contractor. Contractor agrees that it will perform its services in accordance with the usual and customary standards of the Contractor's profession or business and in compliance with all federal, state, and local laws, regulations, codes, ordinances, or orders applicable to the Project, including, but not limited to, O.C.G.A. § 50-5-63, any applicable records retention requirements, and Georgia's Open Records Act (O.C.G.A. § 50-18-70, *et seq.*). Any additional work or costs incurred as a result of error and/or omission by Contractor as a result of not complying with the Contract Documents or not meeting the applicable standard of care or quality, including but not limited to those of repeated procedures and compensation for the Contract Administrator's services or expenses, will be provided at Contractor's expense and at no additional cost to the City. This provision shall survive termination of this Agreement.

It is the Contractor's responsibility to be reasonably aware of all applicable laws, statutes, ordinances, building codes, and rules and regulations. If the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Contract Administrator and the City in writing of any portions of the Contract Documents that are at variance with the applicable laws, statutes, ordinances, building codes, and rules and regulations.

The Contractor's duties shall not be diminished by any approval by the City or Contract Administrator of Work completed or produced; nor shall any approval by the City or Contract Administrator of Work completed or produced release the Contractor from any liability therefor, it being understood that the City is ultimately relying upon the Contractor's skill and knowledge in performing the Work required under the Contract Documents.

Organization of the specifications into divisions, sections and articles, and arrangement of drawings shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of Work to be performed by any trade.

E. Familiarity with the Work.

- (i) *Contractor Familiarity with Work.* Contractor represents that it has familiarized itself with the nature and extent of the Contract Documents, the Work, work site(s), locality, and all local conditions, laws and regulations that in any manner may affect cost, progress, performance, or furnishing of the Work. Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various Contract Documents, site conditions, authorities, tests, reports and studies relative to that portion of the Work, as well as the information furnished by the City, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the Project site(s) affecting it. Contractor represents and agrees that it has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents. These obligations are for the purpose of facilitating construction by the Contractor and are not for the purpose of discovering errors, omissions, inconsistencies, or ambiguities in the Contract Documents; however, any errors, inconsistencies, omissions, or ambiguities discovered by the Contractor shall be reported promptly to the Contract Administrator and City in writing. Contractor represents that it has given the City written notice of all errors, omissions, inconsistencies, or ambiguities that the Contractor has discovered in the Contract Documents so far, and the written resolution thereof by the City is acceptable to the Contractor. Further, Contractor acknowledges that its obligation to give notice of all such errors, omissions, inconsistencies, or ambiguities shall be continuing during the Term of this Agreement. Any failure on the part of the Contractor to notify the Contract Administrator and City in writing of any errors, omissions, inconsistencies, or ambiguities in the Contract Documents that Contractor discovered or reasonably should have discovered shall result in a waiver and full release by the Contractor of any future arguments or defenses based on such errors, omissions, inconsistencies, or ambiguities against the City. Further, if the Contractor fails to perform its obligations pursuant to this

paragraph, the Contractor shall pay such costs and damages to the City as would have been avoided if the Contractor had performed such obligations.

- (ii) *Inspection of Prior Work.* If part of the Contractor's Work depends for proper execution or results upon construction or operations by a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Contract Administrator apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the City's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable, and Contractor shall be responsible for all costs and damages resulting from its failure to report reasonably discoverable defects.
- (iii) *Contractor Requests for Information.* If, with undue frequency (as determined by the City in its sole discretion), the Contractor requests information that is obtainable through reasonable examination and comparison of the Contract Documents, site conditions, and previous correspondence, interpretations or clarifications, the Contractor shall be liable to the City for reasonable charges from the Contract Administrator for the additional services required to review, research and respond to such requests for information.

- F. Supervision, Inspection and Construction Procedures. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Agreement, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety therefor and, except as stated below, shall be fully and solely responsible for the jobsite safety for such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the City and Contract Administrator and shall not proceed with that portion of the Work without further written instructions from the City or Contract Administrator as approved in writing by the City.

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of this Agreement. The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury or loss to: (a) employees and other persons who may be affected, (b) the Work and materials and equipment to be incorporated therein, whether in storage on or off the Project

site(s), under care, custody or control of the Contractor or Contractor's subcontractors or sub-subcontractors, and (c) other property at the Project site(s) or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the Project site(s) by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the City and Contract Administrator in writing.

- G. Tests and Inspections. Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, or ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made promptly at an appropriate time to avoid unreasonable delay in the Work. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the City, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Contract Administrator timely notice of when and where tests and inspections are to be made so that the Contract Administrator may be present for such procedures. Required permits or certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and delivered to the Contract Administrator within ten (10) calendar days of issuance.
- H. Budgetary Limitations. Contractor agrees and acknowledges that budgetary limitations are not a justification for breach of sound principals of Contractor's profession and industry. Contractor shall take no calculated risk in the performance of the Work. Specifically, Contractor agrees that, in the event it cannot perform the Work within the budgetary limitations established without disregarding sound principals of Contractor's profession and industry, Contractor will give written notice immediately to the City.
- I. City's Reliance on the Work. The Contractor acknowledges and agrees that the City does not undertake to approve or pass upon matters of expertise of the Contractor and that therefore, the City bears no responsibility for Contractor's Work performed under this Agreement. The Contractor acknowledges and agrees that the acceptance of Work by the City is limited to the function of determining

whether there has been compliance with what is required to be produced under this Agreement. The City will not, and need not, inquire into adequacy, fitness, suitability or correctness of Contractor's performance. Contractor further agrees that no approval of designs, plans, or specifications by any person, body, or agency shall relieve Contractor of the responsibility for adequacy, fitness, suitability, and correctness of Contractor's Work under professional and industry standards, or for performing services under this Agreement in accordance with sound and accepted professional and industry principles.

- J. Contractor's Reliance on Submissions by the City. Contractor must have timely information and input from the City in order to perform the Work required under this Agreement. Contractor is entitled to rely upon information provided by the City, but Contractor shall be required to provide immediate written notice to the City if Contractor knows or reasonably should know that any information provided by the City is erroneous, inconsistent, or otherwise problematic.
- K. Uncovering and Correction of Work. If a portion of the Work is covered contrary to the Contract Administrator's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Contract Administrator, be uncovered for examination by the Contract Administrator and be replaced at the Contractor's expense without change in the Agreement Term.

If a portion of the Work has been covered which the Contract Administrator has not specifically requested to examine prior to its being covered or which the Contract Documents did not require to remain uncovered until examined, the Contract Administrator may request to see such Work, and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the City's expense, which expense shall be agreed upon in writing prior to being incurred. If such Work is not in accordance with the Contract Documents, correction shall be at the Contractor's expense, unless the condition was caused by the City, in which event the City shall be responsible for payment of such costs including reasonable charges, if any, by the Contract Administrator for additional service, which expense shall be agreed upon in writing prior to being incurred.

If the City prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the City may do so instead of requiring its removal and correction, in which case the Maximum Contract Price will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

- L. Clean Up. Contractor shall keep the Project site(s) and surrounding area free from accumulation of waste materials or rubbish caused by operations under this Agreement. At completion of the Work, the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials. The Contractor shall also restore any

temporary easement areas to substantially their original condition (less any removed structures or vegetation for which the owner has been compensated). If the Contractor fails to clean up and remediate temporary easement areas as provided in the Contract Documents, the City may do so, and the cost thereof shall be charged to the Contractor.

M. Contractor's Representative. **RYAN HOGAN**, shall be authorized to act on Contractor's behalf with respect to the Work as Contractor's designated representative.

N. Independent Contractor. Contractor hereby covenants and declares that it is engaged in an independent business and agrees to perform the Work as an independent contractor and not as the agent or employee of the City. Nothing contained in this Agreement shall be construed to make the Contractor, or any of its employees, servants or subcontractors, an employee, servant or agent of the City for any purpose. The Contractor agrees to be solely responsible for its own matters relating to the time and place the Work is performed and the method used to perform such Work; the instrumentalities, tools, supplies, and/or materials necessary to complete the Work; hiring of subcontractors, agents, or employees to complete the Work; and the payment of employees, including benefits and compliance with Social Security, withholding, and all other regulations governing such matters. The Contractor agrees to be solely responsible for its own acts and those of its subordinates, employees, and subcontractors during the life of this Agreement. There shall be no contractual relationship between any subcontractor or supplier and the City by virtue of this Agreement with the Contractor. Any provisions of this Agreement that may appear to give the City the right to direct Contractor as to the details of the services to be performed by Contractor or to exercise a measure of control over such services will be deemed to mean that Contractor shall follow the directions of the City with regard to the results of such services only. It is further understood that this Agreement is not exclusive, and the City may hire additional entities to perform Work related to this Agreement.

Inasmuch as the City and the Contractor are independent of each other, neither has the authority to bind the other to any third person or otherwise to act in any way as the representative of the other, unless otherwise expressly agreed to in writing signed by both Parties hereto. The Contractor agrees not to represent itself as the City's agent for any purpose to any party or to allow any employee of the Contractor to do so, unless specifically authorized, in advance and in writing, to do so, and then only for the limited purpose stated in such authorization. The Contractor shall assume full liability for any contracts or agreements the Contractor enters into on behalf of the City without the express knowledge and prior written consent of the City.

O. Responsibility of Contractor and Indemnification of City. The Contractor covenants and agrees to take and assume all responsibility for the Work rendered in connection with this Agreement. The Contractor shall bear all losses and

damages directly or indirectly resulting to it and/or the City on account of the performance or character of the Work rendered pursuant to this Agreement. To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold harmless the City and the City's elected and appointed officials, officers, boards, commissions, employees, representatives, consultants, servants, agents, attorneys and volunteers (individually an "Indemnified Party" and collectively "Indemnified Parties") from and against any and all claims, suits, actions, judgments, injuries, damages, losses, costs, expenses and liability of any kind whatsoever, including, but not limited to, attorney's fees and costs of defense ("Liabilities"), which may arise from or be the result of alleged willful, negligent, or tortious act or omission arising out of the Work, performance of contracted services, or operations by the Contractor, any subcontractor, anyone directly or indirectly employed by the Contractor or subcontractor, or anyone for whose acts the Contractor or subcontractor may be liable, regardless of whether or not the act or omission is caused in part by a party indemnified hereunder. This indemnity obligation does not include Liabilities caused by or resulting from the sole negligence of an Indemnified Party. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this provision.

In any and all claims against an Indemnified Party, by any employee of the Contractor, its subcontractor, anyone directly or indirectly employed by the Contractor or subcontractor, or anyone for whose acts the Contractor or subcontractor may be liable, the indemnification obligation set forth in this provision shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under workers' or workmen's compensation acts, disability benefit acts, or other employee benefit acts. This obligation to indemnify, defend, and hold harmless the Indemnified Party(ies) shall survive expiration or termination of this Agreement, provided that the claims are based upon or arise out of actions or omissions that occurred during the performance of this Agreement.

P. Insurance.

- (1) Requirements: The Contractor shall have and maintain in full force and effect for the duration of this Agreement, insurance insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work by the Contractor, its agents, representatives, employees or subcontractors. All policies shall be subject to approval by the City as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the City Administrator.
- (2) Minimum Limits of Insurance: Contractor shall maintain the following insurance policies with coverage and limits no less than:

- (a) *Commercial General Liability*: \$2,000,000 (two million dollars) combined single limit per occurrence aggregate comprehensive/extended/enhanced Commercial General Liability policy with coverage including bodily and personal injury, sickness, disease or death, injury to or destruction of property, including loss of use resulting therefrom, damage to premises/operations, products/completed operations, independent consultants and contractual liability (specifically covering the indemnity), broad-form property damage, and underground, explosion and collapse hazard. This coverage may be achieved by using an excess or umbrella policy. The policy or policies must be on “an occurrence” basis (“claims made” coverage is not acceptable). If a general aggregate limit applies, the general aggregate limit shall apply separately to this project/location, and the general aggregate limit shall be twice the required occurrence limit.
 - (b) *Commercial Automobile Liability (owned, non-owned, hired)*: \$1,000,000 (one million dollars) for bodily or personal injury liability (including sickness, disease or death) and \$100,000 (one hundred thousand dollars) for property damage liability (including destruction of property), combined single limit per occurrence aggregate comprehensive Commercial Automobile liability coverage (owned, non-owned, hired), including loss of use resulting therefrom.
 - (c) *Workers’ Compensation and Employers’ Liability*: Workers’ Compensation policy with limits as required by the State of Georgia and Employers’ Liability limits of \$500,000 (five hundred thousand dollars) per occurrence or disease, per employee.
 - (d) *Commercial Umbrella Liability Coverage*: \$5,000,000 (five million dollars) per occurrence and in the aggregate shall be provided and will apply over all liability policies, without exception, including but not limited to Commercial General Liability, Commercial Automobile Liability, and Employers’ Liability.
- (3) Deductibles and Self-Insured Retentions: Any deductibles or self-insured retentions must be declared to and approved by the City in writing so that the City may ensure the financial solvency of the Contractor; self-insured retentions should be included on the certificate of insurance.
- (4) Other Insurance Provisions: Each policy shall contain, or be endorsed to contain, the following provisions respectively:
- (a) General Liability, Automobile Liability and (if applicable) Umbrella Liability Coverage.

- (i) *Additional Insured Requirement.* The City and City's elected and appointed officials, officers, boards, commissioners, employees, representatives, consultants, servants, agents and volunteers (individually "Insured Party" and collectively "Insured Parties") shall be named as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased, or used by the Contractor; automobiles owned, leased, hired, or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Insured Parties. Nothing contained in this section shall be construed to require the Contractor to provide liability insurance coverage to any Insured Party for claims asserted against such Insured Party for its sole negligence.
 - (ii) *Primary Insurance Requirement.* The Contractor's insurance coverage shall be primary noncontributing insurance as respects to any other insurance or self-insurance available to the Insured Parties. Any insurance or self-insurance maintained by the Insured Parties shall be in excess of the Contractor's insurance and shall not contribute with it.
 - (iii) *Reporting Requirement.* Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Insured Parties.
 - (iv) *Separate Coverage.* Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to limits of insurance provided.
 - (v) *Defense Costs/Cross Liability.* Coverage shall be provided on a "pay on behalf" basis, with defense costs payable in addition to policy limits. There shall be no cross-liability exclusion.
 - (vi) *Subrogation.* The insurer shall agree to waive all rights of subrogation against the Insured Parties for losses arising from Work performed by the Contractor for the City.
- (b) Workers' Compensation Coverage: The insurer providing Workers' Compensation Coverage will agree to waive all rights of

subrogation against the Insured Parties for losses arising from Work performed by the Contractor for the City.

(c) All Coverages:

- (i) *Notice Requirement.* Each insurance policy required by this Agreement shall be endorsed to state that coverage shall not be reduced, suspended, voided, or canceled except after thirty (30) calendar days prior written notice (or 10 calendar days if due to non-payment) has been given to the City. The City reserves the right to accept alternate notice terms and provisions, provided they meet the minimum requirements under Georgia law.
- (ii) *Starting and Ending Dates.* Policies shall have concurrent starting and ending dates.
- (iii) *Incorporation of Indemnification Obligations.* Policies shall include an endorsement incorporating the indemnification obligations assumed by the Contractor under the terms of this Agreement, including but not limited to Section 7(O) of this Agreement.

- (5) Acceptability of Insurers: The insurance to be maintained by Contractor must be issued by a company licensed or approved by the Insurance Commissioner to transact business in the State of Georgia. Such insurance shall be placed with insurer(s) with an A.M. Best Policyholder's rating of no less than "A-" and with a financial rate of Class VII or greater. The Contractor shall be responsible for any delay resulting from the failure of its insurer to provide proof of coverage in the prescribed form.
- (6) Verification of Coverage: Contractor shall furnish to the City for City approval certificates of insurance and endorsements to the policies evidencing all coverage required by this Agreement prior to the start of work. Without limiting the general scope of this requirement, Contractor is specifically required to provide an endorsement naming the City as an additional insured when required. The certificates of insurance and endorsements for each insurance policy are to be on a form utilized by Contractor's insurer in its normal course of business and are to be signed by a person authorized by that insurer to bind coverage on its behalf, unless alternate sufficient evidence of their validity and incorporation into the policy is provided. The City reserves the right to require complete, certified copies of all required insurance policies at any time. The Contractor shall provide proof that any expiring coverage has been renewed or replaced prior to the expiration of the coverage.

- (7) Contractor's Duty to Provide Notice of Reduction in Coverage: Contractor shall provide written notice to City at least thirty (30) days prior to any reduction, suspension, voiding, or cancellation of coverage. Contractor shall require the same notice to the City in all subcontractor contracts.
 - (8) Subcontractors: Contractor shall either (1) ensure that its insurance policies (as described herein) cover all subcontractors and the Work performed by such subcontractors or (2) ensure that any subcontractor secures separate policies covering that subcontractor and its Work. All coverage for subcontractors shall be subject to all of the requirements stated in this Agreement, including, but not limited to, naming the Insured Parties as additional insureds.
 - (9) Claims-Made Policies: Contractor shall extend any claims-made insurance policy for at least six (6) years after termination or final payment under the Agreement, whichever is later, and have an effective date which is on or prior to the Effective Date.
 - (10) Progress Payments: The making of progress payments to the Contractor shall not be construed as relieving the Contractor or its subcontractor or insurance carriers from providing the coverage required in this Agreement.
- Q. Bonds. The Contractor shall provide Performance and Payment bonds on the forms attached hereto within **Exhibit A**. All bond sureties shall be licensed to do business in Georgia and listed on the Treasury Department's most current list (Circular 570 as amended). All bonds shall be approved as to form and as to the solvency of the surety by an officer of the City negotiating this Agreement. Contractor shall maintain the payment and performance bonds throughout the Term of this Agreement and shall increase the amount of such bonds if the total payment amount of this Agreement increases. Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under this Agreement, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.
- R. Assignment of Agreement. The Contractor covenants and agrees not to assign or transfer any interest in, or delegate any duties of this Agreement, without the prior express written consent of the City. As to any approved subcontractors, the Contractor shall be solely responsible for reimbursing them, and the City shall have no obligation to them.
- S. Employment of Unauthorized Aliens Prohibited – E-Verify Affidavit. Pursuant to O.C.G.A. § 13-10-91, the Contractor hereby verifies that it has, prior to executing this Agreement, executed a notarized affidavit, the form of which is provided in **Exhibit B**, and submitted such affidavit to City. Further, Contractor hereby agrees to comply with the requirements of the federal Immigration Reform and Control

Act of 1986 (IRCA), P.L. 99-603, O.C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-10-1-.02.

In the event the Contractor employs or contracts with any subcontractor(s) in connection with the covered contract, the Contractor agrees to secure from such subcontractor(s) attestation of the subcontractor's compliance with O.C.G.A. § 13-10-91 and Rule 300-10-1-.02 by the subcontractor's execution of the subcontractor affidavit, the form of which is provided in **Exhibit A**, which subcontractor affidavit shall become part of the contractor/subcontractor agreement; or evidence that the subcontractor is not required to provide such an affidavit because it is licensed and in good standing as noted in sub-subsection (2); or, in the case of a sole proprietor subcontractor, a copy of subcontractor's state issued driver's license or state issued identification card as noted in sub-subsection (3) above. Contractor agrees to provide a completed copy of the above-required materials to the City within five (5) business days of receipt from any subcontractor.

Contractor agrees that the employee-number category designated below is applicable to the Contractor.

☐ 500 or more employees.
☒ 100 or more employees.
☐ Fewer than 100 employees.

Contractor hereby agrees that, in the event Contractor employs or contracts with any subcontractor(s) in connection with this Agreement and where the subcontractor is required to provide an affidavit pursuant to O.C.G.A. § 13-10-91, the Contractor will secure from the subcontractor(s) such subcontractor(s)' indication of the above employee-number category that is applicable to the subcontractor.

The above requirements shall be in addition to the requirements of State and federal law and shall be construed to be in conformity with those laws.

T. Records, Reports and Audits.

(1) Records:

- (a) Books, records, documents, account ledgers, data bases, and similar materials relating to the Work performed for the City under this Agreement ("Records") shall be established and maintained by the Contractor in accordance with applicable law and requirements prescribed by the City with respect to all matters covered by this Agreement. Such Records shall include, but not be limited to, current and complete books of account of all transactions with respect to the Project. Such books of account shall be kept in accordance with sound accounting practices consistently applied,

and otherwise in such manner as shall be reasonably required by the City. Except as otherwise authorized or required, such Records shall be maintained for at least three (3) years from the date that final payment is made to Contractor by City under this Agreement. Furthermore, Records that are the subject of audit findings shall be retained for three (3) years or until such audit findings have been resolved, whichever is later.

- (b) All costs claimed or anticipated to be incurred in the performance of this Agreement shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders, or other accounting documents pertaining in whole or in part to this Agreement shall be clearly identified and readily accessible.
 - (2) Reports and Information: Upon request, the Contractor shall furnish to the City any and all Records in the form requested by the City. All Records stored on a computer database must be of a format compatible with the City's computer systems and software.
 - (3) Audits and Inspections: At any time during normal business hours and as often as the City may deem necessary, Contractor shall make available to the City or City's representative(s) for examination all Records. The Contractor will permit the City or City's representative(s) to audit, examine, and make excerpts or transcripts from such Records. Contractor shall provide proper facilities for City or City's representative(s) to access and inspect the Records, or, at the request of the City, shall make the Records available for inspection at the City's office. Further, Contractor shall permit the City or City's representative(s) to observe and inspect any or all of Contractor's facilities and activities during normal hours of business for the purpose of evaluating Contractor's compliance with the terms of this Agreement. In such instances, the City or City's representative(s) shall not interfere with or disrupt such activities.
- U. Confidentiality. Contractor acknowledges that it may receive confidential information of the City and that it will protect the confidentiality of any such confidential information and will require any of its subcontractors, contractors, and/or staff to likewise protect such confidential information. The Contractor agrees that confidential information it receives or such reports, information, opinions, or conclusions that Contractor creates under this Agreement shall not be made available to, or discussed with, any individual or organization, including the news media, without prior written approval of the City. Contractor shall exercise reasonable precautions to prevent the unauthorized disclosure and use of City information whether specifically deemed confidential or not.

Contractor acknowledges that the City's disclosure of documentation is governed by Georgia's Open Records Act, and Contractor further acknowledges that, if Contractor submits records containing trade secret information and if Contractor wishes to keep such records confidential, Contractor must submit and attach to such records an affidavit affirmatively declaring that specific information in the records constitutes trade secrets pursuant to Article 27 of Chapter 1 of Title 10, and the Parties shall follow the requirements of O.C.G.A. § 50-18-72(a)(34) related thereto.

- V. Licenses, Certifications and Permits. The Contractor covenants and declares that it has obtained all diplomas, certificates, licenses, permits, or the like required of the Contractor by any and all national, state, regional, county or local boards, agencies, commissions, committees or other regulatory bodies in order to perform the Work contracted for under this Agreement; provided that some permits or licenses related to the Project may be obtained as part of the Work and shall be obtained as required. The Contractor shall secure and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work, which are customarily secured after execution of the Agreement and which are legally required. Contractor shall furnish copies of such permits, licenses, etc. to the City within ten (10) days after issuance.
- W. Personnel
- (i) *Employment of City Personnel.* Contractor shall not employ any person or persons in the employ of, or having any contractual relationship with, the City for any Work required by the terms of this Agreement without the written permission of the City.
- (iii) *Subcontractors.* Contractor shall not subcontract with any third party for the performance of any portion of the Work without the prior written consent of the City. By appropriate written agreement, Contractor shall require each subcontractor, to the extent of the Work to be performed by the subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all obligations and responsibilities, including the responsibility for safety of the subcontractor's Work, which Contractor, by the Contract Documents, assumes toward the City. Each subcontract agreement for a portion of the Work must contain a provision allowing assignment of the subcontract agreement by Contractor to the City in the event that this Agreement is terminated by the City for cause and City notifies Contractor and subcontractor of its intent to accept such assignment; provided that any assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Agreement. Contractor shall be solely responsible for any such subcontractors in terms of performance and compensation.
- X. Authority to Contract. The Contractor covenants and declares that it has obtained all necessary approvals of its board of directors, stockholders, general partners,

limited partners, or similar authorities to simultaneously execute and bind Contractor to the terms of this Agreement, if applicable.

- Y. Ownership of Work. All reports, designs, drawings, plans, specifications, schedules, work product, and other materials, including, but not limited to, those in electronic form, prepared or in the process of being prepared for the Work to be performed by the Contractor (“Materials”) shall be the property of the City, and the City shall be entitled to full access and copies of all Materials in the form prescribed by the City. Any Materials remaining in the hands of the Contractor or subcontractor upon completion or termination of the Work shall be delivered immediately to the City whether or not the Project or Work is commenced or completed, provided; however, that Contractor may retain a copy of any deliverables for its records. The Contractor assumes all risk of loss, damage or destruction of or to Materials. If any Materials are lost, damaged, or destroyed before final delivery to the City, the Contractor shall replace them at its own expense. Any and all copyrightable subject matter in all Materials is hereby assigned to the City, and the Contractor agrees to execute any additional documents that may be necessary to evidence such assignment.
- Z. Nondiscrimination. In accordance with Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and all other provisions of Federal law, the Contractor agrees that, during performance of this Agreement, Contractor, for itself, its assignees and successors in interest, will not discriminate against any employee or applicant for employment, any subcontractor, or any supplier because of race, color, creed, national origin, gender, age or disability. In addition, Contractor agrees to comply with all applicable implementing regulations and shall include the provisions of this paragraph in every subcontract for services contemplated under this Agreement.

Section 8. Covenants of the City

- A. Right of Entry. The City shall provide for right of entry for Contractor and Contractor’s equipment as required for Contractor to complete the Work, provided that Contractor shall not unreasonably encumber the Project site(s) with materials or equipment.
- B. City’s Representative. **PETE SEWCZWICZ, Director of Public Works**, shall be authorized to act on the City’s behalf with respect to the Work as the City’s designated representative on this Project, provided that any changes to the Work or the terms of this Agreement must be approved as provided in Section 6 above.

Section 9. Final Project Documents

Prior to final payment, Contractor shall deliver to City a written assignment of all warranties, guaranties, certificates, permits, and other documents, including

without limitation, all contractors' and manufacturers' warranties. At such time, Contractor shall also deliver to the City copies of all as-built drawings, operations, and maintenance manuals, and any other pertinent documents relating to the construction and operation of the Work that is not otherwise in the possession of the City.

Section 10. Termination

- A. For Convenience. The City may terminate this Agreement for convenience at any time upon providing written notice thereof to Contractor at least seven (7) calendar days in advance of the termination date.
- B. For Cause. The Contractor shall have no right to terminate this Agreement prior to completion of the Work, except in the event of City's failure to pay the Contractor within thirty (30) calendar days of Contractor providing the City with notice of a delinquent payment and a reasonable opportunity to cure. The City may terminate this Agreement for cause as provided in Section 11 of this Agreement. The City shall give Contractor at least seven (7) calendar days' written notice of its intent to terminate the Agreement for cause and the reasons therefor, and if Contractor, or its Surety, fails to cure the default within that period, the termination shall take place without further notice. The City shall then make alternative arrangements for completion of the Project.
- C. Statutory Termination. In compliance with O.C.G.A. § 36-60-13, this Agreement shall be deemed terminated as provided in Section 4(A) of this Agreement. Further, this Agreement shall terminate immediately and absolutely at such time as appropriated or otherwise unobligated funds are no longer available to satisfy the obligation of the City.
- D. Payment. Provided that no damages are due to the City for Contractor's failure to perform in accordance with this Agreement, and except as otherwise provided herein, the City shall, upon termination for convenience or statutory termination, pay Contractor for Work performed prior to the date of termination in accordance with Section 5 herein. The City shall have no further liability to Contractor for such termination. At its sole discretion, the City may pay Contractor for additional value received as a result of Contractor's efforts, but in no case shall said payment exceed any remaining unpaid portion of the Maximum Contract Price.

If this Agreement is terminated for cause, the City will make no further payment to the Contractor or its Surety until the Project is completed and all costs of completing the Project are paid. If the unpaid balance of the amount due the Contractor, according to this Agreement, exceeds the cost of finishing the Project, City shall provide payment to the Contractor (or its Surety) for services rendered and expenses incurred prior to the termination date, provided that such payment shall not exceed the unpaid balance of the amount otherwise payable under this Agreement minus the cost of completing the Project. If the costs of completing the Project exceed the unpaid balance, the Contractor or its Surety shall pay the difference to the City.

- E. Assumption of Contracts. The City reserves the right in termination for cause to take assignment of all contracts between the Contractor and its subcontractors, vendors, and suppliers. The City will promptly notify the Contractor of the contracts the City elects to assume. Upon receipt of such notice, the Contractor shall promptly take all steps necessary to effect such assignment.
- F. Conversion to Termination for Convenience. If the City terminates this Agreement for cause and it is later determined that the City did not have grounds to do so, the termination will be converted to and treated as a termination for convenience under the terms of Section 10(A) above.
- G. Requirements Upon Termination. Upon termination, the Contractor shall: (1) promptly discontinue all services, cancel as many outstanding obligations as possible if requested to do so by the City, and not incur any new obligations, unless the City directs otherwise; and (2) promptly deliver to the City all data, drawings, reports, summaries, and such other information and materials as may have been generated or used by the Contractor in performing this Agreement, whether completed or in process, in the form specified by the City.
- H. Reservation of Rights and Remedies. The rights and remedies of the City and the Contractor provided in this Section are in addition to any other rights and remedies provided under this Agreement or at law or in equity. Specifically, and without limiting the generality of the foregoing, City may, with or without terminating this Agreement, bring an action against Consultant to recover from Consultant all damages, recoverable at law, suffered, incurred or sustained by City as a result of, by reason of, in connection with, or arising out of Consultant's default.

Section 11. City's Rights; Contractor Default

- A. City Rights Related to the Work.
 - (i) *City's Right to Stop the Work.* If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents, as required by the Contract Administrator, or persistently fails to carry out Work in accordance with the Contract Documents, the City may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the City to stop the Work shall not give rise to a duty on the part of the City to exercise this right for the benefit of the Contractor or any other person or entity. Such a stoppage of Work shall not extend the Expected Date of Final Completion of the Work.
 - (ii) *City's Right to Carry Out the Work.* If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven (7) calendar day period after receipt of written notice from the City to commence and/or continue correction of such default or neglect with diligence and promptness, the City may, without prejudice to other remedies the City may have,

correct such deficiencies. In such case, an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including City's expenses and compensation for the Architect/Engineer's and/or Contract Administrator's additional services (if any) made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the City.

- B. Contractor Default. For the purposes of this Agreement, Contractor shall be in default if any of the following occur during the Term of this Agreement: (a) a failure to fulfill in a timely and proper manner Contractor's obligations under this Agreement; (b) Contractor violates any of the material provisions, agreements, representations or covenants of this Agreement or any applicable city, state, or federal laws, which do not fall within the force majeure provisions of this Agreement; (c) the Contractor becomes insolvent or unable to pay its debts as they mature, or makes an assignment for the benefit of creditors, or files a bankruptcy petition under the United States Bankruptcy Code; or (d) Contractor is the subject of a judgment or order for payment of money, which judgment or order exceeds \$100,000 and is no longer subject to appeal or, in the opinion of the City, would be fruitless to appeal and where (i) such judgment or order shall continue un-discharged or unpaid for a period of thirty (30) calendar days and an insurer has not acknowledged that such judgment or order is fully covered by a relevant policy of insurance, or (ii) the City is otherwise reasonably satisfied that such judgment or order is not likely to be satisfied or complied with within sixty (60) calendar days of its issuance.

In the event of Contractor's default under this Agreement, the City shall send written notice to the Contractor setting forth the specific instances of the default and providing the Contractor with at least seven (7) calendar days to cure or otherwise remedy the default to the reasonable satisfaction of the City. If the default is not remedied during the stated cure period, then the City may, at its election: (a) in writing terminate the Agreement in whole or in part; (b) cure such default itself and charge the Contractor for the costs of curing the default against any sums due or which become due to the Contractor under this Agreement; and/or (c) pursue any other remedy then available, at law or in equity, to the City for such default.

Section 12. Miscellaneous

- A. Complete Agreement. This Agreement, including all of the Contract Documents, constitutes the complete agreement between the Parties and supersedes any and all other agreements, either oral or in writing, between the Parties with respect to the subject matter of this Agreement. No other agreement, statement, or promise relating to the subject matter of this Agreement not contained in this Agreement or the Contract Documents shall be valid or binding. This Agreement may be modified or amended only by a written document signed by representatives of both Parties with appropriate authorization.

- B. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Georgia without regard to choice of law principles. If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement, the rules, regulations, statutes and laws of the State of Georgia will control. Any action or suit related to this Agreement shall be brought in the Superior Court of Fulton County, Georgia, or the U.S. District Court for the Northern District of Georgia, and Contractor submits to the jurisdiction and venue of such court.
- C. **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.
- D. **Invalidity of Provisions; Severability.** Should any article(s) or section(s) of this Agreement, or any part thereof, later be deemed illegal, invalid or unenforceable by a court of competent jurisdiction, the offending portion of the Agreement should be severed, and the remainder of this Agreement shall remain in full force and effect to the extent possible as if this Agreement had been executed with the invalid portion hereof eliminated, it being the intention of the Parties that they would have executed the remaining portion of this Agreement without including any such part, parts, or portions that may for any reason be hereafter declared invalid.
- E. **Business License.** Prior to commencement of the Work to be provided hereunder, Contractor shall apply to the City for a business license, pay the applicable business license fee, and maintain said business license during the Term of this Agreement, unless Contractor provides evidence that no such license is required.
- F. **Notices.**

(1) Communications Relating to Day-to-Day Activities.

All communications relating to the day-to-day activities of the Work shall be exchanged between **PETE SEWCZWICZ, Director of Public Works**, for the City, and **RYAN HOGAN**, for the Contractor.

(2) Official Notices.

All other notices, requests, demands, writings, or correspondence, as required by this Agreement, shall be in writing and shall be deemed received, and shall be effective, when (1) personally delivered, or (2) on the third calendar day after the postmark date when mailed by certified mail, postage prepaid, return receipt requested, or (3) upon actual delivery when sent *via* national overnight commercial carrier to the Party at the addresses given below, or at a substitute address previously furnished to the other Party by written notice in accordance herewith:

NOTICE TO CITY shall be sent to:

City of Alpharetta, Georgia
Attn: Pete Sewczwicz, Director of Public Works
Alpharetta City Hall
2 Park Plaza
Alpharetta, GA 30009
Tel: 678-297-6219
Email: psewczwicz@alpharetta.ga.us
With a copy to City's Project Manager:

City of Alpharetta
Attn: Jared Wilson
1790 Hembree Road
Alpharetta, GA 30009
Tel: 678-297-6227
Email: jwilson@alpharetta.ga.us

NOTICE TO CONTRACTOR shall be sent to:

Tri Scapes, Inc.
Attn: Ryan Hogan
1595 Peachtree Parkway
Suite 204-396
Cumming, GA 30041

- G. Waiver of Agreement. No failure by the City to enforce any right or power granted under this Agreement, or to insist upon strict compliance by Contractor with this Agreement, and no custom or practice of the City at variance with the terms and conditions of this Agreement shall constitute a general waiver of any future breach or default or affect the City's right to demand exact and strict compliance by Contractor with the terms and conditions of this Agreement. Further, no express waiver shall affect any term or condition other than the one specified in such waiver, and that one only for the time and manner specifically stated.
- H. Survival. All sections of this Agreement which by their nature should survive termination will survive termination, including, without limitation, confidentiality obligations, warranties, and insurance maintenance requirements.
- I. Sovereign Immunity. Nothing contained in this Agreement shall be construed to be a waiver of the City's sovereign immunity or any individual's qualified good faith or official immunities.
- J. No Personal Liability. Nothing herein shall be construed as creating any individual or personal liability on the part of any of City's elected or appointed officials,

officers, boards, commissions, employees, representatives, consultants, servants, agents, attorneys or volunteers. No such individual shall be personally liable to the Contractor or any successor in interest in the event of any default or breach by the City or for any amount which may become due to the Contractor or successor or on any obligation under the terms of this Agreement. Likewise, Contractor's performance of services under this Agreement shall not subject Contractor's individual employees, officers, or directors to any personal liability, except where Contractor is a sole proprietor. The Parties agree that their sole and exclusive remedy, claim, demand, or suit shall be directed and/or asserted only against Contractor or the City, respectively, and not against any elected or appointed official, officers, boards, commissions, employees, representatives, consultants, servants, agents, attorneys and volunteers.

- K. Force Majeure. Neither the City nor Contractor shall be liable for their respective non-negligent or non-willful failure to perform or shall be deemed in default with respect to the failure to perform (or cure a failure to perform) any of their respective duties or obligations under this Agreement or for any delay in such performance due to: (i) any cause beyond their respective reasonable control; (ii) any act of God; (iii) any change in applicable governmental rules or regulations rendering the performance of any portion of this Agreement legally impossible; (iv) earthquake, fire, explosion, or flood; (v) strike or labor dispute, excluding strikes or labor disputes by employees and/or agents of Contractor; (vi) delay or failure to act by any governmental or military authority; or (vii) any war, hostility, embargo, sabotage, civil disturbance, riot, insurrection, or invasion. In such event, the time for performance shall be extended by an amount of time equal to the period of delay caused by such acts, and all other obligations shall remain intact.
- L. Headings. All headings herein are intended for convenience and ease of reference purposes only and in no way define, limit, or describe the scope or intent thereof, or of this Agreement, or in any way affect this Agreement.
- M. No Third-Party Rights. This Agreement shall be exclusively for the benefit of the Parties and shall not provide any third parties with any remedy, claim, liability, reimbursement, cause of action or other right.
- N. Successors and Assigns. Subject to the provision of this Agreement regarding assignment, each Party binds itself, its partners, successors, assigns, and legal representatives to the other Party hereto, its partners, successors, assigns, and legal representatives with respect to all covenants, agreements, and obligations contained in the Contract Documents.
- O. Agreement Construction and Interpretation. Contractor represents that it has reviewed and become familiar with this Agreement. The Parties hereto agree that, if an ambiguity or question of intent or interpretation arises, this Agreement is to be construed as if the Parties had drafted it jointly, as opposed to being construed against a Party because it was responsible for drafting one or more provisions of the Agreement. In the interest of brevity, the Contract Documents may omit

modifying words such as “all” and “any” and articles such as “the” and “an,” but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

- P. Material Condition. Each term of this Agreement is material, and Contractor’s breach of any term of this Agreement shall be considered a material breach of the entire Agreement and shall be grounds for termination or exercise of any other remedies available to the City at law or in equity.
- Q. Use of Singular and Plural. Words or terms used as nouns in the Agreement shall be inclusive of their singular and plural forms, unless the context of their usage clearly requires contrary meaning.
- R. Exhibits. Each and every exhibit referred to or otherwise mentioned in this Agreement is attached to this Agreement and is and shall be construed to be made a part of this Agreement by such reference or other mention at each point at which such reference or other mention occurs, in the same manner and with the same effect as if each exhibit were set forth in full and at length every time it is referred to or otherwise mentioned.
- S. Defined Terms. Capitalized terms used in this Agreement shall have the meanings ascribed to them at the point where first defined, irrespective of where their use occurs, with the same effect as if the definitions of such terms were set forth in full and at length every time such terms are used.
- T. Pronouns. Wherever appropriate in this Agreement, personal pronouns shall be deemed to include the other genders and the singular to include the plural.

(Signatures on following page)

IN WITNESS WHEREOF, the parties hereto have each caused this Contract to be executed and delivered by a duly authorized officer, agent or official as of the date set forth below.

CITY OF ALPHARETTA, GEORGIA

By: _____
Jim Gilvin, Mayor

Date: _____

Approved as to substance:

Chris Lagerbloom, City Administrator

Approved as to form:
JARRARD & DAVIS, LLP

Ed Howden, City Attorney

TRI SCAPES, INC.

By: _____
Rebecca Martin, President

EXHIBIT A

CITY SOLICITATION DOCUMENT INVITATION TO BID 23-010

CITY OF ALPHARETTA INVITATION TO BID (ITB)

ITB Number: 23-010

ITB Title: Pedestrian Safety Barrier at City Center



ITB and CONTRACT INFORMATION, GENERAL CONDITIONS

Contents:

- ITB Information
- General Contract Terms & Conditions
- Appendix A City Truck Routes
- Appendix B Informational Forms
- Appendix C Sample Contract Bond Forms
- Appendix D General Conditions
- Appendix E Technical Conditions
- Appendix F Supplemental Conditions

ITB Information

1. Bidder Acknowledgement

By submitting a Bid, the authorized signer and represented firm have read, understand, and agree to information within the Invitation to Bid (ITB) documents including all required and informational documents, files, and forms posted to Bonfire project webpage for this ITB. These documents make up the ITB. They will become part of any contract that the City of Alpharetta (City) may award because of response to this ITB.

By sending a Bid, the Bidder acknowledges and agrees that:

- A. Bidder has carefully examined the plans, specifications, and related documents for this project and fully understands the conditions, provisions, and requirements of the proposed Work within this ITB.
- B. Bidder acknowledges that they completed a personal examination of the site of the proposed work (if applicable).
- C. Bidder will furnish all necessary labor, materials, machinery, tools, apparatus, and other means of construction necessary for completion of the project within the time set herein and in accordance with the Contract Documents.
- D. Bidder understands the quantities mentioned are approximate only and are subject to either increase or decrease and proposes to perform any increased or decreased quantities of work or extra work on the basis provided for in the specifications.
- E. Bidder has given the City written notice of all conflicts, errors, or discrepancies discovered in the Contract Documents.
- F. The Bidder is satisfied with the actual conditions and requirements of the proposed Work.

Acknowledging these statements, the Bidder proposes and agrees that if the Bidder's Bid is accepted, the Bidder will contract with the City in full agreement with the Contract Documents.

2. City's Authority and Right to Investigate

This procurement is issued under the authority of the City of Alpharetta's Procurement Policy and following State of Georgia and Federal applicable laws. The City has the authority to reject all bids or any bid that has not followed or met the City's scope of work or specifications (non-responsive) or reject any bid that shows that a bidder cannot meet one or more of the requirements (non-responsibility). The City has the right to ignore unimportant mistakes that do not affect the work or service to be provided, the purchase of requested item(s), or Bid pricing in order to award a contract that is in the best interest of the City.

The City may make such investigations as considered necessary to determine the ability of the Bidder to provide the supplies and/or perform the services specified.

3. Receipt of Bids and Public Inspection

a. Public Information:

During the opening of Bids, the Bidder's name, Bid amount and other pertinent information will be read aloud and recorded. No other information will be disclosed at that time. Each Bid and all information received in response to this ITB, including copyrighted material, is deemed "public record" in accordance with O.C.G.A § 50-18-70, et seq., and will be subject to Public inspection and copying shortly after Bid opening with the following four exceptions:

1. Bona fide trade secrets that have been specifically identified, properly marked, separated, and documented and to which the Bidder has attached an affidavit declaring that such specific information constitutes a trade secret pursuant to Article 27 of Chapter 1 of Title 10 of the Official Code of Georgia Annotated, will not be disclosed; provided however, if the City determines that such specifically identified information does not in fact constitute a trade secret, the City will notify the Bidder of its intent to disclose such information prior to its initial disclosure as required by law;
2. Matters involving individual safety, as determined by the City, may be withheld from disclosure;
3. Any company financial information in the form of records containing tax matters or tax information that is confidential under state or federal law, which has been requested by the City to determine vendor responsibility, unless prior written consent has been given by the Bidder will not be disclosed;
4. Any document or record, or portion thereof, containing information exempt from disclosure pursuant to O.C.G.A. § 50-18-70, et seq., may be withheld from disclosure as determined by the City; and
5. Any other document or record, or portion thereof, mandated by law to be kept confidential, as determined by the City.

All open records requests must be presented in writing along with specific items requested. The Open Records Request form is available from the City's main website and requested through the City Clerk's office.

b. Procurement Agent's Review of Bids:

The Procurement Agent in charge of the solicitation will open and review the Bids and separate out any information that meets the referenced exceptions noted above, providing the following conditions have been met:

1. Documents or records containing information that the Bidder wishes to keep confidential must be specifically identified and clearly marked and separated from the rest of the Bid by the Bidder;
2. The Bid does not contain any such confidential material in the cost/price section; and
3. An affidavit from the Bidder specifically identifying information as a trade secret and declaring that such information constitutes a trade secret pursuant to Article 27 of Chapter 1 of Title 10 of the Official Code of Georgia Annotated is attached to each separated document or record in the Bid that Bidder wishes to be kept confidential because it contains trade secrets.

Information separated out under this process will be available for initial review only by the Procurement Officer, Procurement Agent, and limited other designees. Bidders acknowledge that the act of separating out such information by the Procurement Agent does not operate to exempt such information from disclosure as a public record; rather, the disclosure of such information is governed by O.C.G.A. § 50-18-70, et seq. Bidders should be prepared to pay all legal costs and fees associated with defending a claim for confidentiality in the event an (open records) request is submitted by another party and the City determines that such information is subject to disclosure.

4. Contract Term

The term of the Contract commences upon execution by both parties and shall terminate after 30 days from the notice to proceed.

The term of the Contract may be extended by the City, with the written consent of the Contractor, for such additional period of time as may be necessary or advantageous to the City.

General Contract Terms and Conditions

Certain City standard terms and conditions, which will be incorporated into the Contract, are set forth below ("Terms and Conditions"). Vendors should notify the City of any Terms and Conditions that either preclude them from responding to this procurement or add unnecessary cost. This notification must be made by the deadline for receipt of written questions or with the Vendor's response. Any requests received prior to the deadline for receipt of questions for material, substantive, important exceptions to the Terms and Conditions will be addressed by formal written addendum issued by the designated Procurement Agent. The City reserves the right to address any non-material, minor, and/or insubstantial exceptions to the Terms and Conditions.

A. Additional Contract Provisions and Terms

The procurement, including all documents and appendices attached hereto, referenced herein and/or incorporated herein, and any addenda hereto, and the response of the awarded Contractor, including any amendments thereto, will be incorporated into the Contract (as previously set forth, all of such documents are collectively referred to as the "Contract Documents").

The Terms and Conditions set forth herein do not define the total extent of the contract language. In the event of a conflict or dispute as to the duties and responsibilities of the City and Contractor under any resulting Contract Documents, the Contract, will govern in accordance to the order of precedence set forth therein.

B. Performance Prior to Contract Execution

The successful Contractor shall not begin performance of the Project prior to the execution of a formal written contract by the City and the successful Contractor. Any Contractor beginning performance prior to the execution of the Contract shall be deemed to be proceeding at the Contractor's risk and shall not be entitled to any compensation for such performance. Under such circumstances, the City reserves the right to withdraw or cancel the award of the procurement.

C. Subcontractors

The lowest responsive and responsible Contractor will be the prime contractor if a contract is awarded and executed and shall be responsible, in total, for all work of any subcontractors. All subcontractors, if any, must be listed in the Contractor's response to this procurement. The City reserves the right to approve all subcontractors. The Contractor shall be responsible to the City for the negligent acts and negligent omissions of all subcontractors or agents and of persons directly or indirectly employed by such subcontractors, and for the acts and omissions of persons employed directly by the Contractor. Further, nothing contained within the procurement, or otherwise in the Contract Documents created as a result of any contract award derived from the procurement, shall create any contractual relationships between any subcontractor of the Contractor and the City.

D. Independent Contractor

The Contractor shall at all times be acting as an independent contractor and not be considered or deemed to be an agent, employee, joint venture, or partner of the City. The Contractor shall have no authority to contract for or bind City in any manner. Neither the Contractor nor its employees are employees of the City. The Contractor shall have and maintain the responsibility for and control of the rendition of the Work (including, the services performed) under the Contract, the discipline of its employees, and other matters incident to the performance of the Work (services, duties, and responsibilities as described and contemplated in the Contract). The Contractor is required to supply the City with proof of compliance with the Workers' Compensation Act while performing work for the City. Proof of compliance must be received with the Contractor's response to the procurement at the address listed on the Cover Page of the procurement.

E. Compliance with Illegal Immigration Reform and Enforcement Act

E-Verify Program:

The City of Alpharetta is committed to compliance with Federal and State laws requiring the verification of newly hired employees to ensure they are lawfully entitled to work in the United States. As such, the City shall not enter into a contract for the physical performance of services unless the Contractor registers and participates in a federal work authorization program (E-Verify). Further, Contractors submitting a Bid or Bid for the physical performance of service shall include a fully executed E-Verify affidavit as part of their Response to the procurement.

Requirement to Participate in a Federal Work Authorization Program (E-Verify):

No Contractor shall submit a response for the physical performance of service unless the Contractor participates in a Federal Work Authorization Program and complies with the requirements of O.C.G.A. § 13-10-91.

- (1) Pursuant to O.C.G.A. § 13-10-91, the Contractor represents, warrants, acknowledges, and/or agrees that:
 - a. The Contractor has registered and participates in a federal work authorization program to verify the employment eligibility of all newly hired employees;
 - b. Subcontractors shall not enter into any contract with the Contractor for the physical performance of services within the State of Georgia unless such subcontractor registers and participates in a federal work authorization program to verify the employment eligibility of all newly hired employees; and
 - c. Sub-subcontractors shall not enter into any contract with a subcontractor or sub-subcontractor for the physical performance of services within the State of Georgia unless such sub-subcontractor registers and participates in a federal work authorization program to verify the employment eligibility of all newly hired employees.
- (2) As of the date of enactment of O.C.G.A. § 13-10-91, the applicable federal work authorization program is "E-Verify"

(<https://e-verify.uscis.gov/enroll/StartPage.aspx?IS=YES>), operated by the United States Citizenship and Immigration Services Bureau of the United States Department of Homeland Security. Information and instructions regarding E-Verify program registration, corporate administrator registration, and designated agent registration can be found at such website address.

Contractor, Subcontractor, and Sub-subcontractor Evidence of Compliance:

- (1) The Contractor, if entering a contract with the City providing the physical performance of services, shall comply with the requirements of O.C.G.A. § 13-10-91.
- (2) Pursuant to O.C.G.A. §13-10-91, in the event the Contractor employs or contracts with a subcontractor in connection with a covered contract, Contractor shall secure from such subcontractor attestation of the subcontractor's compliance with O.C.G.A. § 13-10-91 by the subcontractor's execution of the subcontractor affidavit, the form of which is provided in *Appendix B* hereof, and maintain records of such attestation for inspection by the City at any time. Such subcontractor affidavit shall become a part of the contractor/subcontractor agreement. It will be the duty of the Consultant to submit copies of all affidavits, drivers' licenses, and/or identification cards required pursuant to this Section, as applicable, to the City within five (5) business days of receipt.
- (3) Pursuant to O.C.G.A. §13-10-91, in the event the Contractor employs or contracts with a subcontractor that employs or contracts with any sub-subcontractor, the subcontractor will secure from such sub-subcontractor attestation of the sub-subcontractor's compliance with O.C.G.A. § 13-10-91 by the sub-subcontractor's execution of the sub-subcontractor affidavit, the form of which is also provided in *Appendix B* hereof, and maintain records of such attestation for inspection by the City at any time. Such sub-subcontractor affidavit shall become a part of the subcontractor/sub-subcontractor agreement.
- (4) The Contractor shall comply with any and all other applicable requirements and provisions of O.C.G.A. § 13-10-91 and other applicable rules and regulations promulgated in relation thereto.
- (5) All portions of contracts pertaining to compliance with O.C.G.A. § 13-10-91 and all other applicable rules and regulations promulgated in relation thereto, and any affidavit related hereto, shall be open for public inspection in this State at reasonable times during normal business hours.

Forms necessary to ensure compliance with this section are included in Required Forms and must be received at the address listed on the procurement's Cover Page prior to review of Contractor's response.

F. Compliance with Laws

The Contractor shall, in performance of work under the Contract, fully comply with all applicable federal, state, or local laws, rules, and regulations, including, but not limited to, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Any subletting or subcontracting by the Contractor subjects subcontractors to the same provision. The Contractor agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by the persons performing the contract.

G. Disclosure

Any Consultant as defined in O.C.G.A. §36-80-28 that is engaged to develop or draft specifications/requirements or serve in a consultative role during the procurement process for any City procurement method, by entering into such an arrangement or executing a contract that the consultant agrees to: (1) Avoid any appearance of impropriety and shall follow all policies and procedures of the City; (2) disclose to the City any material transaction or relationship pursuant to

§36-80-28, considered a conflict of interest, any involvement in litigation or other dispute, relationship or financial interest not disclosed in the Disclosure form; and (3) Acknowledge that any violation or threatened violation of the agreement may cause irreparable injury to the City, entitling the City, to seek injunctive relief in addition to all other legal remedies. This requirement does not apply to confidential economic development activities pursuant to §50-18-72 or to any development authority for the purpose of promoting the development of trade, commerce, industry, and employment opportunities or for other purposes and, without limiting the generality of the foregoing, shall specifically include all authorities created pursuant to Title 36 Chapter 62; However, per provisions of subparagraph (e)(1)(B) of Code Section 36-62-5 reporting of potential conflicts of interest by development authority board members is required.

H. Compliance with Title VI of the Civil Rights Act of 1964

The City of Alpharetta, as a federal grant recipient, conforms to Title VI of the Civil Rights Act of 1964 and its amendments. Title VI of the Civil Rights Act of 1964 requires that no person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Presidential Executive Order 12898 addresses environmental justice in minority and low-income populations. Presidential Executive Order 13166 addresses services to those individuals with limited English proficiency.

The City is committed to enforcing the provisions of Title VI and to taking positive and realistic affirmative steps to ensure the protection of rights and opportunities for all persons affected by its programs.

Any person who believes they have been subjected to unlawful discriminatory practice under Title VI has a right to file a formal complaint. Any such complaint must be filed in writing or in person with the City of Alpharetta's, Title VI Compliance Officer, within one hundred-eighty (180) days following the date of the alleged discriminatory action. For more information on Title VI Discrimination Complaint Forms contact the Title VI Compliance Officer at the following:

Human Resources: Title VI Compliance
City of Alpharetta
2 Park Plaza
Alpharetta, GA 30009
Tel: 678-297-6014

I. Substitutions and Change Orders

NO substitutions of material, schedule cancellations, or Change Orders are permitted after Contract award without written approval by the Director of the contracting City Department or his authorized representative. Cumulative Change Orders in excess of \$50,000.00 or 10% of the original contract shall require the approval of the City Council.

Where specific employees are proposed by the Contractor for the work, those employees shall perform the work as long as those employees work for the Contractor, either as employees or subcontractors, unless the City agrees to a replacement or requests same based on an objective standard of review of past performance. Requests for any substitution will be reviewed and may be approved by the City at its sole discretion. Verbal agreements to the contrary will not be recognized. In the event a substitution of a Contractor employee is required due to termination of employment by Contractor, Contractor shall provide the City with prompt written notice of the need for such substitution and shall cooperate with the City in providing a replacement.

J. Termination

This Contract may be terminated prior to the term ending by either party in the event of substantial failure or default of the other party to fulfill its obligations under this Contract. Prior to such termination, the non-defaulting party shall give notice to the defaulting party of the failure or default. Such party shall have fifteen (15) days from the date of the notice to cure the default or

failure if such default or failure is capable of being cured. Upon failure to cure the default or failure within fifteen (15) days, or if such failure or default is not capable of being cured, the non-defaulting party may terminate the Contract effective immediately upon the provision of written notice as provided in Section 15 (*Notices*). The Contract may also be terminated prior to expiration of the term by the City for City's convenience upon the provision of not less than fourteen (14) days written notice to the Contractor. In the event of such termination, the Contractor shall be compensated for services performed prior to termination. Such amount shall be paid by the City upon the Contractor's delivering or otherwise making available to the City, all data, drawings, specifications, reports, estimates, summaries and other information and materials as may have been accumulated by the Contractor in performing the services included in this Contract, whether completed or in progress. All unperformed obligations incurred by Contractor prior to such date shall survive termination of this Contract.

K. Annual Appropriation and Renewal

Notwithstanding any other provision or provisions of this Contract, pursuant to O.C.G.A. § 36-60-13, this Contract will terminate immediately and absolutely if the City determines that adequate funds are not appropriated or granted or funds are de-appropriated such that the City cannot fulfill its obligations under the Contract, which determination is at the City's sole discretion and shall be conclusive.

L. Ownership of Work Product

In the event Contractor prepares, pursuant to the performance of this Contract, any drawings, plans, studies, reports, specifications, other documents (the "Work Product"), the City shall be deemed the owner of the original of all such Work Product, and all statutory and common law rights with respect to such Work Product shall accrue to the City, provided the City has paid for the services in full.

1. General Insurance Requirements

A. Required with each bid:

Bidders shall provide certificate of current Proof of Insurance.

B. Insurance Requirements:

Upon Council approval, the awarded Contractor shall provide the City with a Certificate of Insurance (COI) to the procurement agent listed on the cover page for this ITB. The COI shall indicate the existence of the policies prior to the beginning of the contract work or term. Thereafter, a renewal certificate shall be delivered to the City at least thirty (30) days prior to the expiration date of each expiring policy. If at any time, any of the policies shall be or become unsatisfactory to the City as to form or substance, or any of the carriers issuing such policies shall be or become unsatisfactory to the City, the Contractor shall deliver to the City representative upon demand a certified copy of any policy required herein for review.

The Certificates of Insurance shall state that the City of Alpharetta is additionally insured.

Workers Compensation: Workers Compensation \$500,000 per accident per employee with waiver of subrogation. Required documentation includes certificate from insurance company showing issuance of workmen's compensation coverage for the State of Georgia.

- **Comprehensive General Liability Insurance:**

Commercial General Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate

- **Bodily Injury and Property Damage:**

\$1,000,000 combined single limit (BI & PD)

\$1,000,000 aggregate

Property Damage liability insurance shall include Collapse Hazard, Underground Property Damage Hazard, Broad Form Property Damage, Independent Contractors', and completed operations coverages. (Explosion Hazard coverage shall be provided if blasting operations are anticipated, and/or prior to any actual blasting operations). Coverages shall be specifically identified on the Certificates of Insurance.

- **Personal Injury:**

\$1,000,000 annual aggregate

- **Comprehensive Auto Liability Insurance:**

Bodily Injury Liability	\$1,000,000 each occurrence
Property Damage Liability	\$1,000,000 each occurrence

Automobile Liability shall include any and all autos and road vehicles, including owned, non-owned, and hired.

- **Contractual Liability Insurance:**

Bodily Injury and Property Damage	
	\$1,000,000 Combined single limit (BI & PD)
	\$1,000,000 Aggregate

- **An Umbrella or Excess Liability** policy is acceptable in bringing limits into compliance.

Insurance; Indemnification. The awarded Contractor shall maintain the types and amounts of insurance set forth as from time to time reasonably shall be requested by the City. The awarded Contractor shall provide proof of such insurance to the City at the same time as the execution of any resulting Contract and/or purchase order, and as and when requested by the City during the term hereof. Acceptance of a certificate or proof of insurance does not constitute approval or agreement by the City that the insurance requirements have been satisfied. The awarded Contractor shall indemnify and hold the City harmless from all claims, demands, losses, attorneys' fees and liabilities of any type or nature arising out of or related to the Contractor's, or Contractor's agents', employees' or subcontractors', negligent performance or non-performance of any resulting Contract and/or purchase order, including, but not limited to, claims for injury to person or property; provided, however, that this indemnification obligation shall not apply to claims arising from the sole negligence of the City or its employees. Nothing in this paragraph or any resulting Contract and/or purchase order shall be deemed to constitute a waiver of the City's sovereign immunity, create rights in any third party, or create any third party beneficiaries.

Insurance: Additional Parties to be Named:

2. Bonding Requirements

A. Bid Bond

A bid bond in the amount of 5% of bid total required and must be submitted with bid prior to bid due date/time.

By signing and submitting this bid to the City, **BIDDER** agrees that in case of failure on their part to execute said contract and bond, or provide satisfactory proof of carriage of the insurance required, within fourteen (14) calendar days after the award thereof, the Bid Bond or certified check accompanying their bid and the money payable thereon shall be forfeited to the **CITY** as liquidated damages; otherwise, the check or Bond accompanying this bid shall be returned to the **BIDDER**.

Refer to ITB Forms, Bid Bond for required Bid Bond form.

B. Performance and Payment Bonds

Prior to commencing the Work, the Contractor, as principal, and a surety company listed in the Federal Register and licensed to write surety insurance in the State of Georgia, as surety, shall give a Performance Bond in the amount of one hundred percent (100%) of the price of the Contract and a Payment (Labor and Material) Bond, in the amount of one hundred percent (100%) of the price of the Contract.

“Performance bond” means a bond with good and sufficient sureties or guarantees for the faithful performance of the Contract and to indemnify the City for any damages occasioned by a failure to perform same within the prescribed time. Such bond shall be payable to, in favor of, and for the protection of the City.

“Payment bond” means a bond with good and sufficient sureties or guarantees payable to the City and intended for the use and protection of all subcontractors and all persons supplying labor, materials, machinery, and equipment in the prosecution of the Work provided for in the Contract for the use of all persons doing work or furnishing skills, tools, machinery, or materials under or for the purpose of constructing the Project. The life of these bonds shall extend through the Final Completion date of the Project for an additional sixty (60) day maintenance period (where applicable) and a twelve-month warranty/guarantee period after Final Completion.

Refer to Appendix C at the end of this document for Sample Performance and Payment Bond forms.

3. Retainage Requirements

For construction contracts (O.C.G.A § 13-10-80), including road construction contracts (other than GDOT projects), the City will withhold retainage of 5% of the gross value from each invoice or pay application.

No retainage shall be held from design services. Contractor must submit separate invoices for design services

When all Work is completed and final acceptance has been approved by the City, the Contractor may invoice for the amount retained.

4. Time for Completion & Liquidated Damages

The Contractor shall commence performance of the Work as set forth in the Notice to Proceed or otherwise in the Contract. The Contractor shall be required to perform the Work and achieve Substantial Completion and Final Completion by the dates either set forth in this ITB, the Bid, or as reasonably required by the City. “Substantial Completion” shall mean that stage in the progression of the Work in which same is sufficiently complete in accordance with the Contract such that the City can enjoy beneficial use and occupancy of the subject property or site and can utilize the improvements or renovations completed by the Work for their intended purpose. “Final Completion” shall mean the Work is complete in full accordance with this Contract and this Contract has been fully performed as determined by a final inspection of the City following the Contractor’s request for same.

Liquidated damages will apply per GDOT Standard Specifications for Construction of Transportation Systems, 2021, Section 108.08. Any sums due and payable hereunder by the Contractor shall be payable, not as a penalty, but as liquidated damages representing a reasonable pre-estimate of delay damages likely to be sustained by the City for any such breach, as it is mutually agreed that any such actual and consequential damages incurred by the City for such breach would otherwise be difficult to ascertain.

5. Sample Contracting Documents

- A. **Subcontractor Participation List:** For all applicable projects totaling over \$50,000.00 and with a service-related component, the City requires contractors to agree to the public disclosure of the names of any first-tier subcontractors engaged to perform services in relation to the contract.

Contractors are required to inform relevant subcontractors that the subcontractor's participation in fulfilling the contract may be publicly disclosed.

The contractor shall provide a list of subcontractors to the City with each invoice or application for payment submitted. The list shall include the subcontractor's name and scope of service provided.

- B. **Final Affidavit:** For all applicable projects involving construction or progress milestones, Final Affidavit may be required as part of project close-out.
- C. **Subcontractor E-Verify Affidavit and Sub-Subcontractor E-Verify Affidavit:** It is the responsibility of the awarded contractor to require all subcontractors and sub-subcontractors to complete the correct affidavit. The awarded contractor is required to hold the completed affidavits on file and to make available to the City for review upon request.
- D. **Report and Affidavit Sample Copies** are included at the end of this document in Appendix B

6. Invoicing, Payment Processing

- A. The City agrees to pay the Contractor in current funds for the performance of the Contract subject to additions and deductions as provided in the Contract, and, if applicable, to make payments in the manner and on the periodic basis agreed to by the City during the pre-construction meeting or prior to the commencement of the Work. Upon completion of the Work or, if agreed to by the City, upon completion of certain portions thereof, the Contractor shall submit an invoice detailing the appropriate charges as currently allowed.
- B. The City will process approved payment requests under this Project to the awarded Contractor only. Payment to subcontractors and suppliers is the responsibility of the Contractor. The City will not entertain any other payment arrangements.
- C. Upon receipt of invoice and inspection and acceptance of the Work, the City will render payment. All such invoices will be paid within forty-five (45) days by the City unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed and the validity of the claim. The Contractor will provide complete cooperation during any such investigation.
- D. **Invoices** shall be submitted to:

City of Alpharetta
Department of Public Works
1790 Hembree Road
Alpharetta, GA 30009

Appendix A: City Truck Route and Map

City of Alpharetta Allowed Truck Routes

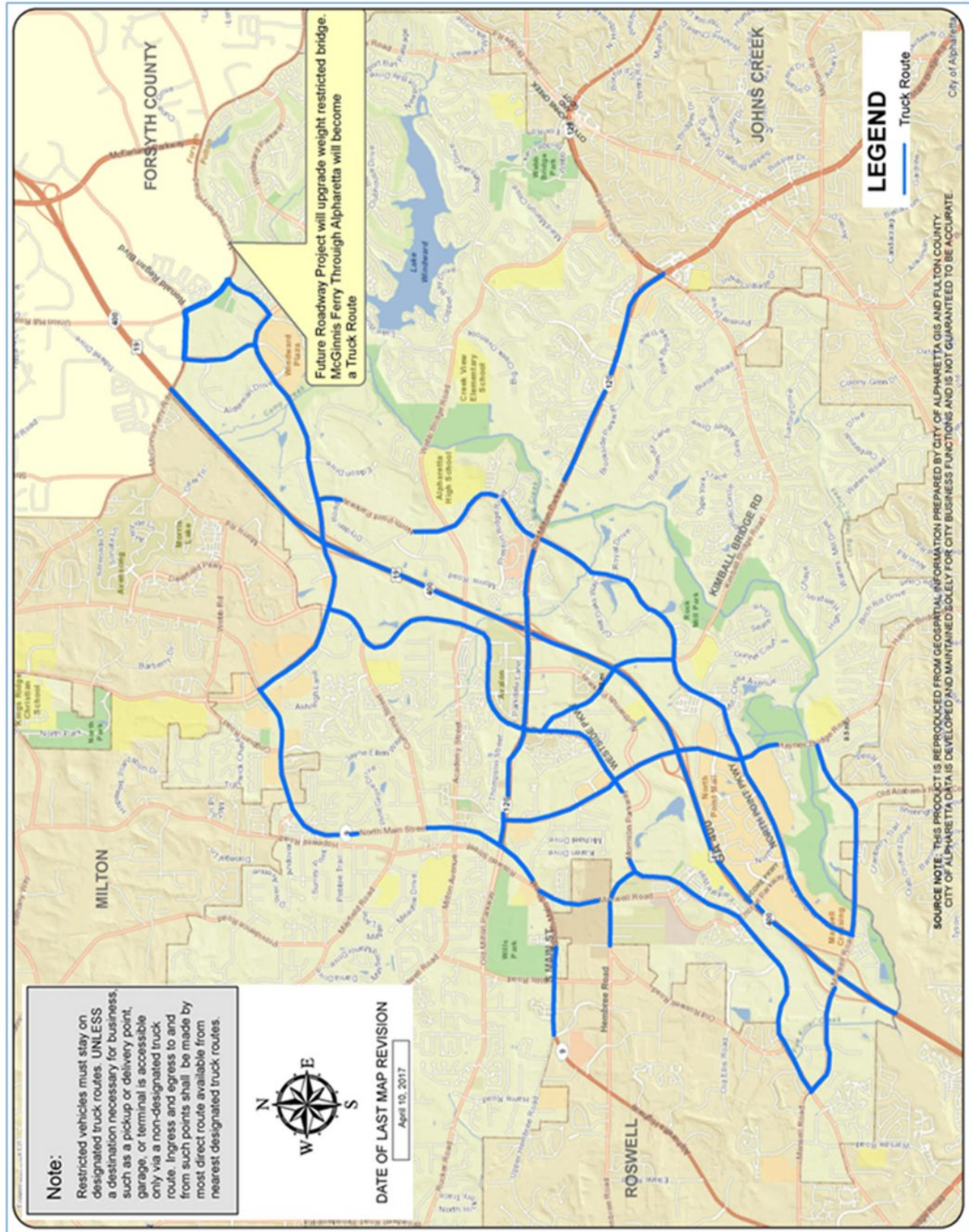
Certain trucks may travel in and through the City of Alpharetta using only those streets and roads highlighted in the Truck Route Map provided here and available for review online at:

<http://www.alpharetta.ga.us/government/departments/public-works/alpharetta-truck-routes>.

As noted in Chapter 18 (Traffic) of the Code of the City of Alpharetta, Georgia, except as specifically set out herein, trucks (defined as motor vehicle having a gross vehicular weight rating (G.V.W.R.) in excess of thirty-six thousand pounds (36,000 lbs.) or having an overall length in excess of thirty feet (30'), except vehicles designed to carry passengers) are prohibited from using any street within the City except those designated below:

- 1) SR 9 (North Main Street – South Main Street)
- 2) SR 120
- 3) Haynes Bridge Road (SR 120 to City Limits)
- 4) Hembree Road (Westside Parkway to Roswell City Limits continuing on Roswell Truck Route)
- 5) Mansell Road
- 6) Maxwell Road (SR 9 to Hembree Road)
- 7) McGinnis Ferry Road
- 8) North Point Parkway
- 9) Union Hill Road
- 10) Westside Parkway
- 11) Windward Concourse
- 12) Windward Parkway (SR 9 to Union Hill Road)

Exceptions to the above schedule are when the terminal, parking lot, repair garage, headquarters, place of pickup or delivery of the restricted motor vehicle is not on a designated truck route, ingress to and egress from such places shall be made by the most direct route available between the terminal, parking lot, repair garage, headquarters, place of pickup or delivery and the nearest designated truck route.



Appendix B: Informational Forms *(do not return with bid package)***Subcontractor E-verify Affidavit**

**AFFIDAVIT VERIFYING SUBCONTRACTOR
PARTICIPATION IN FEDERAL WORK
AUTHORIZATION PROGRAM**

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with (contractor) on behalf of the **City of Alpharetta (GA)** has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91(b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five business days of receipt. If the undersigned subcontractor receives notice that a sub-subcontractor has received an affidavit from any other contracted sub-subcontractor, the undersigned subcontractor must forward, within five (5) business days of receipt, a copy of the notice to the contractor.

Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization (E-Verify) User Identification Number

Date of Authorization

Name of Subcontractor

Name of Project

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE ____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires

Sub-subcontractor E-verify Affidavit

**AFFIDAVIT VERIFYING SUB-
SUBCONTRACTOR PARTICIPATION IN
FEDERAL WORK AUTHORIZATION PROGRAM**

GEORGIA

By executing this affidavit, the undersigned sub-subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract for _____ (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract) and _____ (contractor) on behalf of the **City of Alpharetta (GA)** has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned sub-subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned sub-subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the sub-subcontractor with the information required by O.C.G.A. § 13-10-91(b). The undersigned sub-subcontractor shall submit, at the time of such contract, this affidavit to _____ (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Additionally, the undersigned sub-subcontractor will forward notice of receipt of any affidavit from a sub-subcontractor to _____ (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract).

Sub-subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization (E-Verify) User Identification Number

Date of Authorization

Name of Sub-subcontractor

Name of Project

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires



Subcontractor Participation List

To: City of Alpharetta, Georgia

From: [Contractor/Consultant Name]

Re: [Contract or Purchase Order No.], [Project Name]

Date: [Date of Accompanying Invoice]

Is the accompanying invoice the final invoice for this project? ____ Yes ____ No

Select one of the following:

____ No subcontractors providing a service have been utilized on this project.

____ Below is a list of all subcontractors which have provided a service on this project.

	Subcontractor Name	Scope of Services
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Add additional pages as needed to list all subcontractors.

**Final Affidavit**

TO: CITY OF ALPHARETTA, GEORGIA

I, _____, hereby certify that all suppliers of materials, equipment and service, Subcontractors, mechanics, and laborers employed by

_____ or any of their Subcontractors in connection with the

Work of:

PEDESTRIAN SAFETY BARRIER AT CITY CENTER

in the CITY OF ALPHARETTA have been paid and satisfied in full as of _____, 202____, and that there are no outstanding obligations or claims of any kind for the payment of which CITY on the above named project might be liable, or subject to, in any lawful proceeding at law or in equity. Schedule of Subcontractor Participation has been completed and made part of this Final Affidavit.

Signature

Title

Personally appeared before me this _____ day of _____, 202____.

_____, who under oath deposes and says: that they are of the firm of

_____; that they have read the above statement; and that to

the best of their knowledge and belief same is an exact true statement.

Notary Public

My Commission Expires

Appendix C: Sample Contract Bond Forms *(do not return with bid package)*

Do not return these forms with bids. Only to be supplied by awarded contractor.

- A. 100% Performance Bond
- B. 100% Labor and Material Payment Bond

[remainder of page intentionally blank]

**100% Performance Bond**

BOND # _____

KNOW ALL MEN BY THESE PRESENTS: that, _____, as Principal, hereinafter called **CONTRACTOR**, and _____, a corporation organized and existing under the laws of the State of Georgia, hereinafter called **SURETY**, are held and firmly bound unto CITY OF ALPHARETTA, GEORGIA, as obligee, hereinafter called **CITY** and their successors and assigns, _____ in _____ the _____ penal _____ amount _____ of _____ DOLLARS

(\$ _____) for the payment of which the **CONTRACTOR** and **SURETY** bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly be these presents.

WHEREAS, **CONTRACTOR** has by written agreement dated _____, 20____, entered into a written construction contract, hereinafter referred to as the **CONTRACT**, with **CITY** for:

PEDESTRIAN SAFETY BARRIER AT CITY CENTER, more particularly described in the **CONTRACT** (hereafter called the **PROJECT**)

in accordance with drawings and specifications prepared by **CITY**, which **CONTRACT** is by reference made a part hereof.

NOW, THEREFORE, the conditions of this obligation is such that, if **CONTRACTOR** shall fully and completely perform all the undertakings, covenants, terms, conditions, warranties and guarantees contained in said **CONTRACT**, including all modifications, amendments, changes, deletions, additions and alterations thereto that may hereafter be made, then this obligation shall be null and void, otherwise it will remain in full force and effect.

Whenever **CONTRACTOR** shall be, and declared by **CITY** to be in default under the **CONTRACT**, the **CITY** having performed **CITY**'s obligation thereunder, the **SURETY** shall promptly remedy the default promptly as follows:

1. Complete the **CONTRACT** in accordance with its terms and conditions; or,
2. Obtain a bid or bids for completing the **CONTRACT** in accordance with its terms and conditions, and upon determination by **SURETY** and the **CITY** of the lowest responsible bidder, arrange for a contract between such Bidder and the **CITY**, and make available as **PROJECT** progresses (even though there should be a default or a succession of defaults under the **CONTRACT** or Contract of Completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the **SURETY** may be liable hereunder, the penal sum set forth in the first paragraph hereof. The term "Balance of the Contract Price", as used in this paragraph shall mean the total amount payable by **CITY** to **CONTRACTOR** under the **CONTRACT** and any amendments hereto, less the amount properly paid by **CITY** to **CONTRACTOR**.
3. Allow the **CITY** to complete the **PROJECT** and reimburse the **CITY** for all reasonable costs incurred in completing the **PROJECT**.

100% Performance Bond**Page 2 of 2**

The **SURETY** hereby waives notice of any and all modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and any other amendments in or about the **CONTRACT**, and agrees that the obligations undertaken by this bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, alterations, extensions of time, change in payment terms, and amendments.

The **SURETY** hereby agrees that this bond shall be deemed amended automatically and immediately, without formal or separate amendments hereto, upon any amendment to the **CONTRACT**, so as to bind the **CONTRACTOR** and the **SURETY** to the full and faithful performance of the **CONTRACT** as so amended or modified, and so as to increase the penal sum to the adjusted Contract Price of the **CONTRACT**.

No right of action shall accrue on this bond to or for the use of any person, entity, or corporation other than the **CITY** and any other obligee named herein, or their executors, administrators, successors or assigns.

This Bond is intended to comply with O.C.G.A. § 36-91-70, and shall be interpreted so as to comply with the minimum requirements thereof. However, in the event the express language of this bond extends protection to the **CITY** beyond that contemplated by O.C.G.A. § 36-91-70, or any other statutory law applicable to this **PROJECT**, then the additional protection shall be enforced in favor of the **CITY**, whether or not such protection is found in the applicable statutes.

No action can be instituted on this bond after one year from the completion of the **CONTRACT** and the acceptance by the **CITY** of the work thereunder.

IN WITNESS WHEREOF the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this

Signed and sealed this _____ day of _____, 202____.

In the presence of:

CONTRACTOR:_____

Witness

By:_____ (Seal)

SURETY:_____

Witness

By:_____ (Seal)
Georgia Representative

SURETY Contact Information:

Address: _____

Phone: _____

Email: _____

Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to conduct business in the State of Georgia.



BOND # _____

100% Labor and Material Payment Bond

KNOW ALL MEN BY THESE PRESENTS: that, _____, as Principal, hereinafter called **CONTRACTOR**, and _____, a corporation organized and existing under the laws of the State of Georgia, hereinafter called **SURETY**, are held and firmly bound unto CITY OF ALPHARETTA, GEORGIA, as obligee, hereinafter called **CITY** and their successors and assigns, _____ in _____ the _____ penal _____ amount _____ of _____ DOLLARS

(\$_____) for the payment of which the **CONTRACTOR** and **SURETY** bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly be these presents.

WHEREAS, **CONTRACTOR** has by written agreement dated _____, 202____, entered into a written construction contract, hereinafter referred to as the **CONTRACT**, with **CITY** for:

PEDESTRIAN SAFETY BARRIER AT CITY CENTER, more particularly described in the **CONTRACT** (hereafter called the **PROJECT**)

in accordance with drawings and specifications prepared by **CITY**, which **CONTRACT** is by reference made a part hereof.

NOW, THEREFORE, the condition of this obligation is such that if **CONTRACTOR** shall promptly make payment to all persons working on or supplying labor or materials under the **CONTRACT**, and any amendments thereto, with regard to labor or materials furnished and used in the **PROJECT**, and with regard to labor or materials furnished but not so used, then tis obligation shall be void; but otherwise it shall remain in full force and effect subject, however, to the following conditions:

1. A Claimant shall be defined as any subcontractor, person, [arty, partnership, corporation or other entity furnishing labor, services, or materials used, or reasonably required for use, in performance of the **CONTRACT**, without regard to whether such labor, services, or materials were sold, eased, or rented, and without regard to whether such Claimant is or is not in privity of contract with the **CONTRACTOR** or any subcontractor performing work on the **PROJECT**, including, but not limited to, the following labor, services, or materials: water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the **CONTRACT**.
2. In the event a Claimant files a claim against the **CITY**, or the property of the **CITY**, and the **CONTRACTOR** fails or refuses to satisfy or discharge it promptly, the **SURETY** shall satisfy or discharge the claim promptly upon written notice from the **CITY**, either by bond or as otherwise provided in the **CONTRACT**.
3. The **SURETY** hereby waives notice of any and all modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and any other amendments in or about the **CONTRACT** and agrees that the obligations undertaken by this bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and amendments.

100% Labor and Material Payment Bond**Page 2 of 3**

4. The **SURETY** hereby agrees that this Bond shall be deemed amended automatically and immediately, without formal or separate amendments hereto, upon any amendment or modification to the **CONTRACT**, so as to bind the **CONTRACTOR** and **SURETY**, jointly and severally, to the full payment of any Claimant under the **CONTRACT**, as amended or modified, provided only that the **SURETY** shall not be liable for more than the penal sum of the Bond, as specified in the first paragraph hereof.
5. This Bond is made for the use and benefit of all persons, firms, and corporations who or which may furnish any materials or perform any labor for or on account of the construction to be performed or supplied under the **CONTRACT**, and any amendments thereto, and they and each of them may sue hereon.
6. No action may be maintained on this Bond after one (1) year from the date the last services, labor, or materials were provided under the **CONTRACT** by the Claimant prosecuting said action.
7. This Bond is intended to comply with O.C.G.A. § 36-91-90, and shall be interpreted so as to comply with the minimum requirements thereof. However, in the event the express language of this Bond extends protection to the **CITY** beyond that contemplated by O.C.G.A. § 36-91-90, or any other statutory law applicable to this **PROJECT**, then the additional protection shall be enforced in favor of the **CITY**, whether or not such protection is found in the applicable statutes.

Signed and sealed this _____ day of _____, 202__.

In the presence of:

CONTRACTOR:__________
Witness

By:_____ (Seal)

SURETY:__________
Witness

By:_____ (Seal)

Georgia Representative

100% Labor and Material Payment Bond

Page 3 of 3

Surety Contact Information:

Address: _____

Phone: _____
Fax: _____
Email: _____

Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to conduct business in the State of Georgia.

Appendix D: General Conditions

Beginning next page. Remainder of this page intentionally blank.

APPENDIX D: GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

1. Addenda-- Written or graphic instruments issued prior to the opening of Bids that clarify, correct, or change the Bidding Requirements or the Contract Documents.
2. AGENCY-- The Federal or state agency named as such in the Agreement.
3. Agreement-- The written instrument that is evidence of the agreement between OWNER and CONTRACTOR covering the Work.
4. Application for Payment-- The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
5. Asbestos-- Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
6. Bid-- The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
7. Bidding Documents-- The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
8. Bidding Requirements-- The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.
9. Bonds-- Performance and payment bonds and other instruments of security.
10. Change Order-- A document recommended by ENGINEER that is signed by CONTRACTOR and OWNER and AGENCY and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
11. Claim-- A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
12. Contract-- The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
13. Contract Documents-- The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award), the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

14. Contract Price-- The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).
15. Contract Times-- The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
16. CONTRACTOR-- The individual or entity with whom OWNER has entered into the Agreement.
17. Cost of the Work-- See paragraph 11.01.A for definition.
18. Drawings-- That part of the Contract Documents prepared or approved by ENGINEER that graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR, Shop Drawings and other CONTRACTOR submittals, are not Drawings as so defined.
19. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
20. ENGINEER-- The individual or entity named as such in the Agreement.
21. ENGINEER's Consultant-- An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.
22. Field Order--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
23. General Requirements -- Sections of Division I of the Specifications. The General Requirements pertain to all sections of the Specifications.
24. Hazardous Environmental Condition-- The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
25. Hazardous Waste--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
26. Laws and Regulations; Laws or Regulations--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
27. Liens-- Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
28. Milestone-- A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
29. Notice of Award-- The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.
30. Notice to Proceed-- A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.
31. OWNER-- The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

32. Partial Utilization-- Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
33. PCBs-- Polychlorinated biphenyls.
34. Petroleum-- Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
35. Project-- The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.
36. Project Manual-- The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
37. Radioactive Material-- Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
38. Resident Project Representative-- The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.
39. Samples-- Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
40. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.
41. Site--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER that are designated for the use of CONTRACTOR.
42. Specifications-- That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
43. Subcontractor--An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.
44. Substantial Completion-- The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the work refer to Substantial Completion thereof.
45. Supplementary Conditions--That part of the Contract Documents which amends or supplements these General Conditions.
46. Supplier--A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.
47. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid

petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

48. Unit Price Work--Work to be paid for on the basis of unit prices.

49. Work -- The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, as required by the Contract Documents.

50. Work Change Directive-- A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and AGENCY upon recommendation of the ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

51. Written Amendment--A written statement modifying the Contract Documents, signed by OWNER, CONTRACTOR, and AGENCY upon recommendation of ENGINEER on or after the Effective Date of the Agreement and normally dealing with the non engineering or non technical rather than strictly construction-related aspects of the Contract Documents.

1.02 Terminology

A. Intent of Certain Terms or Adjectives

1. Whenever in the Contract Documents the terms "as allowed," "as approved", or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. Day

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. Defective

1. The word "defective," when modifying the word "Work, " refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. Furnish, Install, Perform, Provide

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.
- E. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2- PRELIMINARY MATTERS

2.01 Delivery of Bonds

- A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 Copies of Documents

- A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

- A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

- A. CONTRACTOR's Review of Contract Documents: Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.
- B. Preliminary Schedules: Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:
 1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and
 3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.
- C. Evidence of Insurance: Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.
- 2.06 Preconstruction Conference**
- A. Before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, AGENCY and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.
- 2.07 Initial Acceptance of Schedules**
- A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.
1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.
 2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.
 3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 -CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the

intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

3.02 Reference Standards

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

- a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.05 Reuse of Documents

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adoption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Land

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

A. Reports and Drawings: The Supplementary conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and
2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.

B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions

A. Notice: If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. ENGINEER's Review: After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. such condition must meet anyone or more of the categories described in paragraph 4.03.A; and
- b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.

2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:

- a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
- b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or
- c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or

damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 Underground Facilities

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and
2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
 - a. reviewing and checking all such information and data,
 - b. locating all Underground Facilities shown or indicated in the Contract Documents,
 - c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated:

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.
2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are able to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a claim therefor as provided in paragraph 10.05.

4.05 Reference Points

A. OWNER shall provide engineering surveys to establish reference points for construction that in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate

replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.

B. Limited Reliance by CONTRACTOR on Technical Data Authorized; CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site that was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to 00 within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a claim therefor as provided in paragraph 10.05.

F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract

Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies

that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) that OWNER is required to purchase and maintain.

5.04 CONTRACTOR's Liability Insurance

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;
4. claims for damages insured by reasonably available personal injury liability coverage that are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;
5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
2. include at least the specific coverages and are written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
3. include completed operations insurance;

4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;
5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);
6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and
7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

5.05 OWNER 'S Liability Insurance

- A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04. OWNER, at OWNER 's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

- A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured;
2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER;
5. allow for partial utilization of the Work by OWNER;
6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
 8. contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph
- B. CONTRACTOR shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

5.07 Waiver of Rights

- A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and their respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.
- B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:
1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and
 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization

pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.8 shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with CONTRACTOR and made payable to CONTRACTOR as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.8. CONTRACTOR shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. CONTRACTOR as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to CONTRACTOR's exercise of this power. If such objection be made, CONTRACTOR as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, CONTRACTOR as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, CONTRACTOR as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction that is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 Labor, Working Hours

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, layout, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 Services, Materials, and Equipment

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

2. proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such

adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 Substitutes and "Or-Equals "

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.

1. "Or-Equal" Items: If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;
- b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.

c. The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.

d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve results called for by the general design, be similar in suited to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales,

maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other Contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.

C. Engineer's Evaluation: ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

D. Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

E. ENGINEER's Cost Reimbursement: ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.8 and in making changes in the Contract Documents (or in the provisions of any other direct contact with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.

F. CONTRACTOR's Expense: CONTRACTOR shall provide all data in support of any proposed substitute or "or equal" at CONTRACTOR's expense.

6.06 Concerning Subcontractors, Suppliers, and Others

A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for an acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.

E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

6.07 Patent Fees and Royalties

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 Laws and Regulations

A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10 Taxes

A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project that are applicable during the performance of the Work.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

B. Removal of Debris During Performance of the Work. During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for \utilization by OWNER At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record Documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 Safety and Protection

A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property .All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in

accordance with paragraph 14.07.8 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

- a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
- b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
- c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

E. ENGINEER's Review

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. Resubmittal Procedures:

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 Continuing the Work

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 CONTRACTOR's General Warranty and Guarantee

A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or
 2. normal wear and tear under normal usage.
- B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:
1. observations by ENGINEER;
 2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;
 4. use or occupancy of the Work or any part thereof by OWNER;
 5. any acceptance by OWNER or any failure to do so;
 6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by OWNER.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and
 2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.
- B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 -OTHER WORK

7.01 Related Work at Site

A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and
2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.

B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8- OWNER'S RESPONSIBILITIES

8.01 Communications to Contractor

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 Replacement of ENGINEER

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 Furnish Data

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 Pay Promptly When Due

A. OWNER shall make payment to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.06 Insurance

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08. Inspections, Tests, and Approvals

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 Limitations on OWNER's Responsibilities

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9- ENGINEER'S STATUS DURING CONSTRUCTION**9.01 OWNER'S Representative**

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 Visits to Site

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work: ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Clarifications and Interpretations

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation; a Claim may be made therefor as provided in paragraph 10.05.

9.05 Authorized Variations in Work

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.

9.06 Rejecting Defective Work

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 Shop Drawings, Change Orders and Payments

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

B. In connection with ENGINEER's authority as to Change Order, see Articles 10, 11, and 12.

C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

9.08 Determinations for Unit Price Work

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 Decisions on Requirements of Contract Documents and Acceptability of Work

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work<: thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.10 Limitations on ENGINEER's Authority and Responsibilities

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be

responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. ENGINEER's review of the final Application for payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07 .A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

ARTICLE 10- CHANGES IN THE WORK; CLAIMS

10.01 Authorized Changes in the Work

A. Without invalidating the Agreement and without notice to any surety, OWNER may, subject to written approval by AGENCY at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved that will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive; a Claim may be made therefor as provided in paragraph 10.05.

10.02 Unauthorized Changes in the Work

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.8.

10.03 Execution of Change Orders

A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:

1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;
2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 Notification to Surety

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 Claims and Disputes

A. Notice; Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

B. ENGINEER's Decision; ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or
2. no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction, within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 -COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

A. Costs Included: The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs

shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.
2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER and CONTRACTOR shall make provisions so that they may be obtained.
3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.
 - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

- e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressive, and similar petty cash items in connection with the Work.
 - i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
 - j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.
- B. Costs Excluded: The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4 all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
 - 2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.
 - 3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
 - 4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of the Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.
- C. CONTRACTOR's Fee: When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.
- D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records

thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 Cash Allowances

A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.

B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
2. CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).
- C. CONTRACTOR's Fee: The CONTRACTOR 's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;
 - b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
 - d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
 - e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in anyone change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

- A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.
- B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 Delays Beyond CONTRACTOR's Control

- A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 Delays Within CONTRACTOR's Control

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 Delays Beyond OWNER's and CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 Delay Damages

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

1. delays caused by or within the control of CONTRACTOR; or
2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inaction of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 -TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing, CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.8 shall be paid as provided in said paragraph 13.04.8; and
3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining

such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.

D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR'S purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER be uncovered for observation.

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 Uncovering Work

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 OWNER May Stop the Work

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating

to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 Correction Period

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 OWNER May Correct Defective Work

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance

with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractor, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineer, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others; destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 -PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.
2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement
- B. Review of Applications
1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.
 2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and
 - c. the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.
 3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be aid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.
 4. Neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.
 5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.8.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:
 - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
 - b. the Contract Price has been reduced by Written Amendment or Change Orders;

- c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or
 - d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.
- C. Payment Becomes Due
 - 1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.
- D. Reduction in Payment
 - 1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:
 - a. claims have been made against OWNER on account of CONTRACTOR 's performance or furnishing of the Work;
 - b. liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling OWNER to a set-off against the amount recommended; or
 - d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.
 - 2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER' s satisfaction the reasons for such action.
 - 3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

14.03 CONTRACTOR's Warranty of Title

- A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

- A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly thereafter, OWNER, AGENCY, CONTRACTOR, and ENGINEER shall make a prefinal inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion that shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the

tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 Partial Utilization

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.1 O regarding property insurance.

14.06 Final Inspection

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER, AGENCY and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER. CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. Review of Application and Acceptance

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's application of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 Final Completion Delayed

- A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims. The remaining balance of any sum included in the final Application for payment but held by OWNER for Work not fully completed and accepted will become due when the Work is fully completed and accepted.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and
 2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 -SUSPENSION OF WORK AND TERMINATION**15.01 OWNER May Suspend Work**

- A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER that will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.

15.02 OWNER May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);
 2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;
 3. CONTRACTOR's disregard of the authority of ENGINEER; or
 4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work, and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 OWNER May Terminate For Convenience

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
4. for reasonable expenses directly attributable to termination.

B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 CONTRACTOR May Stop Work or Terminate

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16- DISPUTE RESOLUTION

16.01 Methods and Procedures

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS**17.01 Giving Notice**

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

APPENDIX E: TECHNICAL CONDITIONS**TABLE OF CONTENTS**

Spec Number -	Spec Title
000110	- Table of Contents
007312	- Special Provisions
011111	- Unique Requirements
012000	- Price and Payment Procedures
013300	- Submittal Procedures
013323	- Shop Drawings, Product Data and Samples
014500	- Quality Control
017423	- Site Cleanup and Finish
017800	- Closeout Documents
024100	- Demolition
034800	- Precast Concrete Specialties – Boardwalk
311100	- Clearing and Grubbing
321313	- Concrete Sitework
329000	- Landscaping
999999	- Miscellaneous Construction

SECTION 007312

SPECIAL PROVISIONS

- SP-1 Georgia Department of Transportation specifications as published in the Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2021 Edition are incorporated by reference into the Project Manual and contract documents. They shall supersede all other specifications unless more stringent requirements are listed. Where the supplemental specifications or drawings are silent on requirements, GDOT standard specifications shall rule. It is the responsibility of the Contractor to become familiar with these specifications before bidding and to adhere to them during construction. Copies of the manuals can be obtained from the GDOT website.
- SP-2 Measurements: Before ordering any material or doing any work, the Contractor shall verify all on-site measurements. The Contractor is responsible for the correctness of all material measurements. No extra charge or compensation will be allowed on account of difference between actual dimensions and the measurements indicated on the Construction Drawings. Any discrepancies, which may be found, shall be submitted to the Design professional for consideration prior to beginning the work.
- SP-3 Materials and Workmanship: All workmanship and materials shall be as prescribed by the Drawings and Specifications. Whenever not explicitly described, all workmanship used or employed in carrying out the work shall be to the best of the respective grades and qualities. Where equipment, materials or articles are referred to in the Specifications as "equal to" any particular standard, the Design professional shall decide the question of equality. When required by the Specifications or when called for by the Design professional, the Contractor shall furnish for approval information concerning the materials or articles to be incorporated in the work. Samples of materials shall be submitted for approval when so directed by the Design professional. Machinery, equipment, materials, and articles installed or used without such approval by the Design professional shall be at the risk of subsequent rejection and will be replaced at no additional cost to the Owner.
- SP-4 Temporary Facilities:
- A. Sanitary Facilities: At Contractor's option provide either piped (wet) toilet facilities or self-contained toilet units of type acceptable to governing authorities. These facilities shall be adequate for use of personnel at Project site.
 - B. Water and Electric Power: The Contractor shall be responsible for obtaining or providing temporary water and electric power as necessary for construction operations.
 - C. The Contractor shall provide potable water adequate for personnel at Project site. Furnish paper cups and waste receptacles.

- D. The Contractor shall provide temporary security and protection. The types of provisions required include, but not by way of limitation, barricades, fencing warning signs/lights, environmental protection, and similar provisions intended to minimize property losses, personal injuries and claims for damages at Project site.
- SP-5 Unknown Conditions: Should the Contractor encounter, during the progress of the work, subsurface latent physical conditions at the site, materially differing from those shown on the Drawings or specified for unknown conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Construction Drawings and Specifications, the Contractor shall inform the Design professional immediately of such conditions before they are disturbed. The Design professional shall thereupon promptly investigate the conditions; and the Design professional finds that they do so materially differ, the Contract price shall, with the written approval of the Design professional, be increased or decreased in accordance with such conditions.
- SP-6 Utilities Not Shown: Contractor shall be responsible for securing the services of a utility locator to determine any unknown utilities that may be on the site. Any utilities encountered that are not shown on the Construction Drawings and are to remain as active utilities, if inadvertently damaged by the Contractor, shall be repaired by the Contractor at the Contractor's own expense. If an extra expense is incurred in protecting and maintaining any utility line not shown on the Construction Drawings, an adjustment in the Contract price may be submitted to the Design professional for consideration. The Contractor shall not be compensated if the utility was improperly located or omitted by locator if it is deemed that the utility could have been detected.
- SP-7 Inclusion of Accessories: Unless specifically mentioned otherwise, all anchors, bolts, screws, fittings, fillers, hardware accessories, trim and other parts required for, or in connection with, an item of material to make a complete, serviceable, finished and first quality installation shall be furnished and installed as part of the item whether or not shown on the Construction Drawings identified in the Specifications.
- SP-8 Reference to Standard Specifications: When standard specifications such as The American Society for Testing and Materials, Federal Specifications, Department of Commerce (Commercial Standards), American Institute of Steel Construction, or other well-known public or trade associates are cited as a standard to govern materials, and/or workmanship, such specifications or portions thereof as referred to shall be equally as binding and have the full force and effect as though it were copied into these Specifications. Such standard as are mentioned are generally recognized by and available to the trades concerned.
- SP-9 Minor Modifications: The Contractor shall make such minor changes in the execution of the work to be done under these Specifications, which in the judgment of the Design professional shall be necessary or expedient to carry out the intent of the Contract before or during the progress of the Contract. No increase over the Contract price shall be paid to the Contractor on account of such minor

modifications. Work, which materially increases the cost to the Contractor, shall not be ordered under the provisions of this Paragraph.

- SP-10 Record of Construction Changes and As-Built Documents: Upon completion of the work, the Contractor shall show the final locations of all underground installations including, but not limited to, power lines, irrigation lines, sewage lines, drainage lines, etc. The Contractor shall record the proper location of all installations above ground where they have been changed on the site from designated locations on the Construction Drawings.
- SP-11 All references to “Architect”, “Project Landscape architect”, “City Representative”, “Project Engineer”, and “Engineer” contained within the Project Specifications and Drawings (except for Geotechnical Engineer or sub-consultant) shall be defined as “Design professional”. The Design professional may be a representative of the City, such as the City’s project manager, or a consultant working on behalf of the City.
- SP-12 Per provisions of O.C.G.A. § 12-7-17(9) and § 12-7-7.1(c), Erosion Control/Land Disturbance is under jurisdiction of the Georgia Environmental Protection Division (EPD). Erosion Control Plans have been submitted to EPD Watershed Protection Branch. A Notice of Intent (NOI) is required for this project and appropriate fees and plans shall be submitted by the Owner to the appropriate EPD district office as a part of the NOI submittal. The Contractor, as primary permittee, shall coordinate the NOI submittal with the Owner and Design Professional.

END OF SECTION

SECTION 011111

UNIQUE REQUIREMENTS

PART 1 GENERAL

1.01 Scope

The scope of this Section is to convey to the Contractor unique and unusual stipulations and requirements which have been established for this Project. Some of the stipulations and requirements are a result of negotiations with various entities and organizations which have an interest in this Project. Some requirements are based on technical aspects of the Project which are not otherwise conveyed to the Contractor. The provisions of this Section shall supersede the provisions of the Division 1 through 17 Specifications but shall not supersede the Bidding Requirements, Contract Forms or Conditions of the Contract.

1.02 Sequencing

- A. The Contractor shall be solely responsible for all construction staging and sequencing.
- B. The completion of specific preliminary sequencing tasks indicated will be required prior to any significant site demolition.

1.03 Sequencing Constraints

- A. The following construction sequencing constraints are to emphasize critical tasks of the work in this Contract. It is not a complete list of all work to be completed.
- B. The scope includes work to be performed within stream buffer areas under the permitting jurisdiction of the Environmental Protection Division of the Georgia Department of Natural Resources. The Contractor must follow the following construction methods:
 - 1. Within the 25-foot stream buffer, the Contractor shall construct the boardwalk from top-down methods to avoid disturbance of existing grade.
 - 2. Within the 25-foot stream buffer, contractor shall flush-cut vegetation to existing soil surface. There shall be no grubbing, grading, stump removal, dredging of soil, or discharge of fill material.
 - 3. Within the 25-foot stream buffer, contractor shall utilize suitable construction matting for all equipment access and workspace in order to avoid soil disturbance and rutting.
 - 4. For boardwalk areas outside stream buffers, the Contractor may disturb the ground if necessary, but stumps for all trees to be removed may remain.

END OF SECTION

SECTION 012000

PRICE AND PAYMENT PROCEDURES

PART 1-GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

1.02 SCHEDULE OF VALUES

- A. Submit a printed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet. Contractor's standard form or electronic media printout will be considered.
- B. The schedule of values shall be the exact same as the schedule of items in this project manual. Section summary totals shall be omitted.
- C. Revise schedule to list approved Change Orders, with each Application for Payment.

1.03 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Submit no more than one progress payment a month.
- B. Present required information in typewritten form or electronic media printout.
- C. Utilize the AIA G702 Application and Certificate for Payment and AIA G703 - Continuation Sheet(s). Approval from the City shall be obtained prior to the submission of any other form utilized besides what is specified herein.

1.04 APPLICATION FOR PROGRESS PAYMENTS-LUMP SUM CONTRACT

- A. For each item, provide a column listing each of the following:
 - 1. Item Number.
 - 2. Description of work and authorized change orders.
 - 3. Scheduled Values.

4. Work completed and accepted by the City from previous applications.
5. Work completed and accepted by the City for current period.
6. Materials presently stored (if applicable).
7. Total completed and stored to date of application.
8. Percent of completion.
9. Balance to finish.
10. Retainage.

B. Execute certification by signature of authorized officer.

C. Use data from Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored Products.

D. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.

E. Submit one copy of each Application for Payment.

F. Include the following with the application:

1. Transmittal letter.
2. Construction progress schedule, revised and current.
3. Partial release of liens from major Subcontractors and vendors.
4. Other documents as required.

1.05 APPLICATION FOR PROGRESS PAYMENT-LUMP SUM CONTRACT WITH UNIT PRICE ITEMS

A. For each item, provide a column listing each of the following:

1. Item Number.
2. Description of work and authorized change orders.
3. Unit of measure.
4. Bid quantity.
5. Unit price.

6. Bid total.
7. Work completed from previous applications.
 - a. Percentages for Lump Sum items installed and accepted by the City.
 - b. Quantities for Unit Price items installed and accepted by the City.
8. Work completed for current period.
 - a. Percentage for Lump Sum items installed and accepted by the City.
 - b. Quantities for Unit Price items installed and accepted by the City.
9. Total work completed to date.
 - a. Percentage for Lump Sum items installed and accepted by the City.
 - b. Quantities for Unit Price items installed and accepted by the City.
10. Total due this month.
11. Total due to date.

- B. Execute certification by signature of authorized officer.
- C. Use data from Schedule of Values. Provide percentages and/or actual quantities in each column for each line item for portion of work performed.
- D. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- E. Submit one copy of each Application for Payment.
- F. Include the following with the application:
 1. Transmittal letter.
 2. Construction progress schedule, revised and current.
 3. Partial release of liens from major Subcontractors and vendors.
 4. Other documents as required.

1.06 CONTRACT MODIFICATION PROCEDURES

- A. Construction Change Directive.

1. The City Representative may issue a document instructing Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
2. The document will describe changes in the Work, and will designate method of determining any change in Contract Sum or Contract Time.
3. Contractor shall promptly execute the change in Work.

B. Proposal Request.

1. The City Representative may issue a document which includes a detailed description of a proposed change.
2. Document may be accompanied with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid.
3. Contractor shall prepare and submit a fixed price quotation within 10 days.

C. Contractor Request for Change.

1. Contractor may propose a change by submitting a request for change to the City Representative.
2. Request for change shall describe the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.
3. The Contractor shall not stop work while waiting on approval of the submitted Request for Change unless written consent is provided by the City Representative.

D. Computation of Change in Contract Amount.

1. For changes requested by the City Representative for work falling under a contract with Unit Price items, the amount will be based on the Contractor's bid prices.

E. Substantiation of Costs.

1. Contractor shall provide full information required for evaluation.
2. The following data shall be provided:
 - a. Quantities of materials, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit.
 - d. Justification for any change in Contract Time.

- e. Credit for deletions from Contract, similarly documented.
- 3. Contractor shall support each claim for additional costs with additional information. The minimum following information shall be included:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
- F. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- G. Promptly enter changes in Project Record Documents.

1.07 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments and sum remaining due.
- B. A separate application for payment shall be submitted for retainage release accompanied by all required close out documents specified in Section 01780.

END OF SECTION 01200

SECTION 013330

SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.01 DEFINITIONS

- A. Data: Submittals that provide calculations, descriptions, or documentation regarding the work.
- B. Drawings: Submittals which graphically show relationship of various components of the work, schematic diagrams of systems, details of fabrication, layouts of particular elements, connections, and other relational aspects of the work.
- C. Instructions: Preprinted material describing installation of a product, system or material, including special notices and material safety data sheets, if any, concerning impedances, hazards, and safety precautions.
- D. Schedules: Tabular lists showing location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.
- E. Statements: A document, required of the Contractor, or through the Contractor, from a supplier, installer, manufacturer, or other lower tier Contractor, the purpose of which is to confirm the quality or orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel, qualifications, or other verifications of quality.
- F. Reports: Reports of inspections or tests, including analysis and interpretation of test results.
- G. Certificates: Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.
- H. Samples: Samples, including both fabricated and unfabricated physical examples of materials, products, and units of work as complete units or as portions of units of work.
- I. Records: Documentation to record compliance with technical or administrative requirements.
- J. Operation and Maintenance Manuals: Data which forms a part of an operation and maintenance manual.

1.02 SUBMITTAL CLASSIFICATION

- A. City approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Department of Public Works.

1.03 APPROVED SUBMITTALS

- A. The Department of Public Works approval of submittals shall not be construed as a complete check but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.
- B. Approval will not relieve the Contractor of the responsibility for any error that may exist. The Contractor is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work.
- C. After submittals have been approved by the Department of Public Works, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.04 DISAPPROVED SUBMITTALS

- A. The Contractor shall make all corrections required by the Department of Public Works and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal.
- B. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Department of Public Works.

1.05 WITHHOLDING OF PAYMENT

- A. Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 - EXECUTION

2.01 GENERAL

- A. The Contractor shall make submittals as required by the specifications or as required by The Department of Public Works in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.
- B. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements.
- C. Prior to submittal, all items shall be checked and approved by the Contractor and each item shall be stamped, signed, and dated by the Contractor indicating the action taken.
- D. Proposed deviations from the contract requirements shall be clearly identified.
- E. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

- F. Submittals shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

2.02 SCHEDULING

- A. Submittals covering component items forming a system or items that are interrelated, shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be included.
- B. A minimum of seven (7) calendar days (exclusive of mailing time) shall be allowed for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

2.03 SUBMITTAL PROCEDURE

- A. Contractor shall send a minimum of three (3) copies of submittals to the Department of Public Works located at, 1790 Hembree Road, Alpharetta, Georgia 30009. Two (2) copies shall be kept by the Department of Public Works and the remaining copies submitted shall be returned to the Contractor.
- B. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The City reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

2.04 CONTROL OF SUBMITTALS

- A. The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made before the Contractor scheduled date of installing items requiring approval by the City.

2.05 CITY APPROVED SUBMITTALS

- A. Upon completion of City review of submittals, the submittals will be identified as having "No Exceptions Taken", "Make Corrections Noted" or "Reject/Resubmit" by being so stamped and dated. Two (2) copies of the submittal will be retained by the Department of Public Works and the remaining copies of the submittal will be returned to the Contractor.
- B. The City reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Department of Public Works from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the City or for check testing by the City in those instances where the technical specifications so prescribe.

2.06 STAMPS

A. Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall include the following minimum information:

1. Name of Contractor
2. Approved
3. Approved with corrections as noted on submittal data and/or attached sheets
4. Signature
5. Title of signee
6. Date

END OF SECTION

SECTION 013323

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 – GENERAL

1.1 SCOPE

- A. The work under this Section includes submittal to the Engineer of shop drawings, product data and samples required by the various sections of these Specifications.
- B. Submittal Contents: The submittal contents required are specified in each section.
- C. Definitions: Submittals are categorized as follows:
 - 1. Shop Drawings
 - a. Shop drawings shall include technical data, drawings, diagrams, procedure and methodology, performance curves, schedules, templates, patterns, test reports, calculations, instructions, measurements, and similar information as applicable to the specific item for which the shop drawing is prepared.
 - b. Provide newly prepared information, on reproducible sheets, with graphic information at accurate scale (except as otherwise indicated) or appropriate number of prints hereof, with name or preparer (firm name) indicated. The Contract Drawings shall not be traced or reproduced by any method for use as or in lieu of detail shop drawings. Show dimensions and note dimensions that are based on field measurement. Identify materials and products in the work shown. Indicate compliance with standards and special coordination requirements. Do not allow shop drawings to be used in connection with the Work without appropriate final “Action” markings by the Engineer.
 - c. Drawings shall be presented in a clear and thorough manner. Details shall be identified by reference to sheet and detail, specification section, schedule or room numbers shown on the Contract Drawings.
 - d. Minimum assembly drawings sheet size shall be 24 x 36 inches.
 - e. Minimum detail sheet size shall be 8 1/2 x 11 inches.
 - f. Minimum Scale:
 - i. Assembly Drawings Sheet, Scale: 1 inch = 30 feet.
 - ii. Detail Sheet, Scale: 1/4 inch = 1 foot.

2. Product Data
 - a. Product data includes standard printed information on materials, products, and systems, not specially prepared for this Project, other than the designation of selections from among available choices printed therein.
 - b. Collect required data into one submittal for each unit of work or system and mark each copy to show which choices and options are applicable to the Project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked and special coordination requirements.
3. Samples
 - a. Samples include both fabricated and unfabricated physical examples of materials, products, and units of work, both as complete units and as smaller portions of units of work, either for limited visual inspection or, where indicated, for more detailed testing and analysis.
 - b. Provide units identical with final condition of proposed materials or products for the work. Include "range" samples, not less than three units, where unavoidable variations must be expected, and describe or identify variations between units of each set. Provide full set of optional samples where the Engineer's selection is required. Prepare samples to match the Engineer's sample where indicated. Include information with each sample to show generic description, source or product name and manufacturer, limitations, and compliance with standards. Samples are submitted for review and confirmation of color, pattern, texture and "kind" by the Engineer. Engineer will note "test" samples, except as otherwise indicated, for other requirements, which are the exclusive responsibility of the Contractor.
4. Miscellaneous submittals related directly to the Work (non-administrative) warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, statements of applicability, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operating and maintenance materials, overrun stock, security/protection/safety keys and similar information, devices and materials applicable to the Work but not processed as shop drawings, product data or samples.

1.2 SPECIFIC CATEGORY REQUIREMENTS

- A. General: Except as otherwise indicated in the individual work sections, comply with general requirements specified herein for each indicated category of submittal. Submittals shall contain:
 1. The date of submittal and the dates of any previous submittals.
 2. The Project title.

3. Numerical submittal numbers, starting with 1.0, 2.0, etc. Revisions to be numbered 1.1, 1.2, etc.
4. The Names of:
 - a. Contractor
 - b. Supplier
 - c. Manufacturer
5. Identification of the product, with the Specification section number, permanent equipment tag numbers and applicable Drawing No.
6. Field dimensions clearly identified as such.
7. Relation to adjacent or critical features of the Work or materials.
8. Applicable standards, such as ASTM or Federal Specification numbers.
9. Notification to the Engineer in writing, at time of submissions, of any deviations on the submittals from requirements of the Contract Documents.
10. Identification of revisions on resubmittals.
11. An 8 x 3-inch blank space for Contractor and Engineer stamps.
12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria and coordination of the information within the submittal with requirements of the Work and of Contract Documents.
13. Submittal sheets or drawings showing more than the particular item under consideration shall have all but the pertinent description of the item for which review is requested crossed out.

1.3 ROUTING OF SUBMITTALS

- A. Submittals and routine correspondence shall be routed as follows:
 1. Supplier to Contractor (through representative if applicable)
 2. Contractor to Engineer
 3. Engineer to Contractor and Owner
 4. Contractor to Supplier

PART 2 - PRODUCTS

2.1 SHOP DRAWINGS

- A. Unless otherwise specifically directed by the Engineer, make all shop drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the Work.
- B. Submit all shop drawings in the form of six hard copies and one pdf file.
- C. One reproducible for all submittals larger than 11 x 17 inches and no more than three prints of other submittals will be returned to the Contractor.

2.2 MANUFACTURER'S LITERATURE

- A. Where content of submitted literature from manufacturers includes data not pertinent to this submittal, clearly indicate which portion of the contents is being submitted for the Engineer's review.
- B. Submit the number of copies which are required to be returned (not to exceed three) plus three copies which will be retained by the Engineer.

2.3 SAMPLES

- A. Samples shall illustrate materials, equipment or workmanship and established standards by which completed work is judged.
- B. Unless otherwise specifically directed by the Engineer, all samples shall be of the precise article proposed to be furnished.
- C. Submit all samples in the quantity which is required to be returned plus one sample which will be retained by the Engineer.

2.4 COLORS

- A. Unless the precise color and pattern is specifically described in the Contract Documents, wherever a choice of color or pattern is available in a specified product, submit accurate color charts and pattern charts to the Engineer for review and selection.
- B. Unless all available colors and patterns have identical costs and identical wearing capabilities, and are identically suited to the installation, completely describe the relative costs and capabilities of each.

PART 3 - EXECUTION

3.1 CONTRACTOR'S COORDINATION OF SUBMITTALS

- A. Prior to submittal for the Engineer's review, the Contractor shall use all means necessary to fully coordinate all material, including the following procedures:
 - 1. Determine and verify all field dimensions and conditions, catalog numbers and similar

data.

2. Coordinate as required with all trades and all public agencies involved.
 3. Submit a written statement of review and compliance with the requirements of all applicable technical Specifications as well as the requirements of this Section.
 4. Clearly indicate in a letter or memorandum on the manufacturer's or fabricator's letterhead, all deviations from the Contract Documents.
- B. Each and every copy of the shop drawings and data shall bear the Contractor's stamp showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp will be returned to the Contractor for conformance with this requirement.
- C. The Owner may back charge the Contractor for costs associated with having to review a particular shop drawing, product data or sample more than two times to receive a "No Exceptions Taken" mark.
- D. Grouping of Submittals
1. Unless otherwise specifically permitted by the Engineer, make all submittals in groups containing all associated items.
 2. No review will be given to partial submittals of shop drawings for items which interconnect and/or are interdependent. It is the Contractor's responsibility to assemble the shop drawings for all such interconnecting and/or interdependent items, check them and then make one submittal to the Engineer along with Contractor's comments as to compliance, noncompliance or features requiring special attention.
- E. Schedule of Submittals
1. Within 30 days of Contract award and prior to any shop drawing submittal, the Contractor shall submit a schedule showing the estimated date of submittal and the desired approval date for each shop drawing anticipated. A reasonable period shall be scheduled for review and comments. Time lost due to unacceptable submittals shall be the Contractor's responsibility and some time allowance for resubmittal shall be provided. The schedule shall provide for submittal of items which relate to one another to be submitted concurrently.

3.2 TIMING OF SUBMITTALS

- A. Make all submittals far enough in advance of scheduled dates for installation to provide all required time for reviews, for securing necessary approvals, for possible revision and resubmittal, and for placing orders and securing delivery.
- B. In scheduling, allow sufficient time for the Engineer's review following the receipt of the submittal.

3.3 REVIEWED SHOP DRAWINGS

- A. Engineer Review
1. Allow a minimum of 30 days for the Engineer's initial processing of each submittal requiring review and response, except allow longer periods where processing must be delayed for coordination with subsequent submittals. The Engineer will advise the Contractor promptly when it is determined that a submittal being processed must be

delayed for coordination. Allow a minimum of two weeks for reprocessing each submittal. Advise the Engineer on each submittal as to whether processing time is critical to progress of the Work, and therefore the Work would be expedited if processing time could be foreshortened.

2. Acceptable submittals will be marked "No Exceptions Taken". A minimum of three copies will be retained by the Engineer for Engineer's and the Owner's use and the remaining copies will be returned to the Contractor.
 3. Submittals requiring minor corrections before the product is acceptable will be marked "Make Corrections Noted". The Contractor may order, fabricate and ship the items included in the submittals, provided the indicated corrections are made. Drawings must be resubmitted for review and marked "No Exceptions Taken" prior to installation or use of products.
 4. Submittals marked "Amend and Resubmit" must be revised to reflect required changes and the initial review procedure repeated.
 5. The "Rejected See Remarks" notation is used to indicate products which are not acceptable. Upon return of a submittal so marked, the Contractor shall repeat the initial review procedure utilizing acceptable products.
 6. Only two copies of items marked "Amend and Resubmit" and "Rejected See Remarks" will be reviewed and marked. One copy will be retained by the Engineer and the other copy with all remaining unmarked copies will be returned to the Contractor for resubmittal.
- B. No work or products shall be installed without a drawing or submittal bearing the "No Exceptions Taken" notation. The Contractor shall maintain at the job site a complete set of shop drawings bearing the Engineer's stamp.

- C. Substitutions: In the event the Contractor obtains the Engineer's approval for the use of products other than those which are listed first in the Contract Documents, the Contractor shall, at the Contractor's own expense and using methods approved by the Engineer, make any changes to structures, piping and electrical work that may be necessary to accommodate these products.
- D. Use of the "No Exceptions Taken" notation on shop drawings or other submittals is general and shall not relieve the Contractor of the responsibility of furnishing products of the proper dimension, size, quality, quantity, materials and all performance characteristics, to efficiently perform the requirements and intent of the Contract Documents. The Engineer's review shall not relieve the Contractor of responsibility for errors of any kind on the shop drawings. Review is intended only to assure conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site. The Contractor is also responsible for information that pertains solely to the fabrication processes or to the technique of construction and for the coordination of the work of all trades.

3.4 RESUBMISSION REQUIREMENTS

- A. Shop Drawings
 - 1. Revise initial drawings as required and resubmit as specified for initial submittal, with the resubmittal number shown.
 - 2. Indicate on drawings all changes which have been made other than those requested by the Engineer.
- B. Project Data and Samples: Resubmit new data and samples as specified for initial submittal, with the resubmittal number shown.

END OF SECTION

SECTION 014500

QUALITY CONTROL

PART 1 – GENERAL

1.01 SERVICES

- A. Quality control services include inspections, tests, and related actions, including reports performed by the Contractor, independent agencies and by governing authorities. They do not include contract enforcement activities performed by the City.
- B. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, test, or approvals required by the Standard Specifications or the Owner's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to the Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to the City.

1.02 INSPECTIONS AND TESTING

- A. Contractor shall provide inspections and tests specified and required by authorities having jurisdiction. Costs for these services are included in the Contract Sum.
- B. The Contractor shall employ and pay a qualified independent testing agency to perform these services. Costs for these services are included in the Contract Sum.
- C. The Contractor is responsible for retesting where results of inspections and tests prove unsatisfactory and indicate noncompliance with requirements. The cost of retesting is the Contractor's responsibility where tests performed indicated noncompliance with requirements.

1.03 AUXILIARY SERVICES

- A. The Contractor shall cooperate with agencies performing inspections and tests and provide auxiliary services as requested. The Contractor shall notify the agency in advance of operations to permit assignment of personnel. Auxiliary services include the following:
 - 1. Providing access to the Work.
 - 2. Furnishing incidental labor and facilities to assist inspections and tests.
 - 3. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 - 4. Providing facilities for storage and curing of test samples.
 - 5. Delivering samples to testing laboratories.

6. Providing preliminary design mix proposed for use for materials mixes that require control by the testing agency.
7. Providing security and protection of samples and test equipment.

1.04 TESTING AGENCY RESPONSIBILITIES

- A. The testing agency shall cooperate with the Design professional and the Contractor in performing its duties. The agency shall provide qualified personnel to perform inspections and tests.
- B. The agency shall notify the Design professional and the Contractor of irregularities or deficiencies observed in the Work during performance of its services.
- C. The agency shall communicate the results of their tests to the Design professional and the Contractor either orally or in writing immediately after performance of services prior to leaving the site.
- D. The agency shall not release, revoke, alter, or enlarge requirements or approve or accept any portion of the Work.
- E. The agency shall not perform duties of the Contractor.

1.05 COORDINATION

- A. Coordinate activities to accommodate services with a minimum of delay. Avoid removing and replacing construction to accommodate inspections and tests.
- B. The Contractor is responsible for scheduling inspections, tests, taking samples and similar activities.

1.06 SUBMITTALS

- A. The testing agency shall submit a certified written report, in duplicate, of each inspection and test to the Design professional.
- B. Submit additional copies of each report to the governing authority, when the authority so directs.
- C. Reports of each inspection, test, or similar service shall include, but are not limited to, the following:
 1. Date of issue.
 2. Project title and number.
 3. Name, address, and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making the inspection or test.
 6. Designation of the Work and test method.
 7. Identification of product and Specification Section.
 8. Complete inspection or test data.
 9. Test results and an interpretation of test results.
 10. Ambient conditions at the time of sample taking and testing.

11. Comments or professional opinion on whether inspected or tested Work complies with requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting.

1.07 QUALIFICATIONS

- A. Engage inspection and testing service agencies that are prequalified as complying with the American Council of Independent Laboratories' "Recommended Requirements for Independent Laboratory Qualification" and that specialize in the types of inspections and tests to be performed.
- B. Each agency shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.

PART 2 – EXECUTION

2.01 REPAIR AND PROTECTION

- A. Upon completion of inspection, testing, and sample taking, repair damaged construction.
- B. Protect construction exposed by or for quality control service activities and protect repaired construction.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for inspection and testing.

END OF SECTION

SECTION 017423

SITE CLEAN UP AND FINISH

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. This section covers the clean up of the site prior to final inspections. The contractor is to provide all labor and equipment required to complete section.

1.02 RELATED DOCUMENTS

- A. Provisions established within the General and Supplementary Conditions of the Contract, Division 1 – General Requirements, and the Construction Drawings are collectively applicable to this section.

1.03 TRAFFIC CONTROL

- A. The Contractor shall be fully responsible for traffic control on the project.
- B. Traffic control shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Addition.
- C. The Contractor shall submit a traffic control plan to the City of Alpharetta Traffic Department for approval. The traffic control plan shall detail all lane shifts, lane closures, detours, barrel spacing etc. and shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Addition.
- D. Contractor shall not impact traffic before 9:00 AM and after 4:00 PM.

PART II- EXECUTION

2.01 CLEAN UP

- A. The Contractor shall dispose of any and all trash and debris off site.
- B. All debris, construction materials, stumps, roots, boulders or any other extraneous material deposited during construction shall be removed from the site.
- C. Contractor shall remove office trailer, all storage buildings, stockpile of materials and equipment from site.

2.02 FINAL INSPECTIONS

- A. Contractor shall remove all tree save fence only with the approval of the City of Alpharetta's arborist or City Representative.

- B. Contractor shall remove all erosion control devices only with the approval of the City of Alpharetta's storm water engineer or City Representative.
- C. Contractor shall have the entire site clean, swept and washed down prior to final inspections.
- D. Provide the City Representative with at least 48 hours notice of final inspections.

END OF SECTION

SECTION 017800

CLOSEOUT DOCUMENTS

PART 1-GENERAL

1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

1.02 SUBMITTALS

A. Project Record Documents

1. Submit documents to City Representative with Retainage Release Application for Payment.

B. Operation and Maintenance Data (Where Applicable)

1. For equipment, or component parts of equipment put into service during construction and operated by the City, submit completed documents within ten days after acceptance.
2. Submit 1 copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with City Representative comments. Revise content of all document sets as required prior to final submission.
3. Submit two sets of revised final documents in final form within 10 days after final inspection.

C. Warranties and Bonds

1. For equipment or component parts of equipment put into service during construction with City Representative's permission, submit documents within ten days after acceptance.
2. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by City Representative.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.

3.02 OPERATION AND MAINTENANCE DATA

- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.

- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 - 1. Product data, with catalog number, size, composition, and color and texture designations.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

3.04 OPERATION AND MAINTENANCE MANUALS

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- B. Prepare data in the form of an instructional manual.
- C. Binders: Commercial quality, 8-1/2 x 11 inch (216 x 280 mm) three D side ring binders with durable plastic covers; 2 inch (50 mm) maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- G. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

- H. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- I. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of City Representative, Contractor, Subcontractors, and major suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.

3.05 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work. Except for items put into use with City Representative's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 x 11 inch (216 x 279 mm) three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of

responsible company principal.

- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION

SECTION 024100

DEMOLITION

PART 1-GENERAL

1.01 SCOPE OF WORK

- A. This section covers demolition and removal of existing items on site which interfere with proposed construction and protection of existing items to remain. This includes removal of existing structures, foundations, pavements, broken & dumped concrete and construction debris. The Contractor shall coordinate with the City phasing the work to accommodate existing site users.

1.02 TRAFFIC CONTROL

- A. The Contractor shall be fully responsible for traffic control on the project.
- B. Traffic control shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Addition.
- C. The Contractor shall submit a traffic control plan to the City of Alpharetta Traffic Department for approval. The traffic control plan shall detail all lane shifts, lane closures, detours, barrel spacing etc. and shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Addition.
- D. Contractor shall not impact traffic before 9:00 AM and after 4:00 PM.

PART 2-EXECUTION

2.01 UTILITY PROTECTION

- A. The Contractor shall comply with the Georgia Utilities Protection Law. Notice must be given to the Utilities Protection Center at 800-811-7411, three (3) working days prior to starting any work.
- B. The Contractor shall protect all existing utilities that are not slated for demolition at all times throughout the project. Contractor shall make such explorations and probes as necessary to ascertain any wet sewer lines, water supply lines, live electrical conduits, live phone lines, etc. and shall make sure these utilities can be broken or changed without danger or disruption to any necessary service. De-activate and disconnect all existing utilities before proceeding with the work, except as specified above or otherwise shown on plans.
- C. Follow rules and regulations of authorities having jurisdiction for the respective utilities in executing work under this section.
- D. Inactive and Abandoned Utilities: Remove, plug or cap. In absence of specified requirements, plug or cap such utility lines as required by local regulations.

2.02 DEMOLITION AND REMOVAL

- A. Demolish and remove from site existing structures, foundations, curb & gutter, slabs, walks, paving, steps, and any other item above or below ground that interferes with construction of the project as shown on plans.
- B. Materials demolished and items removed shall become the property of the Contractor and shall be removed promptly from the site, except for salvageable items as specified by the City Representative. All demolished material shall be legally disposed of off the Owner's property. Any cost incurred by the City in cleaning up such materials and debris left behind shall be deducted from funds due the Contractor under this contract.
- C. The Contractor shall be responsible for removing any demolition debris or mud from any street, alley or right-of-way resulting from the execution of the demolition work. Any cost incurred by the City in cleaning up any debris or mud shall be charged to the Contractor and be deducted from funds due to the Contractor.
- E. Littering of the site shall not be permitted.
- F. All construction equipment used in conjunction with this project shall be in good repair and adequately muffled. The Contractor shall comply with the City's noise ordinance.
- G. The Contractor shall comply with all applicable air pollution control requirements. The Contractor shall take appropriate actions to minimize atmospheric pollution. The City shall have the authority to require that reasonable precautions be taken to prevent particulate matter from becoming airborne.
- H. No fires of any kind will be permitted on site.
- I. No material obstructions or debris shall be placed or allowed to accumulate within fifteen feet of any fire hydrant. All fire hydrants shall be accessible at all times.
- J. Hazardous Materials: It is not expected that hazardous materials will be encountered in the work. If materials suspected of containing hazardous characteristics are encountered, do not disturb; immediately notify City Representative.

2.03 UTILITY ADJUSTMENTS

- A. All existing utilities shown within the construction area shall be removed, adjusted or relocated as needed at the Contractor's expense including valves, meter boxes, pull boxes, etc. Contractor shall be responsible for coordinating (with the appropriate utility provider) the removal, relocation, abandonment, adjustment or modification of all utilities that interfere with construction of the project as shown on plans. The Contractor shall pay for temporary relocation of utilities, which are relocated at the Contractor's request for his convenience.

2.04 PUBLIC SAFETY

- A. The Contractor shall provide all barricades, guards, lights and other installations required to protect persons and property during the work period. This shall be in addition to such protection required elsewhere in this specification.

END OF SECTION

SECTION 034800

PRECAST CONCRETE SPECIALTIES – BOARDWALK (DEDUCTIVE ALTERNATE)

PART 1-GENERAL

1.1 SUMMARY

- A. These specifications are for a precast concrete boardwalk which is to be priced as a deductive alternate in lieu of steel and concrete bridge deck planned as the base bid boardwalk (refer to GDOT standard specifications) and shall be regarded as the minimum standards for this project. These specifications are based upon products designed and supplied by:
- PermaTrak North America
LLC Ph: 980-229-3036
Ph: 877-332-7862
Fax: 704-541-3675
www.permatrak.com
Contact: Mr. Jason
Philbin
jphilbin@permatrak.com
- B. All reference to “Professional Engineer” in this section shall refer to an engineer provided by PermaTrak and for PermaTrak products only. This item shall also include the design, specification, and construction of a railing and foundation system that is attached to the proposed boardwalk system.
- C. If the contractor is to supply an equivalent design and product, the proposed design shall include shop drawings signed and sealed by a Professional Engineer in the state of Georgia. Any deviation from the specifications herein shall be submitted for approval along with the proposed shop drawings.

1.2 QUALITY ASSURANCE

- A. The contractor performing the installation of the pile foundations shall have installed piles of size and length similar to those shown on the plans for a minimum of three (3) years prior to the bid date for this project. The contractor shall submit a list containing at least three (3) projects completed in the last three (3) years on which the contractor has installed piles of a size and length similar to those shown on the plans. The list of projects shall contain names and phone numbers of owner’s representatives who can verify the Contractor’s participation on those projects.
- B. Prior to the installation of the pile foundations, a survey must be performed to stake pile locations in the field as shown on the project plans. The survey shall be performed by a licensed surveyor in the state of Georgia. The surveyor shall have a minimum experience of five (5) years in surveying foundation locations for projects of similar length and environmental complexity. The surveyor shall have a minimum of five (5) years experience using equipment that is adequate to stake locations in field using a CAD file

- plan location and that has tolerance to achieve accurate locations as described below.
1. If timber pilings are detailed on project documents as pile foundations, pilings shall be placed within the tolerances indicated on the shop drawings and driven to refusal. If pilings extend further than anticipated per Geotechnical report, additional piling lengths may be spliced and paid by additional depth of piling. As construction is placed, it is anticipated to build from a top-down approach to avoid disturbance of sensitive areas.
 2. If helical piers are detailed on project documents as pile foundations, production anchors shall be placed such that the anchor head is within one (1) inch laterally and one (1) inch longitudinally of location specified on the project plans, and the anchor shaft alignment shall be within two (2) degrees of the inclination angle shown on the project plans.
- C. Manufacturer Qualifications: Not less than 5 years experience in the actual production of precast products as described below.
1. Components shall be factory fabricated and engineered by single entity. This entity shall be registered to do business in the State of Georgia.
 2. Boardwalk supplier (Precaster) for the boardwalk shall have in-house color mixing facilities for color pigmentation.
 3. Boardwalk supplier (Precaster) shall have either a minimum experience of 5 years or 20 boardwalk projects in design, production, and field consultation.
 4. Boardwalk supplier (Precaster) must be certified by PCI or NPCA.
 5. Precast components must be manufactured with the use of hot rolled steel skin in reinforced steel forms. Temporary (i.e., Timber) and/or single use forms are unacceptable unless approved in writing by the Professional Engineer.
- D. Acceptability Criteria for Treads and Curbs (if applicable): The finished visible (in the final installed position) surface shall have no obvious imperfections other than minimal color or texture variations from the approved samples or evidence of repairs when viewed in good typical daylight illumination with the unaided naked eye at a 20 ft. viewing distance. Appearance of the surface shall not be evaluated when light is illuminating the surface from an extreme angle as it tends to accentuate the minor surface irregularities. The following is a list of finish defects that shall be properly repaired, if obvious when viewed at a 20 ft. distance. Patching (by a trained skilled concrete repair person) is an acceptable repair method.
1. Ragged or irregular surfaces.
 2. Excessive air voids (commonly called bug holes) larger than 1/4 in. evident on the top surface of the tread or curbs (if applicable).
 3. Adjacent flat and return surfaces with greater texture and/or color differences than the approved samples or mockups.
 4. Casting and/or aggregate segregation lines evident from different concrete placement lifts and consolidation.
 5. Visible mold joints or irregular surfaces.
 6. Rust stains on exposed surfaces.
 7. Units with excessive variation in texture and/or color from the approved samples, within the unit or compared with adjacent units.
 8. Blocking stains evident on exposed surfaces.
 9. Areas of backup concrete bleeding through the facing concrete.
 10. Foreign material embedded in the surface.
 11. Visible repairs at a 20 ft. viewing distance.
 12. Reinforcement shadow lines.

13. Cracks visible at a 20 ft. viewings distance.
- E. Installer Qualifications: Boardwalk Installer shall demonstrate verifiable experience in the following areas within the past three (3) years:
 1. Experience in boardwalk installation is required. The Contractor shall show not less than three examples of boardwalk installation for projects of similar size and scope.
 2. Installation of at least one precast concrete boardwalk is preferred, but not mandatory. The Contractor will need to demonstrate experience with precast components or modular systems (i.e., precast 3-sided bridges, precast wall panels or precast MSE walls) on a project of not less than \$100,000 in precast scope.
- F. Mock-Up: Provide, if required by the Owner's Representative, a mock-up for evaluation of the boardwalk showing the surface preparation techniques and application workmanship.
 1. Finish areas designated by the Owner's Representative.
 2. Do not proceed with remaining work until mock-up is accepted by the Owner's Representative.
 3. Refinish mock-up area as required to produce acceptable work.
- 1.3 SUBMISSIONS: Prior to the start of fabrication or construction, the Contractor shall submit to the Engineer a design package, which shall include, but is not limited to, the following:
 - A. PRELIMINARY SUBMISSIONS: Prior to the start of fabrication or construction, the Contractor shall submit to the Owner's Representative a design package, which shall include but not limited to the following:
 1. DETAILED PLANS:
 - a. REGISTRATION / SEAL: Sealed by a licensed Professional Engineer (Georgia).
 - b. PLAN VIEW: Full plan view of the boardwalk, foundation and railing system drawn to scale. The plan view must reflect the proposed horizontal alignment as shown on the design plans.
 - c. ELEVATION VIEW: Full elevation view of the boardwalk, railing and foundation system drawn to scale which reflect the actual vertical alignment. Elevation views shall indicate the elevation at the top and bottom of the boardwalk and foundation system components, horizontal and vertical break points, and location of the finished grade.
 - d. DETAILS: Details of all boardwalk and railing system components and their connections such as the length, size and where changes occur; connections; etc.
 - e. CODE REFERENCE: Design parameters used along with AASHTO references.
 2. DESIGN COMPUTATIONS: computations shall:
 - a. Be stamped by a licensed Professional Engineer in the State of Georgia.
 - b. Clearly refer to the applicable AASHTO provisions.

- c. Include documentation of computer programs including all design parameters.
- d. Clearly show that all reinforced precast treads and beams meet AASHTO requirements for the loading per Section 1.3.F.
- e. Include sketches of reinforcement in treads and beams, shear and moment diagrams, and all equations used shall be referenced to applicable code.

3. CONSTRUCTION SPECIFICATIONS:

- a. Construction methods specific to the boardwalk vendor chosen. Submittal requirements such as certification, quality and acceptance/rejection criteria shall be included. Details on connection of boardwalk units and foundation system such that assurance of uniform load transfer shall be checked.
- B. FINAL SUBMISSION: Once a boardwalk, foundation and railing system design has been reviewed and accepted by the Owner, the Contractor shall submit the final plans. The designer of the boardwalk, foundation and railing system is responsible for the review of any drawings prepared for fabrication. One set of all approved shop drawings shall be submitted to the Owner's Representative permanent records.
- C. SUBMITTALS: Product Data: Submit Manufacturer's technical product data for railing components and accessories.

Manufacturer to supply submittal drawings for approval to include the following:

- 1. Section-thru details.
 - 2. Mounting methods.
 - 3. Typical Elevations.
 - 4. Key plan layout.
- D. SHOP DRAWINGS: Shop drawings shall:
- a. Be stamped by a licensed Professional Engineer in the State of Georgia.
 - b. Show actual field conditions and true elevation and location supplied after field verification.
 - c. Clearly detail reinforcement in beams, treads and curbs including clear dimension from concrete edge, size and amount of rebar.
 - d. Clearly state concrete reinforcement strength and epoxy coating where required as well as component weight and lifting locations.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Field Measurements: Where handrails and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication; show recorded measurements on final shop drawings.

1. Where field measurements cannot be made without delaying the railing fabrication and delivery, obtain guaranteed dimensions in writing by the Contractor and proceed with fabrication of products so as not to delay fabrication, delivery and installation.
- C. Coordinate fabrication and delivery schedule of handrails with construction progress and sequence to avoid delay of railing installation.
- D. The Owner supplied PermaTrak material will be stored at a location on site with full coordination between the Contractor and Owner. If the Owner elects to store material at PermaTrak's manufacturing facility, delivery requests can be made directly by the Contractor to PermaTrak's logistics manager.
- E. The Owner will notify the Contractor when material is available to be scheduled for delivery. The Contractor will schedule delivery directly with PermaTrak. One (1) week notice must be given prior to any delivery of material and two (2) trucks per day is the maximum that can be delivered. All truckloads must be full truckloads.
- F. Acceptance and off-loading of material shall be performed by the Contractor. The Owner shall be notified and updated regarding delivery and off-loading schedules. The Contractor will be responsible for the inspection of all materials during off-loading. Deficient materials shall be noted and photographed. The Owner and PermaTrak shall be immediately notified of any deficient materials. Acceptability criteria shall be per Section 1.2.D. Minor patching and repair to be performed by the installer.

1.5 WARRANTY:

- A. Contractor will be responsible for installation defects associated with the boardwalk and abutment components, foundation system, and railings for a period of 12 calendar months from the date of final acceptance by the Owner.
- B. Boardwalk manufacturer shall warranty all precast concrete components against defects in material and workmanship for a period of 10 years.
- C. Railing manufacturer shall warranty the railing against defects in materials and workmanship for a period of 12 months.

1.6 MEASUREMENT AND PAYMENT

- A. Precast concrete boardwalk and foundations shall be paid for at the contract unit price as listed in the bid proposal for "Concrete Boardwalk - Permatrak on timber pilings". This price shall include all materials, equipment, labor and work necessary for and incidental to the design, construction, delivery, unloading, assembly, and placement of the boardwalk and foundation as shown in the contract plans.
- B. Railings for the boardwalk shall be paid for at the contract unit price as listed in the bid proposal for "Boardwalk Guardrail". This price shall include all materials, equipment, labor and work necessary for and incidental to the design, construction, delivery, unloading, assembly, and placement of boardwalk railings as shown in the contract plans.
- C. Precast abutments, if used, shall be paid for at the contract unit price as listed in the bid proposal for "Boardwalk Abutment Walls – Precast." This price shall include all

materials, equipment, labor and work necessary for and incidental to the design, construction, delivery, unloading, assembly, and placement of abutments as shown in the contract plans.

PART 2-MATERIALS & TESTING

2.1 PRECAST CONCRETE: shall conform to the following:

- a. The minimum compressive strength of the concrete shall be 4000 psi measured at 28 days.
- b. All precast concrete shall contain fiber reinforcing as well as structural steel reinforcement as designed by the Professional Engineer.
- c. All precast concrete components shall be air entrained composed of Portland cement, fine and coarse aggregates, admixtures and water. The air-entraining feature may be obtained by the use of either an air entraining Portland cement or an air entraining admixture. The entrained air-content shall be not less than four percent or more than seven percent.

PART 3 - EXECUTION

1.1 PRECAST CONCRETE BOARDWALK

- A. Installation of the precast concrete boardwalk system and railings, if applicable, shall be performed in accordance to the approved plans and manufacturers installation instructions. Boardwalk manufacturer shall provide a field representative to review installation instructions with the Contractor and Engineer and to certify that the installation has been performed according to the approved drawings and manufacturer's instructions.

END OF SECTION

SECTION 311100

CLEARING AND GRUBBING

PART 1-GENERAL

1.01 SCOPE OF WORK

- A. This section covers clearing of vegetation, grubbing of stumps, roots, and debris, stripping of topsoil, disposal of unutilized materials and other incidental work related to preparing the site for later use.

1.02 DEFINITIONS

- A. Clearing: Clearing shall consist of the felling, trimming, and cutting of obstructions such as trees into sections and the satisfactory disposal of the trees and other surface vegetation designated for removal, including down timber, snags, brush, and rubbish occurring in the areas to be cleared.
- B. Grubbing: Grubbing shall consist of the removal and disposal of below-surface stumps, roots larger than 3 inches in diameter, and matted roots from the designated grubbing areas.
- C. Hazardous Material: Substance likely to cause death or injury by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, or otherwise harmful; and includes, but is not limited to flammable dust, flammable fiber, combustible liquid, dangerous chemical, flammable gas, liquefied flammable gas, and flammable liquid.
- D. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, stones, and other objects more than 1 inch in diameter; and free of subsoil and weeds, roots, toxic materials, and other non-soil materials.
- E. Tree Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction.

1.03 PROJECT/SITE CONDITIONS

- A. Work Limits: Area to be cleared and grubbed will be the limits of disturbance as shown on the plans.
- B. Burning: No burning of any kind shall be permitted.
- C. Landscape Preservation: Protect vegetation outside the work limits from injury. Existing trees and shrubs shall not be disturbed or damaged. Any existing trees and or shrubs that are damaged as a result of construction activities shall be pruned by an ISA Certified Arborist.
- D. Traffic: Minimize interference with adjoining roads, streets, walks and other adjacent occupied or used facilities during site clearing operations.

- E. Hazardous Materials: It is not expected that hazardous materials will be encountered in the work. If materials suspected of containing hazardous characteristics are encountered, do not disturb; immediately notify City Representative.

1.04 TRAFFIC CONTROL

- A. The Contractor shall be fully responsible for traffic control on the project.
- B. Traffic control shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Addition.
- C. The Contractor shall submit a traffic control plan to the City of Alpharetta Traffic Department for approval. The traffic control plan shall detail all lane shifts, lane closures, detours, barrel spacing etc. and shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Addition.
- D. Contractor shall not impact traffic before 9:00 AM and after 4:00 PM.

PART 2-EXECUTION

2.01 PROTECTION

- A. Areas within the boardwalk corridor are delineated as wetlands. Refer to plans for these areas. For trees and vegetation to be removed within the limits of disturbance delineated as wetlands on the plans, the contractor is NOT to remove stumps. A permit to disturb wetland areas has not been obtained for this project, and is to be avoided by adhering to the following directives:
 - a. Boardwalk installation is to utilize top-down construction methods to avoid disturbance in wetlands.
 - b. Soils are not to be disturbed by heavy equipment nor shall streams be piped by temporary or permanent culverts.
 - c. For tree removal in boardwalk corridor outside wetlands, do not remove stumps. For vegetation removal within wetlands, 25-foot stream buffers and boardwalk corridor, cut trees cleanly and allow no more than 6"-8" of the trunk to protrude from existing grade.
 - d. Within wetlands and 25-foot stream buffers, contractor shall utilize suitable construction matting for all equipment access and workspace in order to avoid soil disturbance and rutting. The contractor will refrain from utilizing tracked equipment within sensitive areas of boardwalk corridors to avoid disturbance of soil. There shall be no grubbing, grading, stump removal, dredging of soil, or discharge of fill material.
 - e. For all other sections of the corridor not within the boardwalk corridor, wetland or 25-foot stream buffer areas, the contractor shall clear and grub as directed in this specification.
- B. Prior to clearing and grubbing, locate and clearly flag trees and vegetation to remain or to be relocated. Erect and maintain a temporary fence around trees and vegetation to remain as indicated on the plans. Obtain approval from City Arborist for tree save fence locations prior to installing silt fence.
- C. Prior to clearing and grubbing, install erosion control measures as shown on the plans. Obtain approval from City Representative certified in erosion control inspections that erosion control measures have been installed properly and completely.

D. Protect existing site improvements to remain from damage during construction. Any existing site improvements that are damaged during construction activities shall be restored back to their original condition as acceptable to the City Representative at no additional cost.

E. Roads and Walks: Keep roads and walks free of dirt and debris at all times.

2.02 UTILITY PROTECTION

A. The Contractor shall comply with the Georgia Utilities Protection Law. Notice must be given to the Utilities Protection Center at 800-811-7411, three (3) working days prior to starting any work.

B. The Contractor shall protect all existing utilities that are indicated to remain from damage at all times throughout the project. Contractor shall make such explorations and probes as necessary to ascertain any wet sewer lines, water supply lines, live electrical conduits, live phone lines, etc. and shall make sure these utilities can be broken or changed without danger or disruption to any necessary service. Deactivate and disconnect all existing utilities before proceeding with the work, except as specified above or otherwise shown on plans.

C. Notify the City of Alpharetta Public Works Department immediately of damage to an existing utility line or of an encounter with an unknown existing utility line. The Contractor shall be responsible for the repairs of damage to existing utilities. When utility lines which are to be removed are encountered within the area of operations, the Contractor shall notify the City of Alpharetta Public Works Department 72 hours prior to interruption of the service.

D. Follow rules and regulations of authorities having jurisdiction for the respective utilities in executing work under this section.

E. Inactive and Abandoned Utilities: Remove, plug or cap. In absence of specified requirements, plug or cap such utility lines as required by local regulations.

2.03 CLEARING

A. Clear trees, stumps, roots, brush, and other vegetation in areas to be graded; cut off flush with or below the original ground surface, except such trees and vegetation indicated or directed to be left standing. Trees designated to be left standing within the cleared areas shall be trimmed of dead branches 1-1/2 inches or more in diameter and be painted with an approved tree-wound paint. Limbs and branches to be trimmed shall be neatly cut close to the bole of the tree or main branches. Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require. Clearing shall also include the removal of existing obstructions that are a distance of 5 feet beyond the perimeter of to-be-built structures.

2.04 GRUBBING

A. Requirements: Material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, shall be removed to a depth of not less than 18 inches below the original surface level of the ground in areas indicated to be grubbed. Depressions made by grubbing

shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface of the ground. Debris not suitable for foundation purposes shall be removed.

2.05 STRIPPING OF TOPSOIL

- A. Remove sod or grass before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
- C. Stockpile topsoil materials on site for re-use where applicable. Any extra topsoil not incorporated into the work shall be removed promptly from the site.

2.06 SALVAGE

- A. Salvage and place any items requested by City Representative in a location approved by the City Representative.

2.07 DISPOSAL

- A. Material that is not to be salvaged shall be removed promptly from the project site and legally disposed of.

END OF SECTION 311100

SECTION 321313

CONCRETE SITEWORK

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. This section covers furnishing all labor, equipments and materials required to construct all curb and gutter, concrete paving, sidewalks and all other items indicated on the drawings, including layout, preparation of subgrade, formwork, placing, finishing and testing.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.
- B. Georgia Department of Transportation Standard Specifications, 2013 edition and other related supplemental documents.

1.03 REFERENCE STANDARDS

- A. City of Alpharetta Design Standards:
 - 1. STD. 901 Roadway Pavement Sections, Curb and Gutter Details
 - 2. STD. 902 Concrete Sidewalk Details, Curb Cut Ramp Details
 - 3. STD. 951 Commercial, Industrial Driveway Details
 - 4. STD. 952 Residential Driveway Details
- B. Where testing frequencies conflict between the specifications in this section and the requirements on the City of Alpharetta Standard Drawings, the frequencies outlined in this specification shall overrule.

1.04 SUBMITTALS

- A. Mix Design: Submit mix design for each concrete mix specified on plans. Submit alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustment.
 - 1. Indicate amounts of mixing water to be withheld for later addition at project site.
- B. Submit copies of Concrete Testing Reports to City Representative.
- C. Submit copies of concrete break results to City Representative.

- D. Submit (2) copies of performance and product data for concrete devices specified on the plans or as required by the City Representative.
- E. Additional submittals as required by the City Representative.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed concrete sitework similar in material, design and extent to that indicated for this project and whose work has resulted in construction with a record of successful in-service performance.
- B. Testing Agency Qualifications: An independent testing agency, hired by the City, qualified according to ASTM C 1077 and ASTM E 329 to conduct the testing specified herein as documented according to ASTM E 548.
- C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant and each aggregate from one source.
- D. ACI Publications: Comply with ACI 301, "Specifications for Structural Concrete", unless modified by the requirements of the Contract Documents.
- E. Concrete Testing Services: Engage a qualified independent testing agency to perform material evaluation tests.
- F. All work shall be performed in accordance with applicable codes and ordinances and requirements of the local issuing authority.

1.06 TRAFFIC CONTROL

- A. The Contractor shall be fully responsible for traffic control on the project.
- B. Traffic control shall comply with the Manual for Uniform Traffic Control Devices (MUTCD).
- C. The Contractor shall submit a traffic control plan to the City of Alpharetta Traffic Department for approval. The traffic control plan shall detail all lane shifts, lane closures, detours, barrel spacing etc. and shall comply with the Manual for Uniform Traffic Control Devices (MUTCD).
- D. Contractor shall not impact traffic before 9:00 AM and after 4:00 PM.

PART II – PRODUCTS/MATERIALS

2.01 CONCRETE MIXES

- A. Prepare mix designs proportioned to ACI 211.1 and ACI 301 for each type and strength of concrete determined by either laboratory trial mixes or field experience.
- B. Provide mix designs to provide concrete with the following properties:
 - 1. Minimum compressive strength (28 Days): 3,000 PSI unless noted otherwise on the drawings.

2. Maximum Water-Cementitious Materials Ratio: 0.49.
3. Slump Limit: 3 inches plus or minus 1 inch.
4. Air Content: 4.5 % plus or minus 1.5 %.

2.02 CEMENTITIOUS MATERIALS

- A. Use the following cementitious materials of the same type, brand and source throughout the project:
 1. Portland Cement: ASTM C 150, Type I supplemented with the following:
 - a. Fly Ash: ASTM C 618, Class C or F.
 - b. Ground, granulated blast furnace slag: ASTM C 989, Grade 100 or 120.
 - c. Silica Fume: ASTM C 1240, amorphous silica.
 - d. Normal weight aggregates: ASTM C 33, Class 3S coarse aggregate or better, graded. Provide aggregate from a single source.
 1. Maximum coarse aggregate size: 1 inch (25 mm) nominal.
 2. Fine aggregate: Free of materials with deleterious reactivity to alkali in cement.
 - e. Water: ASTM C 94/C 94M and potable.

2.03 ADMIXTURES

- A. Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute to water-soluble chloride ions exceeding those permitted in hardened concrete.
 1. Air-entraining admixture: ASTM C 260
 2. Water-reducing admixture: ASTM C 494/C 494M, Type A.
 3. Retarding admixture: ASTM C 494/C 494M, Type B.
 4. Water-reducing and retarding admixture: ASTM C 494/C 494M, Type D.
 5. Calcium Chloride: The use of calcium chloride or admixtures containing calcium chloride is permitted provided:
 - a. No more than 2% calcium chloride is added.
 - b. The calcium chloride is mixed at the concrete plant.
 - c. No calcium chloride is added to concrete used to pour any item containing reinforcing steel

or wire mesh.

2.04 STEEL REINFORCEMENT

- A. Plain steel welded wire reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.
- B. Reinforcing bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.

2.05 REINFORCEMENT ACCESSORIES

- A. Bar Supports: Bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice", of greater compressive strength than concrete.

2.06 FORMS

- A. Forms shall be constructed to ensure that the finished concrete will conform accurately to the indicated dimensions, lines and elevations and within tolerances specified.
- B. Forms shall be of wood or steel, straight, of sufficient strength to resist springing during deposition and consolidating concrete.

2.07 FORM RELEASE AGENT

- A. Commercially formulated form-release agent that will not bond with, stain or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.08 EXPANSION JOINT MATERIAL

- A. ASTM D 1751, asphalt-saturated cellulosic fiber.

2.09 DETECTABLE WARNING SURFACE

- A. Raised truncated domes with a nominal diameter of 0.9 Inch, a nominal height of 0.2 Inch, a center to center spacing of 1.7 Inches and with a visually contrasting color selected by Owner.
 - 1. Utilized product must appear on Georgia Department of Transportation's QPL-87 Detectable Warning Surfaces. Color selected by Owner.
 - 2. Stamping of ADA warning strips into concrete will not be accepted.

PART III – EXECUTION

3.01 LAYOUT

- A. Layout shall be accomplished by a State of Georgia licensed Land Surveyor or Construction Layout Professional.

- B. Establish and maintain stakes as required for drives, parking, walks, and other site improvements.

3.02 UTILITY PROTECTION

- A. The Contractor shall comply with the Georgia Utilities Protection Law. Notice must be given to the Utilities Protection Center at 800-811-7411, three (3) working days prior to starting any work.
- B. The Contractor shall protect all existing utilities that are not slated for demolition at all times throughout the project. Contractor shall make such explorations and probes as necessary to ascertain any wet sewer lines, water supply lines, live electrical conduits, live phone lines, etc. and shall make sure these utilities can be broken or changed without danger or disruption to any necessary service. De-activate and disconnect all existing utilities before proceeding with the work, except as specified above or otherwise shown on plans.
- C. Follow rules and regulations of authorities having jurisdiction for the respective utilities in executing work under this section.
- D. Inactive and Abandoned Utilities: Remove, plug or cap. In absence of specified requirements, plug or cap such utility lines as required by local regulations.

3.03 SITE PROTECTION

- A. Protect existing and placed concrete from damage. When construction traffic is permitted, maintain concrete as clean as possible by removing surface stains and spillage of materials as they occur.
- B. Maintain concrete free of stains, discoloration, dirt and other foreign material. Clean concrete no more than two (2) days before date of final inspection.
- C. The Contractor shall maintain carefully all benchmarks, monuments, property pins and other reference points. If disturbed or destroyed, replace as directed at no additional cost to the Owner. If found at variance with the drawings, notify the City Representative. Replacement of benchmarks, monuments, property pins and other reference points shall be accomplished by a State of Georgia licensed Land Surveyor.
- D. All existing curbs, sidewalks, buildings, utilities, and paving damaged in performance of this work shall be restored at no additional cost to the Owner.
- E. Any settlement or cracking that occurs to concrete areas prior to acceptance of the work shall be repaired and or replaced.

3.04 WEATHER LIMITATIONS

- A. Cold Weather Placement: Concrete placement shall not take place when air temperature reaches 40 degrees F and falling or is already below that point. Placement may begin when air temperature reaches 35 degrees F and is rising or is already above 40 degrees F. Protect concrete from physical damage or reduced strength that could be caused by frost, freezing actions or low temperatures. Provisions shall be made to protect the concrete from freezing during the specified curing period. If necessary to place concrete when the air temperature, aggregates or water is below 35 degrees F,

placement and protection shall be approved in writing by the City Representative. Approval shall be contingent upon the following provisions:

1. The underlying material shall be prepared and protected so that it is entirely free of frost or frozen materials when concrete is placed.
 2. Mixing water and aggregates shall be heated as necessary to result in the temperature of the in-place concrete being between 50 and 80 degrees F.
 3. Aggregates shall be free of ice, snow, and frozen lumps before entering the mixer.
 4. Covering and other means shall be provided for maintaining the concrete at a temperature of at least 50 degrees F for not less than 72 hours after placing and at a temperature above freezing for the remainder of the curing period.
 5. Do not use calcium chloride, salt or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mix designs.
 6. Cold weather concrete placement shall comply with ACI 306.1.
- B. Cold Weather Placement Time: When air temperature is below 85 degrees F contractor shall have 90 minutes from batch time printed on the delivery ticket to place concrete. If Contractor exceeds the 90 minute time limit the City Representative shall have the right to stop the concrete that is being placed. Any concrete left over due to the expired time limit shall be removed from the site at the Contractor's expense. If there is no batch time printed on the delivery ticket the City Representative shall have the right to reject the concrete prior to placement. Rejected concrete as a result of missing batch time on delivery ticket shall be removed from the site at the Contractor's expense.
- C. Hot Weather Placement: The temperature of concrete as placed shall not exceed 85 degrees F except where an approved retarder is used. The mixing water and/or aggregates shall be cooled if necessary to maintain a satisfactory placing temperature. The placing temperature shall not exceed 90 degrees F at any time.
1. Chilled mixing water or chopped ice may be used to control temperature provided water equivalent of ice is calculated into the total amount of mixing water. Using liquid nitrogen to cool concrete is the Contractor's option.
 2. Cover reinforcement steel with water-soaked burlap so reinforcement temperature will not exceed ambient air temperature immediately before placing concrete.
 3. Fog-spray forms, reinforcing steel and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots or dry areas.
 4. Hot weather concrete placement shall comply with ACI 305R.
- D. Hot Weather Placement Time: When air temperature is between 85 and 90 degrees F, the contractor shall have 75 minutes from batch time printed on the delivery ticket to place concrete. When air temperature is above 90 degrees F the Contractor shall have 60 minutes from batch time printed on the delivery ticket to place concrete. If Contractor exceeds the time limits specified herein, the City

Representative shall have the right to stop the concrete that is being placed. Any concrete left over due to expired time limits shall be removed from the site at the Contractor's expense. If there is no batch time printed on the delivery ticket the City Representative shall have the right to reject the concrete prior to placement. Rejected concrete as a result of missing batch time on delivery ticket shall be removed from the site at the Contractor's expense.

3.06 FIELD QUALITY CONTROL

- A. The Contractor shall engage a qualified testing and inspection agency to sample materials, perform field tests and inspections and prepare test reports during concrete placement according to requirements specified in this section.
- B. Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Slump: ASTM C 143, one test at point of placement for each composite sample for each type of concrete poured. Perform additional tests when concrete consistency appears to change.
 - 2. Air Content: ASTM C 231, pressure method, one test for each composite sample for each type of concrete poured.
 - 3. Concrete Temperature: ASTM C 1064, one test hourly when air temperature is 40 degrees F and below, when air temperature is 80 degrees F and above, and one test for each composite sample.
 - 4. Compression Test Specimens: ASTM C 31, one set of four (4) standard cylinders for each composite sample. Cylinders shall be molded and stored for laboratory-cured test specimens.
 - 5. Compressive Strength Tests: ASTM C 39, one specimen shall be tested at seven (7) days and two (2) specimens at twenty-eight (28) days; one specimen shall be retained in reserve for later testing if required.
 - a. Strength of each concrete mixture will be satisfactory if every average of any three (3) consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 PSI.
 - 6. Test results shall be reported in writing to Owner, Concrete Manufacturer and Contractor within 48 hours of testing. Reports of compressive strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspection agency, location of concrete batch in work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength and type of break for both 7 and 28 day tests.
 - 7. In the event that concrete break results do not achieve specified strengths, nondestructive testing may be utilized by an independent testing agency. Impact hammer, sonoscope or other nondestructive device may be permitted by the Owner but will not be used as the sole basis for approval or rejection.
 - 8. Additional Tests: The City's selected testing agency shall make additional tests of concrete when

test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met as directed by the City Representative.

9. Additional testing and inspecting at the Contractor's expense will be performed to determine compliance of replaced or additional work with specified requirements.
10. Correct deficiencies in the work where test reports and inspections indicate noncompliance with the contract documents.

C. CONCRETE DELIVERY TICKETS

1. Place only concrete mix designs approved by the Owner. Concrete delivery tickets shall have the following minimum information on the ticket:
 - a. Approved mix code.
 - b. Batch time and date.
 - c. Maximum allowable water that may be added at the job site.
 - d. Type of concrete and amount.
 - e. Amount of concrete ordered and delivered.
 - f. Project description/location.
2. If at any point it is determined by the City Representative that the concrete delivered to the project site does not meet the minimum specifications outline above, the City Representative can reject the load of concrete. If rejected, the load of concrete shall be promptly removed from the site at the Contractor's expense.

3.07 CONCRETE CURB AND GUTTER

A. Subgrade Preparation.

1. Curb and gutter subgrade shall be constructed to specified grade and cross section.
2. Subgrade shall be placed and compacted in conformance with the contract documents and applicable City of Alpharetta Standard Drawings.
3. Subgrade shall be maintained in a smooth, compacted condition in conformity with the required section and established grade until concrete is placed.

B. Subgrade Testing.

1. Prior to concrete placement, Contractor shall have subgrade of curb and gutter tested by the City's selected testing agency per the requirements outlined in section "02310 Grading" and The City of Alpharetta Standard Drawings.

2. If at any point it rains on subgrade prior to concrete placement, Contractor shall have subgrade re-tested by the City's selected testing agency. Any areas that fail shall be undercut and replaced with clean, compacted fill at no additional cost to the Owner.
- C. Concrete Testing: The Contractor shall provide molded concrete specimens for strength tests. Testing of concrete shall be made at the following frequencies:
1. For each mix poured, a minimum of one set of cylinders shall be made per day or for each 18 CY of concrete placed.
 2. Additional tests may be required as determined by the City Representative.
- D. Formwork.
1. Set, brace and secure forms, bulkheads and intermediate screed guides to required lines, grades and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least twenty-four (24) hours after concrete placement.
 2. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.
- E. Reinforcement.
1. Install reinforcing as required on the plans and City of Alpharetta Standard Drawings.
 2. Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
 3. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
 4. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
 5. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- F. Joints and Spacing
1. Expansion Joints
 - a. Expansion joints shall be installed by means of preformed expansion joint material one-half (½) inch in thickness cut and shaped to the cross section of curb and gutter.
 - b. Expansion joints shall be installed where newly poured concrete abuts concrete curbs, catch basins, sidewalk, driveway aprons, fixed objects, structures, pour breaks and where indicated or requested by the City Representative.

- c. Expansion joints shall be installed at all radius points and structures.
- d. Expansion joints shall be installed at fifty (50) foot intervals.
- e. Extend expansion joints the full width and depth of joint.
- f. Place top of expansion material flush with finished concrete surface.
- h. Furnish expansion joints in one-piece lengths. Where more than one length is required, lace or clip sections together.

2. Contraction joints

- a. Contraction joints shall be installed by forming or tooling a joint with a minimum depth of one-quarter ($\frac{1}{4}$) inch at right angles to the line of curb and gutter. Radius of tooled edges shall be one-quarter ($\frac{1}{4}$) inch.
- b. Contraction joints shall be installed in ten (10) foot intervals where indicated or as requested by the City Representative.

G. Placement and Finish

1. Placement

- a. Prior to placing concrete the City Representative must inspect and approve formwork and subgrade preparation.
- b. Do not add water to concrete during delivery, at the project site or during placement unless approved by the City Representative. With the approval of the City Representative, water may be added at the project site prior to test sampling and placement. The amount of water added shall not exceed the maximum allowable water amount specified on the delivery ticket. If the delivery ticket does not contain the maximum allowable water to be added at the site, the City Representative may prohibit the use of additional water.
- c. If at any point it is determined by the City Representative that the concrete delivered to the project site does not meet the specifications provided, the City Representative can reject the load of concrete. If rejected the load of concrete shall be promptly removed from the site at the Contractor's expense.
- d. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness.
- e. When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified for formed concrete. If results are not approved, remove and replace with formed concrete.

2. Finishing

- a. Exposed surfaces shall be floated and finished with a smooth wood float until true to grade, section and uniform in texture. Floated surfaces shall then be brushed with a fine-hair brush with longitudinal strokes. The edges of the gutter and top of the curb shall be rounded with an edging tool to a radius of $\frac{1}{4}$ inch. Immediately after removing the front curb form, the face of the curb shall be rubbed with a wood or concrete rubbing block and water until blemishes, form marks, and tool marks have been removed. The front curb surface, while still wet, shall be brushed in the same manner as the gutter and curb top. The top surface of gutter and entrance shall be finished to grade with a wood float.
- b. Finished surfaces shall not vary more than $\frac{1}{4}$ inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to $\frac{1}{4}$ inch.

3.08 CONCRETE PAVING

A. Subgrade Preparation.

1. Concrete Paving subgrade shall be constructed to specified grade and cross section.
2. Subgrade shall be placed and compacted in conformance with the contract documents and applicable City of Alpharetta Standard Drawings.
3. Subgrade shall be maintained in a smooth, compacted condition in conformity with the required section and established grade until concrete is placed.

B. Subgrade Testing.

1. Prior to concrete placement, Contractor shall have subgrade of concrete paving tested by the City's selected testing agency per the requirements outlined in section "02310 Grading" and The City of Alpharetta Standard Drawings.
2. If at any point it rains on subgrade prior to concrete placement, Contractor shall have subgrade re-tested by the City's selected testing agency. Any areas that fail shall be undercut and replaced with clean, compacted fill at no additional cost to the Owner.

C. Concrete Testing: The Contractor shall provide molded concrete specimens for strength tests. Testing of concrete shall be made at the following frequencies:

1. For each mix poured, a minimum of one set of cylinders shall be made per day or for each 18 CY of concrete placed.
2. Additional tests may be required as determined by the City representative.

D. Formwork.

1. Set, brace and secure forms, bulkheads and intermediate screed guides to required lines, grades and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least twenty-four (24) hours after concrete placement.

2. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.

E. Reinforcement.

1. Install reinforcing as required on the plans and City of Alpharetta Standard Drawings.
2. Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
3. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
4. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
5. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

F. Joints and Spacing

1. Expansion Joints

- a. Expansion joints shall be installed by means of preformed expansion joint material one-half ($\frac{1}{2}$) inch in thickness cut and shaped to the cross section of existing concrete.
- b. Expansion joints shall be installed where newly poured concrete abuts concrete curbs, catch basins, sidewalk, fixed objects, structures, pour breaks, where indicated on the City of Alpharetta Standard Drawings or as requested by the City representative.
- c. Expansion joints shall be installed at all radius points and structures.
- d. Extend expansion joints the full width and depth of joint.
- e. Place top of expansion material flush with finished concrete surface.
- f. Furnish expansion joints in one-piece lengths. Where more than one length is required, lace or clip sections together.

2. Contraction joints

- a. Contraction joints shall be installed by forming or tooling a joint with a minimum depth of one-quarter ($\frac{1}{4}$) inch. Radius of tooled edges shall be one-quarter ($\frac{1}{4}$) inch.
- b. Contraction joints shall be installed where indicated on the City of Alpharetta Standard Drawings or as requested by the City Representative.

G. Placement and Finish

1. Placement

- a. Prior to placing concrete the City Representative must inspect and approve formwork and subgrade preparation.
- b. Do not add water to concrete during delivery, at the project site or during placement unless approved by the City Representative. With the approval of the City Representative, water may be added at the project site prior to test sampling and placement. The amount of water added shall not exceed the maximum allowable water amount specified on the delivery ticket. If the delivery ticket does not contain the maximum allowable water to be added at the site, the City Representative may prohibit the use of additional water.
- c. If at any point it is determined by the City Representative that the concrete delivered to the project site does not meet the specifications provided, the City Representative can reject the load of concrete. If rejected the load of concrete shall be promptly removed from the site at the Contractor's expense.
- d. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness.
- e. Contractor shall pull wire mesh up while placing concrete to ensure wire mesh is installed at the required elevations per plans.
- f. Produce concrete paving to required cross section, lines, grades, finish, and jointing as specified.

2. Finishing

- a. After screeding, when most of the water sheen has disappeared, and just before the concrete hardens, the surface shall be finished with a wood float or darby to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A scored surface shall be produced by brooming with a fiber-bristle brush in a direction transverse to that of the traffic, followed by edging.
- b. Finished surfaces shall not vary more than ¼ inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to ¼ inch.

3.09 CONCRETE SIDEWALK AND MULTI-USE TRAILS

A. Protection

1. Contractor shall not encroach upon any areas outside the proposed limit of disturbance. Equipment shall not twist, turn, or backup into woodland spaces outside the area of the graded trail unless approved by the City representative.
2. Contractor shall not park vehicles, store or stage any materials or equipment under the overhanging branches or the drip line of trees to be saved. Drip line is defined as the area of

ground perpendicularly below the outer reaches of the trees' branches.

3. In delineated wetland areas, elevated boardwalk is proposed. The contractor must prevent disturbance of the existing grade and prevent the placement of fill material within the wetland. All vegetation to be cleared shall be cut to the ground with stumps remaining. Use construction mats for all removal and construction activity in wetland areas.
4. Contractor shall review all construction adjustment considerations with the City representative prior to implementation.

B. Subgrade Preparation

1. Concrete Sidewalk subgrade shall be constructed to specified grade and cross section.
2. Subgrade shall be placed and compacted in conformance with the contract documents and applicable City of Alpharetta Standard Drawings.
3. Subgrade shall be maintained in a smooth, compacted condition in conformity with the required section and established grade until concrete is placed.

C. Subgrade Testing

1. Prior to concrete placement, Contractor shall have subgrade of concrete sidewalk tested by the City's selected testing agency per the requirements outlined in section "02310 Grading" and The City of Alpharetta Standard Drawings.
2. If at any point it rains on subgrade prior to concrete placement, Contractor shall have subgrade re-tested by the City's selected testing agency. Any areas that fail shall be undercut and replaced with clean, compacted fill at no additional cost to the Owner.
3. Additional stabilization of poor subgrade areas may be necessary to achieve compaction criteria for aggregate base. These additional subgrade stabilization measures shall be performed under the direct supervision of the City's selected testing agency. These measures may include, but are not limited to, placement of geogrid reinforcement materials, aggregate bridge lifts, undercutting of unsuitable soils, and use of surge stone or #57 stone.

D. Concrete Testing: The Contractor shall provide molded concrete specimens for strength tests. Testing of concrete shall be made at the following frequencies:

1. For each mix poured, a minimum of one set of cylinders shall be made per day or for each 18 CY of concrete placed.
2. Additional tests may be required as determined by the City Representative.

E. Formwork.

1. Set, brace and secure forms, bulkheads and intermediate screed guides to required lines, grades

and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least twenty-four (24) hours after concrete placement.

2. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.
3. Form sidewalk to ensure there is no more than 2.08 % or ¼ inch per foot cross slope from front to back of sidewalk per City of Alpharetta Standard Drawings.

F. Reinforcement.

1. Install reinforcing as required on the plans and City of Alpharetta Standard Drawings.
2. Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
3. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
4. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
5. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

G. Joints and Spacing

1. Expansion Joints
 - a. Expansion joints shall be installed by means of preformed expansion joint material one-half (½) inch in thickness cut and shaped to the cross section of existing concrete.
 - b. Expansion joints shall be installed where newly poured concrete abuts concrete curbs, catch basins, sidewalk, driveway aprons, fixed objects, structures, pour breaks, where indicated on the City of Alpharetta Standard Drawings or as requested by the City Representative.
 - c. Expansion joints shall be installed at all radius points and structures.
 - d. Expansion joints shall be installed at fifty (50) foot intervals.
 - e. Extend expansion joints the full width and depth of joint.
 - f. Place top of expansion material flush with finished concrete surface.
 - g. Furnish expansion joints in one-piece lengths. Where more than one length is required, lace or clip sections together.
2. Contraction joints

- a. Contraction joints shall be installed by forming or tooling a joint with a minimum depth of one-quarter ($\frac{1}{4}$) inch. Radius of tooled edges shall be one-quarter ($\frac{1}{4}$) inch.
- b. Contraction joints shall be installed where indicated on the City of Alpharetta Standard Drawings or as requested by the City Representative.

H. Placement and Finish

1. Placement

- a. Prior to placing concrete, the City Representative must inspect and approve formwork and subgrade preparation.
- b. Do not add water to concrete during delivery, at the project site or during placement unless approved by the City Representative. With the approval of the City representative, water may be added at the project site prior to test sampling and placement. The amount of water added shall not exceed the maximum allowable water amount specified on the delivery ticket. If the delivery ticket does not contain the maximum allowable water to be added at the site, the City Representative may prohibit the use of additional water.
- c. If at any point it is determined by the City Representative that the concrete delivered to the project site does not meet the specifications provided, the City Representative can reject the load of concrete. If rejected the load of concrete shall be promptly removed from the site at the Contractor's expense.
- d. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness.
- e. Contractor shall pull wire mesh up while placing concrete to ensure wire mesh is installed at the required elevations per plans.
- f. Produce concrete sidewalk to required cross section, lines, grades, finish, and jointing as specified.
- g. Where reinforcing bars are indicated, Contractor shall consolidate placed concrete with mechanical vibrating equipment according to ACI 301.

2. Finishing

- a. After screeding, when most of the water sheen has disappeared, and just before the concrete hardens, the surface shall be finished with a wood float or darby to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A scored surface shall be produced by brooming with a fiber-bristle brush in a direction transverse to that of the traffic, followed by edging.
- b. Finished surfaces shall not vary more than $\frac{1}{4}$ inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to $\frac{1}{4}$ inch.

3.10 ADA REQUIREMENTS

- A. Sidewalk: Contractor shall construct sidewalks per City of Alpharetta Standard Drawings. Cross slope shall not exceed $\frac{1}{4}$ Inch per foot (2.08%) for the full width of sidewalk.
- B. Multi-Use Trails: Contractor shall construct trails per the drawings. Cross slope shall not exceed $\frac{1}{4}$ Inch per foot (2.08%) for the full width of trails. Running slopes of trails shall be as noted on drawings, with the following tolerances: 5% and less for any distance. Between 5 and 8.33% for up to 200 linear feet. Between 8.33 and 10% for up to 30 linear feet. Between 10 and 12.5% for up to 10 linear feet.
- C. Driveway Aprons: Contractor shall construct driveway aprons per City of Alpharetta Standard Drawings. Cross slope of driveway aprons where sidewalk passes through shall not exceed $\frac{1}{4}$ Inch per foot (2.08%) for the full width of sidewalk.
- D. Handicap Ramps: Contractor shall construct handicap ramps per the City of Alpharetta Standard Drawings. Landing slopes shall not exceed $\frac{1}{4}$ Inch per foot (2.08%) in any direction. Ramp longitudinal slope shall not exceed 1 inch per foot (8.33%) at any point. Ramp cross slope shall not exceed $\frac{1}{4}$ Inch per foot (2.08%) at any point.
- E. If existing grades do not permit ADA compliance the City Representative shall determine the required slopes to be met.

END OF SECTION

SECTION 02900
LANDSCAPING
(Revised 09/29/2022)

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. Provisions established within the General and Supplementary Conditions of the Contract, Division 1 – General Requirements, and the Construction Drawings are collectively applicable to this section.
- B. Extent of landscape work is indicated on Drawings and in Schedules. Where specifications and plans contradict, the more stringent requirements shall apply. Where written and drawn quantities contradict, the drawn quantities shall apply.
- C. Provide all labor, material and equipment required or inferred from Drawings and Specifications to complete the Work of this Section.

1.02 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Standardized Plant Names, 1988 edition, by the American Joint Committee on Horticultural Nomenclature.
 - 2. American Standard for Nursery Stock, ANSI Z-60.1, 2014 edition, by American Horticulture Industry Association.
- B. Source Quality Control:
 - 1. General: The only plant material accepted will be grown in an established nursery within industry standard horticultural practice. The stock will be free of disease, insects, eggs, larvae, and defects such as knots, sun-scald, injuries, abrasions or disfigurement.
 - 2. Inspection of Plant Material prior to Digging:
 - a. Contractor will secure all plant material to be supplied for the Project and inform the City Representative in writing of supplier location(s) within ten (10) days of the Contract being awarded.
 - b. City Representative reserves the right to approve 100% of plant materials for the Project provided by the Contractor's sources.
 - c. Should the plant material be determined unacceptable, the Contractor will pursue other sources until acceptable plant material is obtained, at no additional cost to the City of Alpharetta.

- d. Approval at the plant source or by other means of communication such as email does not affect the City's right to reject material at the time of delivery or before, during or after installation.
 - e. Contractor will inform the City Representative 72 hours prior to delivery of plant material to arrange for an inspection. The City Representative reserves the right to be present during delivery and to inspect the plant material prior to installation. The City Representative may reject plant materials at this time. Approval of delivered material does not affect the City's right to reject material before, during or after installation.
3. Shipping:
- a. Landscape materials will be shipped with certificates of inspection as required by governing authorities. Inspection by Federal and/or State Governments at the site does not preclude rejection of plant material by the City Representative. Plants must be properly prepared for shipment to avoid damage.
 - b. Plant material may be rejected if not properly shipped. Water plant material during shipment as needed to avoid damage.
 - c. Do not ship plant material when temperatures are below 20 degrees Fahrenheit.
- C. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by a recognized laboratory.
- D. Do Not Make Substitutions: If specified landscape material is not available, submit to the City Representative proof of non-availability from reliable nursery sources (AmericanHort members) and proposal for use of equivalent material. Proof of non-availability must be submitted if the plant in question is not available in the Eastern United States.

1.03 SUBMITTALS

- A. Material Approvals: All materials requiring approval by the City Representative must be submitted so that approval is obtained **prior to beginning of Work**.
- Standard landscape materials that require samples to be submitted for approval include, but are not limited to:
- 1. Hardwood Mulch
 - 2. Organic Compost Product (with certified analysis)
 - 3. Off-site Fill/Backfill Dirt (with soil test report)
 - 4. Root Barrier (at discretion of the City, product cut-sheet may be accepted in lieu of sample)
- B. Soil Test Reports: When soil test reports are required, obtain reports from a City approved laboratory such as UGA Cooperative Extension Office. Reports shall not be older than 30 days at time of submittal to City. Cost of soil test reports shall be borne by the Contractor.

Reports shall be based on the specified “crop” and include the following data:

1. Existing and Recommended pH levels.
 2. Existing phosphorous, potassium, calcium, magnesium, zinc, and manganese content.
 3. Recommended nutrient (fertilizer, lime, etc.) applications.
- C. Certified Analysis: Organic Compost Products (OCP) must provide Certified Analysis that includes all the Soil Test Report content outlined above. Additionally, it must include Organic Matter (OM) content. The analysis may be obtained from the OCP manufacturer or an independent lab. Certified Analysis shall not be older than 90 days at time of submittal to City.
- D. Planting Schedule: At least one week prior to beginning work, Contractor must submit a planting schedule with dates outlining the different components/stages of the project from start to finish.
- E. Certifications: Prior to beginning work, submit certificates of inspection (if required by governmental authorities), certified analysis for soil amendments and fertilizer materials, and any other data needed to establish that materials comply with specified requirements.
- F. Approval and Selection of Materials and Work: The selection of all Materials and the execution of all Work required under the Drawings and Specifications are subject to the approval of the City Representative. The City Representative has the right to reject any and all materials and all Work which, in their opinion, does not meet the requirements of the Contract Documents at any stage of the work operations. The Contractor shall remove rejected work and or materials from Project site and replace promptly.

1.04 DELIVERY, STAGING, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in containers displaying weight, analysis, and name of manufacturer. Protect materials from damage during delivery and while stored on site.
- B. Sod: Sod should be delivered and installed within 24 hours of cutting and shall be protected from drying and breaking until installation is complete. **Sod shall not be allowed to be staged at the work site for more than 6 hours prior to installation.**
- C. Trees, Shrubs and Groundcover: Provide freshly dug trees and shrubs. Do not prune prior to delivery. Do not damage bark or branches in handling. Cover and protect during shipment.
- D. Delivery and Staging: Deliver trees and other plant material AFTER planting preparations have been completed and install IMMEDIATELY. Any delay of planting exceeding 6 hours requires proper staging and storage including: Daily watering as needed to keep roots moist, protection from severe weather, wildlife, and other physical damage. Stage all trees, shrubs, and other plants in a shaded area.
- E. Labels: Label at least one tree and one shrub of each variety with a securely attached waterproof tag designating its botanical and common name. Do not remove labels on plant materials until Final Acceptance by Owner.

1.05 JOB CONDITIONS

- A. Insurance on plant material and other stored or installed materials is the responsibility of the Contractor. The Contractor is liable for any losses due to theft, fire or vandalism incurred prior to date of Substantial Completion of the work. Owner shall in no way be held responsible for any loss of plant material and other stored or installed materials due to fire, theft, or vandalism.
- B. Proceed with and complete all landscape work as soon as portions of the site become available.
- C. Existing Utilities: Locate all underground utilities. Avoid possible damage to utilities. All damages to utilities resulting from this contract work will be repaired at the Contractor's expense. Contractor must notify the City Representative of any conflicts between proposed plant material and underground/overhead utilities.
- D. Excavations: When conditions detrimental to plant growth are encountered, such as debris, poor drainage, or other subsurface deterrents, immediately notify City Representative in writing.
- E. Planting Schedule: Prepare a proposed planting schedule per Section 1.03. Coordinate the schedule as needed with the general Contractor and/or any other concerned subcontractors. Plant trees after final grades are established and prior to planting of sod, unless otherwise stated. If planting of trees and other large plant material occurs after sodding work, protect sodded areas and promptly repair damage to sodded areas resulting from planting operations.

1.06 WARRANTY

- A. Warranty: Following the date of Substantial Completion, the Contractor shall warranty all materials against any defects or death as follows:
 - 1. **All shrubs, groundcovers and other plants, turf, irrigation, lighting, etc. shall be warrantied for a one-year period.**
 - 2. **All trees shall be warrantied for a two-year period.**Defects and death shall be determined by the City Representative. Damage by others or severe acts of nature beyond the Contractor's control are excepted.
- B. Removal and Replacement: Remove and replace all dead, defective, or undesirable plant material as soon as noticed or directed by the City Representative, during the warranty period. Make replacements as soon as possible during the next acceptable planting season (Spring or Fall) as directed by the City Representative. All replacements will be at the expense of the Contractor.
- C. Replacement Material: Replacements must match the original specifications, including size, species, variety, part number, etc. Replacements are subject to all requirements stated in the Contract Documents. **All replacements will carry the original specified warranty for that item, beginning upon the replacement planting date.** For example, a tree planted in January that dies during its first summer and is then replaced on November 1st shall result in the start of a new two-year warranty on the November 1st replacement date.

1.07 TRAFFIC CONTROL

- A. **The Contractor shall be fully responsible for traffic control on the project.**
- B. Traffic control shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Edition.
- C. The Contractor shall submit a traffic control plan to the City Representative for approval. The traffic control plan shall detail all lane shifts, lane closures, detours, barrel spacing, etc. and shall comply with the Manual for Uniform Traffic Control Devices (MUTCD), Latest Edition.
- D. **Contractor shall not impact traffic before 9:00 AM and after 4:00 PM.**

PART 2 – PRODUCTS

2.01 ORGANIC COMPOST PRODUCTS (OCP)

Planting soils shall be amended with an Organic Compost Product, such as *Sugar Hill Soil Conditioner* by Cowart Mulch, as outlined in Section 3.02 of this document. The proposed OCP must include Certified Analysis and must be pre-approved by the City Representative prior to beginning work.

2.02 FERTILIZER AND OTHER SOIL NUTRIENTS

Contractor must provide nutrient applications (fertilizer, lime, etc.) as recommended by the Soil Test Report for each planting location. Products must be applied at the rate specified per Soil Test Report and according to manufacturer's instructions. All fertilizers must be slow-release products, unless otherwise specified. Proposed fertilizer/nutrient products must be pre-approved by the City Representative prior to application.

2.03 PLANT MATERIALS

A. General:

1. Provide plants true to species and variety, complying with recommendations of ANSI Z60.1-2014 "American Standard for Nursery Stock".
2. Specific requirements concerning plant material are shown on the Drawings and Plant List (or Plant Schedule).

B. Quality and Size:

1. Furnish nursery grown plants that are well branched, fully foliated when in leaf, and with healthy well developed root systems. Shrubs must have self-supporting stems. All plants must be disease free and without insect infestation (all life stages).
2. Provide vigorous plants with full and symmetrical form, unless otherwise called for.
3. Provide trees and shrubs of sizes specified. Trees and shrubs of larger size may be used if acceptable to the City Representative. If larger sizes are approved, root balls must be increased proportionately per ANSI Z260.1-2014 standards. The increased size will not result in additional cost to the Owner.
4. Within specified size ranges, not less than 50% of the plants must be of the larger size specified. For example, an 8'-10' height specification requires that not less than 50% of the plants are 10' height.
5. Balled and Burlapped Plants: Plants designated "B&B" are to have firm root balls of natural soil and corresponding to the minimum sizes specified in ANSI Z60.1-2014 "American Standard for Nursery Stock". Root balls shall be firmly wrapped in biodegradable burlap and securely tied with biodegradable heavy twine, rope and/or wire baskets. Plants with loose, broken, or manufactured root balls will be rejected. During transportation and other movement, **Root balls shall be lifted from the bottom only. Plants/trees shall not be lifted by stems or trunks.**
6. Container grown plants in plastic containers will be acceptable in lieu of balled and burlapped plants, provided they are of specified size and quality. The container must be removed with care exercised to prevent injury to the plant and roots prior to planting.

C. Trees:

1. Provide trees of size and caliper specified and with branching configuration recommended by ANSI Z60.1-2014 for type and species. Provide single stem trees except where other forms are specified. Provide minimum clear trunk height as specified.
2. Caliper shall be measured 6" above ground for trees up to and including 4" caliper. Trees over 4" caliper shall be measured 12" above ground. **Specified height and spread dimensions refer to the main body of the plant, not a dimension between individual branch tips.** Take measurements with branches in natural position.
3. Unless otherwise directed, do not limb-up tree canopies before planting. Otherwise, prune as directed by the City Representative.

D. Groundcovers:

Provide established and well-rooted groundcover plants, in removable containers or integral peat pots, having not less than the minimum number and length of runners for the pot size specified per ANSI Z60.1-2014.

E. Grass:

1. When grassing/sodding areas adjacent to residential or commercial lawns, grassing/sodding shall match the species and cultivar of grass growing on the adjacent lawn.
2. Grass Seed: Provide fresh, clean, new crop-seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide seed of grass species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed as specified.
3. **Sod: Unless otherwise specified, all sod shall be GCIA certified TifTuf™ Bermuda grass.** Provide strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Only provide sod capable of growth and development at time of planting. Provide machine cut sod with a uniform minimum soil thickness of 5/8 inch, not including the thickness of top growth and thatch. Sod pieces to be consistent in size and shape.

2.04 MISCELLANEOUS LANDSCAPE MATERIALS

- A. Burlap for wrapping earthball shall be biodegradable jute mesh not less than 7.2oz per square yard. Wrapping materials made from man-made fibers are prohibited.
- B. Stakes: Unless otherwise stated, stakes shall be 2"x2" wide and pressure treated.
- C. Anchors: #4 rebars or comparable size steel stakes, 36" in length.
- D. Filter Cloth: Rot resistant polypropylene filter fabric, water permeable and unaffected by freeze-thaw.
- E. Drainage Gravel: Clean crushed stone no larger than 1" diameter.
- F. Water: Water sourcing and transportation is the sole responsibility of the Contractor.
- G. Mulch:
 1. Unless otherwise indicated on the plans, mulch shall be pine straw. Pine straw shall be clean, fresh, dark brown, and free of branches, cones, foreign matter, insects, and disease. Mulch installation shall adhere to specifications as set forth within this document or on plan details.
 2. When plans specify hardwood mulch, Contractor shall submit a sample to the City Representative for approval prior to work. Hardwood mulch shall be clean, fresh, and free of branches, leaves, pine needles, manufactured wood products, foreign matter, insects, and

disease. Mulch installation shall adhere to specifications as set forth within this document or on plan details.

- H. Anti-Desiccant: If used, anti-desiccant must be an emulsion-type film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver for use in manufacturer's original containers/packaging and apply in accordance with manufacturer's instructions.

PART 3 - EXECUTION

3.01 PREPARATION

A. General:

1. Contractor shall examine conditions under which planting is to be installed, review applicable survey drawings, and confirm location of underground utilities before digging.
2. Planting operations are to be performed according to specific dates indicated on plans.
If specific dates are not indicated on plans, planting shall be performed as follows:
Trees: November 1 to February 28
Shrubs, Groundcovers, and Other Plants: April 1 to April 30

No installation of plant material shall take place during official City Holidays or from December 24 through January 1. The Contractor guarantees the plant material as specified. Plant only during suitable weather conditions and seasons.

3. Lay out tree and shrub locations and areas for mass plantings. Flag tree locations, outline areas and secure City Representative's acceptance before start of excavation for planting work. Adjust layouts as requested by the City Representative.
4. Notify City Representative of adverse sub-surface drainage or soil conditions. State conditions and submit a proposal for correction, including costs if necessary. Obtain approval for method of correction prior to continuing Work in the affected area. If alternate locations are selected, the Contractor shall prepare such areas at no additional expense to the Owner unless otherwise agreed to between both parties prior to proceeding.

B. Excavation for Trees and Large Shrubs:

1. Excavate planting pits according to drawings and written specifications.
2. Loosen hardpan until broken and water can drain freely.
3. For balled and burlapped (B&B) trees and shrubs, make excavations at least 3x the width of the root ball diameter for the top 1/3 of the planting pit. For the remaining depth of the pit, excavate 2x the width of the root ball diameter. Planting pit shall be dug to a depth so that the

top of the root ball is 1"- 2" above the surrounding grade. **City Representative must approve sample tree pit prior to tree planting.**

4. For container grown stock, excavate as specified for B&B stock, substituting container width for root ball width.

C. Drainage Testing:

For all tree and large shrub pits: Fill each pit ¼ full of water. If percolation is less than 100% within the following 12 hours, drill a ten-inch diameter auger hole to a depth of 4' (four feet) below the bottom of the pit. Fill auger hole with drainage gravel and cover with filter cloth. Perform new drainage test. If drainage is still unsatisfactory, Contractor must notify City Representative in writing of the locations with unsatisfactory drainage so that a solution can be arrived at before planting.

3.02 PLANTING SOIL PREPARATION

The top 12" of soil in areas to be planted with trees, shrubs, groundcovers, and other plants shall be a soil mix of:

75% Existing Native Soil

25% Organic Compost Product (OCP)

Planting areas shall be prepared as follows:

Soil Preparation within Medians and Beauty Strips

On new construction, medians and beauty strips (greenspace between curb and sidewalk) shall typically be pre-graded in preparation of landscape work so that the existing soil surface is 6" below the top of curb/sidewalk. The Landscape Contractor shall prepare a planting soil mix there as follows:

- A. Prior to work, Landscape Contractor shall first confirm grades are 6" below the top of curb/sidewalk.
- B. Rid existing soil surface of all foreign material $\geq$ the size of a golf ball. This includes rocks, stones, roots, sticks, clay clods, trash, etc. Other extraneous materials harmful or toxic to plant growth, such as asphalt and concrete, must be removed in their entirety before planting soil preparation.
- C. Spread 3" layer of approved OCP over the prepped existing native soil within the entire planting area. Till the OCP into the top 9" of underlying native soil. Hand-grade the tilled soil mix so that the surface of it is 3" below the top of curb/sidewalk. Allow for settling. The remaining 3" between the top of the soil mix and the top of curb/sidewalk shall be mulched after plant installation. **NOTE: Additional planting soil mix may be necessary to grade planting areas per planting details. For example, crowned planting areas within medians.**

Soil Preparation for Planting Beds Constructed On Existing Grade

In locations where planting beds are to be constructed on existing ground (grade), the Landscape Contractor shall prepare a planting soil mix as follows:

- A. Lay out planting beds on the ground as shown on the plans. **Bed layout to first be approved by City Representative prior to proceeding with the following steps.**

- B. Remove any existing turf, weeds, or other vegetation within entire planting bed area.
- C. Outline bed area with a trench edge.
- D. Rid existing soil surface of all foreign material $\geq$ the size of a golf ball. This includes rocks, stones, roots, sticks, clay clods, trash, etc. Other extraneous materials harmful or toxic to plant growth, such as asphalt and concrete, must be removed in their entirety before planting soil preparation.
- E. Spread 3" layer of approved OCP over the prepped existing native soil within the entire bed area. Till the OCP into the top 9" of underlying native soil. Allow for settling. **NOTE: Additional planting soil mix may be necessary to grade planting areas per planting details. For example, a planting bed area for which details call for a 6" crown.**
- F. Fine grade planting areas to ensure positive drainage after settlement has occurred. Slope surface of shrub beds to drain toward the trench edge.

Soil Preparation in Planting Pits for Trees and Large Shrubs

For tree and large shrub installation in individual planting pits outside of larger planting areas such as medians or planting beds, the Landscape Contractor shall prepare a planting soil mix for backfill as follows:

- A. Excavate planting pits according to plan details and written specifications.
- B. Amend excavated native soil with OCP so that resulting soil mixture is comprised of 25% OCP and 75% native soil. OCP must be thoroughly mixed into native soil.
- C. Backfill soil mixture into planting pit according to plan details and written specifications. Allow for settling.

Soil Preparation using Off-Site Soil Source

In areas where the existing native soil volume is insufficient to create the required amount of planting soil mix, off-site soil can be utilized. **However, the Contractor must first obtain pre-approval for the off-site soil from the City Representative.** Upon approval from the City Representative, the Landscape Contractor shall prepare a planting soil mix as follows:

- A. Amend off-site soil with OCP so that resulting soil mixture is comprised of 25% OCP and 75% off-site soil. For example, to prepare 10 cubic yards of planting soil, mix 2.5 cubic yards of OCP + 7.5 cubic yards of off-site soil. OCP must be thoroughly mixed into off-site soil.
- B. Backfill prepared soil mixture into planting areas as needed and according to plan details and written specifications. Allow for settling.

NOTE: Upon completion of preparation/installation of planting soil mix, Contractor must obtain Soil Test Reports for all locations where planting soil mix has been prepared and installed. Soil Test Reports must comply with Section 1.03 B of this document. Once reports are obtained, the Contractor shall apply nutrients (fertilizer, lime, etc.) to the corresponding planting areas as recommended by the

Soil Test Reports. Nutrients shall be applied 3-7 days prior to plant installation, unless otherwise directed by the product label.

3.03 PREPARATION OF SEASONAL COLOR BEDS

- A. Lay out seasonal color beds on the ground as shown on the plans. **Bed layout to first be approved by City Representative prior to proceeding with the following steps.**
- B. Excavate top 4" of existing soil. Break through any existing hardpan and remove all stone, roots, debris, etc. Remove excavated soil.
- C. Till excavated bed area to a depth of 6".
- D. Outline bed area with a trench edge.
- E. Backfill seasonal color bed with a soil mix best suited for seasonal color plants. **Soil mix must be pre-approved by the City.** Crown seasonal color bed for proper drainage towards edges. High point of bed should be constructed a minimum of 6" above surrounding grade. Add drainage pipe if necessary to ensure proper drainage.

3.04 PREPARATION OF LAWN/TURF AREAS

- A. **Obtain Soil Test Reports from existing soil within the lawn/turf areas. Reports shall be referred to as outlined in Section D below.**
- B. Remove existing grass/sod or other vegetation within proposed lawn/turf area. Dispose of such material off site.
- C. Till/loosen the surface of new lawn/turf areas to a minimum depth of 6". Rid soil surface of all foreign material $\geq$ the size of a golf ball. This includes rocks, stones, roots, sticks, clay clods, trash, etc. Other extraneous materials harmful or toxic to plant growth, such as asphalt and concrete, must be removed in their entirety.
- D. Prior to start of lawn/turf installation, apply ground limestone at the rate recommended by the Soil Test Report(s) and work into top 6" of soil.
- E. Prior to start of lawn/turf installation, apply fertilizer at the rate recommended by Soil Test Report(s) and work into top 2" of soil. The fertilizer application shall not precede the placement of sod by more than three days.
- F. Grade lawn/turf areas to a smooth even surface with loose fine-textured soil. Roll and rake areas as required to meet finish grades. **Limit fine grading to areas which can be planted immediately afterwards.**
- G. Prior to start of lawn/turf installation, repair any surface areas that have become eroded or otherwise disturbed after fine grading.

3.05 PLANTING TREES AND LARGE SHRUBS ($\geq$ 15 gallon or 6' height)

- A. For individual planting pits that are located outside of planting beds, prepare soil around each tree/large shrub location **prior to excavation** as follows:
 - 1. Till all soil within a 5' radius of the proposed center of the tree/large shrub to a minimum depth of 9".
 - 2. If lawn/turf is present, remove prior to tilling.
 - 3. Do not till in areas where it will result in damage to existing ornamental vegetation identified to remain.
- B. Excavate planting pit per plan details and written specifications (including Section 3.01 B of this document). Set balled and burlapped (B&B) stock on a layer of compacted planting soil mixture, plumb and in center of pit, with top of root ball 2"-3" above the finish grade. **Loosen and remove top 12" of burlap from root ball. Cut and remove at least the top two rings from wire baskets before backfilling. Cut and remove any visible encircling roots.**
- C. Backfill planting pits with soil amended per Section 3.02 of this document. Lightly compact the backfill around the root ball to eliminate voids and air pockets. When planting pit is backfilled 2/3 full, water thoroughly before placing remainder of backfill.
- D. Install container grown stock exactly as specified above for balled and burlapped stock. Remove containers without damaging root balls. Cut and remove any visible encircling roots.
- E. As needed, apply anti-desiccant if deciduous trees or shrubs are shipped and transplanted in full leaf. Spray with anti-desiccant at nursery before transporting and again after planting as per manufacturer's recommendations.
- F. Construct tree saucers as instructed per plan details and written specifications.
- G. Immediately after planting work has been completed, mulch all planting areas to a minimum depth of 3". **For individual trees, mulch ring must be a minimum radius of 5' (10' diameter). Do not mulch within 5" of trunk/base of trees.** Finish mulch ring edges according to plan details and written specifications.
- H. **All trees and specimen shrubs must be sufficiently watered at time of planting. Sufficient watering is determined by soil conditions, site conditions, weather, and season. Soil moisture must be verified using a soil moisture probe. Initial watering must include a City approved Moisture Manager product, applied per manufacturer's specifications. Water thereafter as required by Section 3.09 D of this document.**
- I. After one week and/or upon full settlement of soil, set trees/large shrubs plumb as needed.
- J. Inspect trees/large shrubs for problems such as injury, disease, insect infestation, etc. Inform City Representative of any found issues.

3.06 STAKING, GUYING, AND PRUNING OF TREES AND LARGE SHRUBS (≥ 15 gallon or 6' height)

- A. Stake and guy trees/large shrubs immediately after planting per plan details and written specifications. Set plumb if needed after staking/guying. Maintain stakes and guys until time of removal.
- B. Contractor must remove all stakes and guys exactly one year after date of Substantial Completion.**
- C. Prune as needed to remove broken or dead branches from trees/large shrubs. Also, prune to remove cross branching that may result in injury to crossed limbs. Do not prune central leaders and other main stems unless directed by the City Representative.

3.07 PLANTING SHRUBS, GROUNDCOVER, AND OTHER PLANTS

- A. Prepare planting beds according to plan details and written specifications, including Section 3.02 of this document.
- B. Remove plants from containers without damaging root balls and set in planting holes per plan specifications.
- C. Backfill planting holes with planting soil mix. Lightly compact the backfill around the root ball to eliminate voids and air pockets.
- D. Immediately after planting work has been completed, mulch all planting areas/beds to a minimum depth of 3". Keep mulch off plant bodies and foliage. Finish mulched area edges according to details and written specifications.
- E. All plants must be sufficiently watered at time of planting. Sufficient watering is determined by soil conditions, site conditions, weather, and season. Soil moisture must be verified using a soil moisture probe. Initial watering must include a City approved Moisture Manager product, applied per manufacturer's specifications. Water thereafter as required by Section 3.09 D of this document.**

3.08 INSTALLING SOD

- A. When sodding areas adjacent to residential or commercial lawns, grassing/sodding shall match the species and cultivar of grass growing on the adjacent lawn unless otherwise specified.
- B. Water soil in area to be sodded PRIOR to installing sod. Soil must be moist but not saturated when laying sod.
- C. Lay sod within 24 hours from time of cutting by grower. Sod shall not be allowed to be staged at the work site for more than 6 hours prior to installation.
- D. Do not install dormant sod.

- E. Do not install sod on frozen ground.
- F. Lay sod to form a solid mass with tightly fitted joints. Do not overlap. Stagger strips. Work from plywood to avoid damage to subgrade or sod. Tamp or roll lightly with water filled roller to ensure contact with subgrade. Work sifted soil into gaps between pieces of sod; remove excess soil to avoid smothering.
- G. Anchor sod with 6" sod staples on slopes where specified or if slippage and/or erosion is anticipated. Lay sod perpendicular to slope direction with staggered joints.
- F. **Water all sod immediately following installation, applying a minimum of 1" of water. The following day, water to apply a City approved Moisture Manager product per manufacturer's specifications. Water thereafter according to plans and written specifications.**

3.09 MAINTENANCE AND WATERING

- A. Begin maintenance immediately after planting. Maintain trees, shrubs, and other plants as necessary to keep healthy and thriving until date of Substantial Completion. Maintain trees, shrubs, and other plants by all accepted horticulture practices such as: watering, pruning, cultivating, spraying for insects and disease. Other maintenance items may include, but not be limited to, touch-up mulching, restoring planting saucers, tightening/repairing stakes and guys, pruning dead and broken limbs, straightening/plumbing trees/plants, adjusting planting depth of trees/plants. **Contractor must remove all stakes and guys exactly one year after date of Substantial Completion of the project.**
- B. Maintain lawn/turf areas until date of Substantial Completion. Maintain lawn/turf areas as needed by watering, weeding, mowing, repairing eroded areas, and re-seeding or re-sodding as necessary to establish thriving and uniform lawn/turf areas.
- C. **All trees and other plants must be sufficiently watered at time of planting and then daily throughout the landscape installation project until project completion. Initial watering must include a City approved Moisture Manager product, applied per manufacturer's specifications. Sufficient watering is determined by soil conditions, site conditions, weather, and season. SOIL MOISTURE MUST BE VERIFIED USING A SOIL MOISTURE PROBE.**

Upon completion of all planting, Contractor is responsible for watering of all trees and plants during year-one as follows:

Trees, Shrubs, Groundcovers, and Other Plants

- Daily during first 2 weeks (10 waterings)
 - Twice weekly during next 6 months (26 wks / 52 waterings)
 - Weekly until established* (24 wks / 24 waterings)
- Total for Year-One = Up to 86 Total Waterings

Trees must be watered via slow-release watering bag product such as *Treegator*. Bags must be installed according to manufacturer's specifications. For example, a double bag setup is often required for trees ≥ 4 " caliper.

Contractor must provide a watering schedule prior to tree/plant installation. If conditions do not require trees/plants to be watered, the Contractor must submit a written explanation to Owner's Representative stating the reason for bypassing watering. Explanations for skipping scheduled watering must be submitted prior to or on the same day watering is bypassed.

Contractor shall submit a weekly watering report to the City. Reports are due each Tuesday for the previous week and shall include the following:

1. Date of each watering visit.
2. Summary of moisture level readings recorded during each watering visit.
3. Percent of project watered.

Contractor shall bill for watering each month based on total watering visits. Invoices for watering are due on the 3rd of each month for the previous month. Invoices must include quantity of watering visits performed for the month.

Failure to meet the above watering requirements without prior written approval by the Owner's Representative may result in reduced payment, bond claims, or potential contract termination.

REGARDING TREES: Upon completion of year-one watering, Contractor must remove all watering bags and replace them with TreeDiaper hydration product "TD48R", unless otherwise specified. TreeDiapers must be installed according to the manufacturer's instructions and covered with mulch to match existing mulch ring or planting bed. **All existing tree saucers must be removed at this time. Soil from tree saucers shall not be placed over roots of trees.**

Contractor will be responsible for TreeDiaper removal exactly one-year after the date of installation.

3.10 CLEAN-UP AND PROTECTION

- A. Keep all work areas including roadways, sidewalks, staging locations, etc. in a safe and orderly condition.
- B. Upon completion of work, remove all debris, materials, and equipment. Any damage inflicted upon the work area or surrounding areas must be repaired to the condition of the site prior to the damage occurrence. For example, damaged sod areas may require grading and re-sodding. Damaged sidewalk panels may require removal and replacement to specifications matching the existing sidewalk.
- C. As necessary, protect installed landscape from damage due to operations by other workers and subcontractors. Maintain protection during installation and maintenance periods. For example, put barricade in place to separate newly installed planting bed from adjacent grading activity for sod installation. Damage to landscape from other workers and subcontractors will be repaired/replaced at no expense to the City.
- D. Theft: Contractor is responsible for theft of any plant material (staged, installed, or otherwise) at the Project Site until date of Substantial Completion.

3.11 INSPECTION AND ACCEPTANCE

- A. Periodic site inspections will be made from time to time by the City Representative to review the quality and progress of the work. Unacceptable work must be corrected within five (5) calendar days.
- B. Upon completion of work, the Contractor shall notify the City Representative at least ten (10) days prior to requested date of Substantial Completion for inspection of all portions of the work. Based upon inspection, the City Representative will issue a punch list for work to be corrected. All work in the punch list must be completed within five (5) working days from receipt of punch list. Where inspected work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected and receipt of Certificate of Substantial Completion by the City Representative.
- C. Certificate of Substantial Completion will be issued for acceptable work. Substantial Completion will not be issued for items with outstanding punch list requirements.
- D. Warranty commences on the date of issuance of the Certificate of Substantial Completion. All new plant material and maintenance is the responsibility of the Contractor. Replacements and repair during the warranty shall be at the expense of the Contractor.
- E. Final Acceptance: One year after the date of Substantial Completion, the Owner will inspect shrubs and groundcovers and associated work for Final Acceptance of those items. Two years after the Date of Substantial Completion the Owner will inspect trees and associated work for Final Acceptance of those items. Upon satisfactory completion of repairs and/or replacements, warranty obligations will have been met.

END OF SECTION 02900

SECTION 999999

MISCELLANEOUS CONSTRUCTION

Line item number 7 is intended for Miscellaneous Construction which may or may not be required on the project as directed/requested by the Engineer. Use of this item will be only as specifically authorized by the City of Alpharetta.

Every effort will be made to negotiate an acceptable price with the Contractor for miscellaneous construction. If the City of Alpharetta is unable to negotiate an agreeable price with the Contractor, Alpharetta reserves the right to negotiate both price and warranties with specialty contractors for this purpose. The Contractor will then be required to include the work authorized, utilizing the authorized specialty subcontractor. A maximum allowance of 5% may be included for overhead purposes of the prime contractor above the negotiated specialty contractor agreement.

For payment purposes, negotiated prices will be converted to a percentage of the Miscellaneous Construction Allocation line item. Payment for this item will be only for amounts authorized by the Engineer. Final Payment may or may not equal 100% of the Lump Sum Price included in the Contract.

END OF SECTION 999999

APPENDIX F: SUPPLEMENTAL CONDITIONS

SECTION SC

SUPPLEMENTARY CONDITIONS

GENERAL

These Supplementary Conditions modify, change, delete from or add to the General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

SC-2.2 COPIES OF DOCUMENTS

Amend the first sentence of paragraph 2.2 of the General Conditions to read as follows:

"OWNER shall furnish to CONTRACTOR up to three copies of the Contract Documents."

SC-2.3 COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED

Delete paragraph 2.3 of the General Conditions in its entirety and substitute the following in its place:

"The Contract Time will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within sixty (60) days after the effective date of the Agreement."

SC-4.2 PHYSICAL CONDITIONS

Contractor shall make his own determination of physical and subsurface conditions of the site and the location, depth, type, and description of underground or overhead utilities, pipes, and conduits at the project site. Such information (if any) shown on the Drawings was obtained from readily available sources believed to be reliable but may not be accurate or complete. Excavation and/or electronic detection methods were not used to verify the information.

SC-5.3 CONTRACTOR'S LIABILITY INSURANCE

Each insurance policy required by Article 5 of the General Conditions shall contain a provision that the coverage afforded "Will not be cancelled, materially changed, or renewal refused until at least thirty (30) days' prior written notice has been given to the Owner and Engineer". Certificates of Insurance shall state that the above included in each policy or is added by policy endorsement.

The limits of liability for the insurance required by paragraph 5.3 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by law:

5.3.1 and 5.3.2 Workers Compensation, etc.:

- (1) State: Statutory
- (2) Federal: Statutory

5.3.3, 5.3.4 and 5.3.5 Comprehensive General Liability:

- (1) Bodily Injury and Property Damage
\$1,000,000 Combined single limit (BI & PD)
\$1,000,000 Aggregate
- (2) Property Damage liability insurance shall include Collapse Hazard, Underground Property Damage Hazard, Broad Form Property Damage, Independent Contractors', and completed operations coverages. (Explosion Hazard coverage shall be provided if blasting operations are anticipated, and/or prior to any actual

blasting operations) .Coverages shall be specifically identified on the Certificates of Insurance.

- (3) Personal Injury:
\$1,000,000 Annual Aggregate

An Umbrella or Excess Liability policy is acceptable in bringing the above Limits into compliance.

- (4) Railroad Protection Policy: To limits specified in Railroad Encroachment Permits (Only if applicable).

5.3.6 Comprehensive Automobile Liability:

- (1) Bodily Injury and Property Damage
\$1,000,000 Combined single limit (BI & PD)
- (2) Automobile Liability shall include any and all autos and road vehicles, including owned, non-owned, and hired.

An Umbrella or Excess Liability policy is acceptable in bringing Limits into compliance.

SC-5.4 CONTRACTUAL LIABILITY INSURANCE

The Contractual Liability Insurance required by paragraph 5.4 of the General Conditions shall provide coverage for not less than the following amounts:

- (1) Bodily Injury and Property Damage
\$1,000,000 Combined single limit (BI & PD)
\$1,000,000 Aggregate

An Umbrella or Excess Liability policy is acceptable in bringing Limits into compliance.

SC-5.5 OWNER'S LIABILITY INSURANCE

Delete paragraph 5.5 of the General Conditions in its entirety and insert the following in its place:

"The Contractor shall provide an Owner's Protective policy which shall provide liability coverage, including personal injury, for not less than the amounts required for the Contractor's Liability Insurance under the General Conditions paragraph 5.3 and shall include the ENGINEER and ENGINEER's Consultants as additional insured parties. The policy shall be delivered to the Owner prior to issuance of Notice to Proceed. "

SC-5. 6 PROPERTY INSURANCE

- (1) Delete the first sentence only of paragraph 5.6 of the General Conditions and substitute the following in its place:
"Contractor shall purchase and maintain property insurance upon the Work at the site(s) to the full insurable value thereof."
- (2) For only that portion of the Work that is underground water and sewer utility installation, Contractor may purchase and maintain Builder's All Risk insurance only to the full insurable value of material in storage at the site or in storage off site, but not yet incorporated into the Work (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations).
- (3) Add to paragraph 5.6: "The All Risk property insurance policy shall be delivered to the OWNER prior to issuance of the Notice to Proceed."

SC-6.2 SUPERVISION AND SUPERINTENDENCE

Add a new paragraph immediately after paragraph 6.2 of the General Conditions as follows:

"6.2.1 Contractor shall have a responsible representative on call at all times and shall maintain a crew with necessary tools and equipment available on call after normal Working hours, on weekends, during inclement weather and other times when Work is not in progress, to perform any necessary emergency repair Work which may occur as a result of the Work under this Contract. Negligence on the part of the Contractor, in the opinion of the Owner, to satisfy such situations will be just cause for the Owner to take whatever action necessary to remedy the situation and to deduct the cost from monies due the Contractor."

SC-6.3 LABOR, MATERIALS AND EQUIPMENT

Add sentence to paragraph 6.3 of the General Conditions as follows:

"Contractor's request for consent for overtime, Saturday or legal holiday Work shall be delivered to the ENGINEER at least 48 hours prior to proposed start of such operations."

SC-6.13 PERMITS

Add the following to paragraph 6.13 of the General Conditions:

"Railroad crossing and State of Georgia Department of Transportation (GDOT) encroachment permits will be furnished by the Owner. GDOT blasting permits shall be obtained by the Contractor. Any delays in obtaining Owner furnished permits will not be cause for extra compensation; however, they will be cause for an extension of the Contract Time for a period equal to the delay. Contractor's Work shall conform to all requirements of the permits. Contractor shall obtain and pay for extra insurance and bonds (if any) required by permits. Owner will pay fees of utility service companies for permanent connections required by the Work. Contractor shall pay all utility user fees for temporary utilities required for the Work during the construction period until Substantial Completion."

SC-6.19 RECORD DOCUMENTS

Add to Article 6.19 the following:

"Keep accurate up-to-date as-built drawings as the Work progresses. These drawings shall reflect any deviations from the original Contract Documents. At the completion of the Work, the Contractor shall transfer all "as-built" corrections and notations. This set shall be delivered to and approved by the ENGINEER prior to final payment."

SC-6.20 SAFETY AND PROTECTION

Comply with all of the requirements of Public Law 91-956, cited as the "Occupational Safety and Health Act of 1970," and all amendments thereto, commonly referred to as OSHA, and it shall be the responsibility of the CONTRACTOR to fully enforce and comply with all of the provisions of the Act. Comply with OSHA requirements for maintaining a competent person at the job site at all times who is capable of identifying existing and predictable hazards in the surroundings or Working conditions which are unsanitary, hazardous, or dangerous to employees, and who is knowledgeable about OSHA standards, and who has authorization to take prompt corrective measures to abate hazards. A competent person at excavation, trenching or shoring sites also must be one having training in, and be knowledgeable about, soils analysis and the use of protective systems, shall have completed trench safety training in a course approved by the OSHA Training Institute, and shall be licensed as a "Utility Foreman" in the State of Georgia .

SC-9.8 PROJECT REPRESENTATION

Add a new paragraph immediately after paragraph 9.8 of the General Conditions to read as follows:

"9.8.1 The duties, responsibilities, and limitations of the Resident Project Representative shall be as stated in Duties, Responsibilities, and Limitations of Authority of Resident Project Representative."

SC-10 CHANGES IN THE WORK

Add paragraph 10.6 to the General Conditions to read as follows:

"10.6 The itemized quantities shown in the Bid Form shall be considered by the CONTRACTOR as the estimated quantities required to complete the Work only for the purpose of bidding. Should actual quantities required in the construction of the Work be greater or less than the quantities shown on the Bid Form, an amount equal to the difference in quantities at the unit prices bid for the items will be added to or deducted from the contract price upon completion of the Work. Owner may elect to delete entirely one or more bid items from the Work by giving written notice to the CONTRACTOR prior to commencement of Work on the deleted bid item."

SC-13.14 OWNER MAY CORRECT DEFECTIVE WORK

Add the following to Paragraph 13.14 after the first sentence:

"In the event of damage to existing utilities, or failure of completed or partially completed Work, which damage or failure creates an emergency or loss of service exceeding 4 hours, the Owner may (a) proceed to correct defective Work without prior written notice to the CONTRACTOR and (b) directly invoice CONTRACTOR for all such direct and indirect costs of the OWNER in accordance with OWNER's current policies".

SC-16 ARBITRATION

Article 16 of the General Conditions is deleted in its entirety.

END OF SECTION SC

CITY OF ALPHARETTA INVITATION TO BID (ITB)

ITB Number: 23-010

ITB Title: Pedestrian Safety Barrier at City Center



ITB SPECIFICATIONS; BIDDING INSTRUCTIONS

1. ITB Period of Non-communication

The no communication period starts on the issue date of this ITB May 18, 2023, and lasts until the City Council meeting for contract award recommendation (or until contract award if this isn't required to go before council for approval).

Any person or company, their employees, representatives, agents, attorneys, etc. involved in bidding this project must not contact the City's elected officials or any City staff concerning this ITB.

Contacting anyone other than the Procurement Agent named below for this ITB during this time will be reason to remove a proposal from review.

2. Procurement Agent, Single Point of Contact

Beth Rucker is the Procurement Agent and Single Point of Contact for this ITB and is the only contact representing the City for this ITB.

Enter all questions or comments using Opportunity Q&A tab at the Bonfire project web page. Beth can be reached at 678-297-6052 or purchasing@alpharetta.ga.us.

City of Alpharetta
2 Park Plaza
Alpharetta, GA 30009
Attn: Beth Rucker, Procurement Agent

3. ITB Schedule of Events, Addenda, Additional Communications

1. **Bidding Close Date, Deadline for Submissions: June 15, 2023, at 10:00 am.** We may change this date during the ITB process. We will post any change in an addendum. Review web page for addenda.
2. Link to Bonfire Project Web Page: <https://cityofalpharetta.bonfirehub.com/>
3. This project web page has the important dates and all project documents for this ITB.
4. Enter all questions, comments, requests for information before the Questions Due Date using ☒ **Message – Opportunity Q&A** at the project web page.
5. In each question, clearly tell the ITB document and section that is in question.
6. We will share any changes or added information from the City by a written addendum. We will make the information available to the public on the project web page.
7. It is your responsibility to check the project web page for any addenda, other information, or other messages before finally uploading a bid. You must respond using any updated information.

March 2023

8. A public bid opening will be held shortly after the ITB due date / time has passed. The public bid opening will be held via Zoom.

Zoom Public Bid Opening Details, June 15, 2023; 10:00 AM

Topic: ITB 23-010 Zoom Public Opening: Pedestrian Safety Barrier at City Center

Time: June 15, 2023, at 10:00AM Eastern Time (US and Canada)

Join Zoom Meeting:

<https://us05web.zoom.us/j/7394313662?pwd=K1FzaFVXMjYwWi85YldhZlAwL2Ewdz09>

Meeting ID: 739 431 3662

Passcode: BidOpening

WHAT THE CITY WANTS TO DO

1. Project Background and General Description

The City is requesting bids from qualified contractors to provide all materials, labor, and equipment for the complete construction of the **Pedestrian Safety Barrier at City Center** project. The project scope includes, but is not limited to, construction of brick walls, removal of existing light poles and foundations, installation of LED lights on the brick walls, patching the synthetic turf, and related work. The location of the work is along Highway 9 just south of Academy Street / Milton Avenue, within the City of Alpharetta.

2. Specifications

Plans are posted publicly on Bonfire as separate documents for this ITB. File names are:

- ITB 23-010 Plan Set

3. Project Specific Requirements

- A. The Bidder shall commence the Work with adequate force and equipment within **ten (10)** calendar days from receipt of Notice to Proceed and shall continuously pursue the work without interruption to completion and to achieve **Final Completion** of the Work in **thirty (30) calendar days from Notice to Proceed**. The NTP will be issued when all necessary materials are available to begin the construction work.
- B. The Bidder shall be responsible for performing with their own organization at least thirty percent (30%) of the work in this contract. The Bidder shall not subcontract, transfer, assign, or otherwise dispose of the contract or any portion thereof, without the written consent of the City.
- C. The cost of mobilization, bonds and insurance should be included in line item 1, Construction of the brick wall, on the bid form.
- D. The cost of any work performed, materials furnished, services provided, or expenses incurred, which are not specifically delineated in the Contract Documents, but which are incidental to the scope, intent, and completion of the Contract, shall be included in the prices for the various items scheduled.

- E. Construction is only permitted between the hours of 7:00 AM and 5:00 PM Monday through Friday. Work on Saturday and Sunday is not permitted.
 - a. Construction outside of these hours requires approval by both the Department of Public Works and the Department of Public Safety.
 - b. Once approved by the Department of Public Works, Contractor must submit request in writing to the Director of Public Safety for modified work hours.
- F. Contractor shall be responsible for implementing and maintaining all necessary traffic control measures. Contractor shall submit a traffic control plan to the City for approval prior to commencing any operations at a given location. Traffic can only be impeded between the hours of 9:00 AM and 4:00 PM. Traffic control is entirely the responsibility of the Bidder and must comply with MUTCD standards.
- G. Should the Contractor desire to utilize police officers as part of their traffic control, only City of Alpharetta Police may be so utilized. Contact Lieutenant Greg Jones (678-297-6319) with the City of Alpharetta Department of Public Safety.
- H. The Contractor shall be responsible for all required testing as set forth in the Technical Specifications. Testing services must be provided by an independent source. All testing costs shall be incorporated into the unit price for the associated line items.
- I. Unless specified otherwise, all handrails, pedestrian signal poles, strain poles and mast arms shall have a black powder-coat finish. All pedestrian and roadway lighting poles shall have a black finish applied by the manufacturer.
- J. Utility coordination shall be the responsibility of the Contractor. Costs for utility relocations will be paid by the City directly to the utility owner.
- K. Any limbs overhanging the limits of disturbance that may be ripped, torn, or damaged during construction shall be properly pruned under the direction of an ISA Certified Arborist.
- L. The City intends to award this contract to a single vendor. Should the bid results exceed the City's budget for this project, the City reserves the right to eliminate items from the final scope of work.
- M. Six trash receptacles shall be black in color and from Kings River Casting, Inc. This is the only company that manufactures and distributes the trash containers (SIVTR-32-RT) that are placed in the City Center and surrounding grounds.

Kings River Casting, Inc.

1350 North Avenue, Sanger, CA 93657

(559) 875-8250 SALES@KINGSRIVERCASTING.COM

Trash Receptacle Specifications:

SIVTR-32-RT

SQUARE IRON VALLEY TRASH Receptacle

32 Gallon Liner Included

BLACK

4. Public Works Construction

According to Georgia Public Works Law, public works construction means the building, altering, repairing, improving, or demolishing of any public structure or building or other public improvements of any kind to any public real property *other than* road construction or the routine operation, repair, or maintenance of existing structures, buildings, or real property.

- i. Contractor shall submit an updated construction schedule with each application for payment.
- ii. No rights of way and/or easements required for this project have been obtained. The work is within existing easements or within City-owned parcels or right of way.
- iii. The Schedule of Items form will be used as the primary representation of each Bidder's cost/price. Award of this project will be by grand total of base bid.

FOLLOW THIS OUTLINE

How We Want You to Construct Your Bid

1. Using Bonfire to Submit Bid

- 1.1. This is the link to Bonfire Project Web Page to get our documents and to upload your bid: <https://cityofalpharetta.bonfirehub.com/>
- 1.2. We are accepting all bids by online response only. You must upload completed bids online before the closing date and time found in Project Details of the project web page for this ITB.
- 1.3. Don't send bids by mail, fax, or email. We will not accept paper copy bids. We will not accept any bids after the closing time deadline has passed.
- 1.4. You have not completed your response simply by uploading bid documents and information. You must successfully upload all the required documents, including filling out any questionnaires, price sheets, or data requests, and then you must click the submit button before the closing time.
- 1.5. You will receive an email confirmation receipt with a unique confirmation number shortly after you complete your bid upload. This confirms that you have successfully turned in your bid with all required information.
- 1.6. You can update your bid at any time until the closing time.
- 1.7. All uploaded items and responses are Sealed in the project web page and will only be visible by the City after the closing time has passed.
- 1.8. If the file is 'mandatory' or 'required', you won't be able to complete your bid until you have met all requirements.

- 1.9. Uploading large documents may take more time, depending on the size of the file(s) and your Internet connection speed.
- 1.10. Pay attention to the type and number of files we have asked you to upload.
- 1.11. The largest upload file size is 1000 MB.
- 1.12. Don't embed any documents within your uploaded files. They won't be accessible or evaluated.
- 1.13. Minimum system requirements: Internet Explorer 11, Microsoft Edge, Google Chrome, or Mozilla Firefox. Java Script must be enabled.

2. Required Bid Documents and Formats

- ❖ Each bid must follow these document formats.
 - Failure to follow these formats will reduce our review team's ability to review and evaluate supplied information.
 - Format your documents using this outline:
 - ☐ no more than seven (7) pages per document,
 - ☐ formatted to single space lines,
 - ☐ 10 to 12-point font size,
 - ☐ black font color, and
 - ☐ upload documents in PDF format.

3. Bid Package and Company Information

IMPORTANT NOTE: By submitting a bid to the City in response to this ITB, Bidder acknowledges the understanding that each Bid and all information received in response to this ITB, including copyrighted material, is deemed "public record" in accordance with O.C.G.A § 50-18-70, et seq., and will be subject to Public inspection.

For any information required to submit a response to the ITB that may be confidential information, matters involving individual safety, or other required information that may be exempt from public disclosure, Bidders must include this information on a separate page(s) within the bid package with the page(s) clearly marked at the top of page(s), **CONFIDENTIAL INFORMATION**. City Procurement will review and separate out any information that meets the referenced exceptions to disclosure as public record. (*See ITB 23-010 Info Contract document for more details*)

- A. **Cover Letter with Brief Business Profile**, include a brief business profile length of time in business, and a summary describing strong points and why your firm's/team's experience, particularly with similar projects, will benefit the City.
- B. **Business information**, including business name and home office address. If another office address oversees work of this project, add that address information too.

- C. **Contact**, one person to be the single point of contact for this bid. All communication with the City will be with this person. Supply the following contact information in the bid:
- Name, including business title and preferred personal/honorific title (Mr. Ms. Dr. etc.)
 - mailing address,
 - telephone number, cell phone number, and
 - e-mail address.
- D. **References**. Supply at least three references for work or services similar in scope, specifications, and complexity to the project in this ITB (don't include the City of Alpharetta). These references must be for work or services provided by your company within the last five years. Also supply a list of three active projects or upcoming projects, awarded and yet to begin.
- NOTE:* We contact references to verify your ability to do the work. We also reserve the right to use any information or other references to decide your ability to perform the work in this ITB. Poor references from any source are grounds to disqualify a bid.
- E. **Technical Bid Information.**
- **Examples of Previous Projects.** If it fits the purpose of this ITB, you can use this section to highlight previous work, services, installations, etc. Keep this section to projects that are like our request in this ITB. Include no more than six (6) examples.
 - **Timeline.** If it fits the purpose of this ITB, include a timeline to complete the work or service requested in this ITB. Note any major milestones. Along with the timeline, include a written description of the plan of approach for each project phase, and a plan to deal with any setbacks.
 - **Wrap-up.** Use this section to add any other information about how you can supply the work or services requested in this ITB.

4. Bid Bond

We require bid bond equal to 5% of Grand Total bid price as listed in the ITB 23-010 Schedule of Items. A bid bond form has been supplied as a separate document for you to download and have completed by your surety. Return the completed bid bond to us as a separate document. All information must be readable including all seals (ex: Notary Seal).

5. Schedule of Items, Bid Pricing

We will supply a pricing sheet or cost form for you to complete. We may either have the form completed online, or it may be an Excel document for you to complete and upload with your bid.

6. Required Forms:

- We have provided required forms. You must complete these forms and return to us with every bid.
- A. **IRS Form W-9**
- B. **Bidder's Disclosures and Certifications**
- C. **E-Verify** (Affidavit Verifying Contractor Participation in Federal Work Authorization Program)

- ❖ ***E-Verify side note:*** Companies return this form to us incorrectly more often than anything else we request in our ITBs.
- ❖ Top mistakes include wrong number or missing information.
- ❖ State of Georgia law requires that we have this completed form before we can review a bid or bid.
- ❖ A form with errors doesn't fulfill this requirement.

- ⊗ No A,B,Cs.
- ⊗ It's different from your Tax ID, Employer Identification, or Social Security Number.
- ⊗ It won't have a combination of letters and numbers.
- Date of Authorization – this is when you first signed up and got the E-verify number.
- Name of Contractor – your company
- Name of Project – Same as ITB title
- Date, City, and State – when and where this form was signed
- Signature of Authorized Officer or Agent – to be signed
- Printed Name and Title of Authorized Officer or Agent – the person that signed the form.
- Notarized with seal

7. Questionnaire

We use a questionnaire to gather important information needed for legal requirements, your acknowledgements, our proposal review, or information needed for writing a contract.

Some questions may require your answers about the work we have described in this ITB.

You will fill out the questionnaire provided. There is no other form or document to upload.

Information requests and response types are as follows:

- Addenda Acknowledgement, enter the number of addenda received: 0, 1, 2, etc.
- Authorized signer for contract execution in DocuSign: Name, business title, email address, text entry.
- Contact for legal notices-needed for contracting: Business name and mailing address, contact name, text entry.
- Corporate secretary for contract execution in DocuSign: Name, business title, email address, Response Type: Response Type: text entry.
- Note the employee-number category for your company (all locations). Select either 500 or more employees, 100 or more employees, or less than 100 employees.
- Unique Entity ID / identifier used at SAM.gov, Response Type: alphanumeric entry.
- Acknowledgement of Contract and T&C review, Yes, No entry.
- Insurance Requirement Acknowledgement, Yes, No entry.
- Performance and Payment Bonds, Retainage Acknowledgment, Yes, No entry.
- Note any Exceptions to Contract T&Cs, text entry.

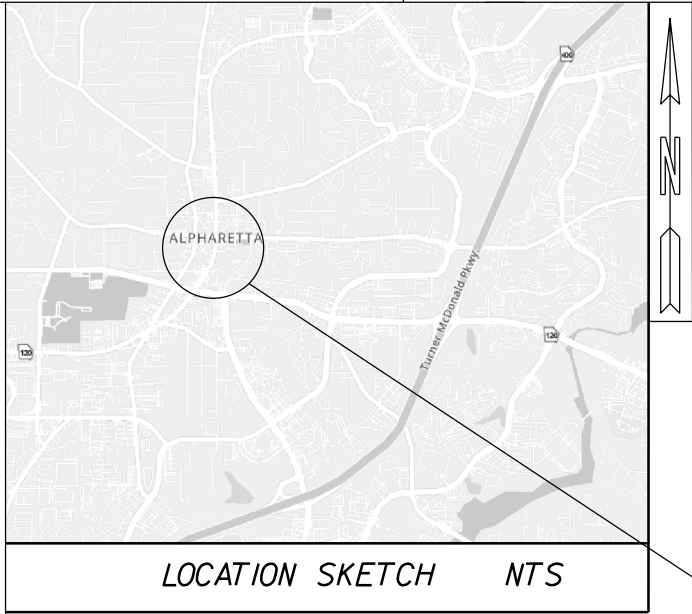
CITY OF ALPHARETTA

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED

PEDESTRIAN SAFETY IMPROVEMENTS

WALL DESIGN ON HIGHWAY 9



PROJECT
LOCATION

DESIGNED IN ENGLISH UNITS

THIS PROJECT HAS BEEN PREPARED
USING THE HORIZONTAL GEORGIA
COORDINATE SYSTEM OF 1984 (NAD
1983)/94 WEST ZONE, AND THE NORTH
AMERICAN VERTICAL DATUM (NAVD)
OF 1988.

END PROJECT
STA. 11+75.00

BEGIN PROJECT
STA. 10+50.00

11+00

12+00

10+00

SR 9/ S. MAIN STREET

N. BROAD ST

S. BROAD ST

EXIST R/W

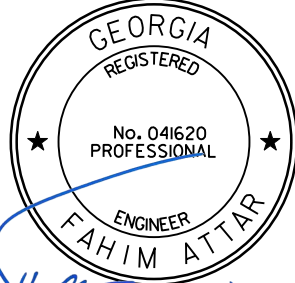
36" HT. WALL

36" HT. WALL

36" HT. WALL



THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY
INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON
FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE
SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE CITY OF
ALPHARETTA IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO
SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.



Fahim Attar

PLANS PREPARED BY:



moﬀatt & nichol

UNDER THE
SUPERVISION OF: FAHIM ATTAR, PE

PLANS COMPLETED	- -
REVISIONS	

[illegible][illegible]

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO OBTAIN ALL BORROW AND WASTE PITS AT NO ADDITIONAL COST TO THE CITY.
2. NOI WILL NOT BE REQUIRED FOR THIS PROJECT.
3. ALL CONSTRUCTION VEHICLES SHALL PARK IN AREAS OUT OF PUBLIC ROADWAY RIGHT-OF-WAY.
4. CONTRACTOR IS CAUTIONED ABOUT THE PRESENCE OF UNDERGROUND UTILITIES AT OR NEAR THE PROPOSED IMPROVEMENTS THROUGHOUT THIS PROJECT. CALL BEFORE YOU DIG: GEORGIA811.
5. ALL EXISTING UTILITIES AND STRUCTURES SHALL BE MAINTAINED, UNLESS OTHERWISE NOTED.
6. ALL FILL AREAS MUST BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE CONSTRUCTION INSPECTOR FOR ALL FILL AREAS WITHIN THE RIGHT-OF-WAY.

PROJECT NOTES

DEMOLITION NOTES:

1. DEMOLITION WORK SHALL NOT BEGIN UNTIL PHASE I EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVED BY CITY INSPECTOR.
2. SAWCUT CONCRETE AT INSIDE EDGE OF GREEN SPACE TO PROVIDE SMOOTH EDGE FOR WALL INSTALLATION.
3. EXISTING BENCHES TO BE REMOVED PRIOR TO THE WALL INSTALLATION.
4. THE CONTRACTOR SHOULD INFORM THE CITY CONSTRUCTION MANAGER AT 678-297-6227 WHEN LIGHT POLES AND BENCHES ARE REMOVED AND DELIVER THEM TO PUBLIC WORKS DEPARTMENT AT 1790 HEMBREE ROAD, ALPHARETTA, GA 30009.
5. CONTRACTOR IS RESPONSIBLE FOR PATCHING THE SYNTHETIC TURF WHERE DAMAGED PER DETAIL ON SHEET 04-0003.
6. CONTRACTOR IS RESPONSIBLE FOR REMOVING THE LIGHT POLE FOUNDATION SPECIFIED ON THE CONSTRUCTION PLANS AND PATCHING THE SYNTHETIC TURF PER DETAIL ON SHEET 04-0003.

GRADING NOTES:

1. CONTRACTOR MUST ATTEND CITY OF ALPHARETTA PRE-CONSTRUCTION CLASS PRIOR TO SITE INITIATION.
2. THE PROJECT WILL HAVE NO IMPACT ON THE OVERALL STORM WATER RUN OFF FOR THE PROJECT BASIN.
3. THIS PROJECT DOES NOT DISCHARGE WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT.
4. CRITICAL AREAS: NONE
5. APPROVED PLANS MUST BE ON SITE AT ALL TIMES.

SITE NOTES

1. THERE ARE NO KNOWN EXISTING WELLS OR SEPTIC SYSTEMS WITHIN THE PROJECT LIMITS. NO NEW WELLS OR SEPTIC SYSTEMS ARE PROPOSED.
2. THE BOUNDARY AND TOPOGRAPHIC INFORMATION CONTAINED IN THESE PLANS WAS TAKEN FROM A BOUNDARY & TOPOGRAPHIC SURVEY BY PLATINUM GEOMATICS, DATED 02-27-2023.
3. THE PROJECT LIMITS DO NOT CONTAIN STATE WATERS AND/OR WETLANDS. NO PORTION OF THIS PROJECT IS WITHIN 200 LF OF STATE WATERS.

CITY OF ALPHARETTA - TRAFFIC NOTES

1. ALL UTILITY LOCATES AND RELOCATIONS, AND/OR DAMAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MUST CONTACT CITY OF ALPHARETTA LOCATE PERSONNEL DIRECTLY FOR TRAFFIC SIGNAL UTILITY LOCATES. PHONE 678-297-6200.
2. ALL REQUIRED TRAFFIC SIGNAGE MUST MEET MUTCD STANDARDS.

UTILITY NOTES:

1. THE CITY WILL CONTRACT DIRECTLY WITH THE AFFECTED UTILITY OWNERS FOR PURPOSES OF RELOCATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THEIR CONSTRUCTION EFFORTS WITH THE RELOCATION ACTIVITIES.



CITY OF ALPHARETTA - COMMUNITY DEVELOPMENT NOTES

1. CURRENT SITE ZONING: PUBLIC RIGHT-OF-WAY
2. PROPOSED USE: PUBLIC SAFETY IMPROVEMENTS
3. PARKING REQUIRED: NOT APPLICABLE
4. HANDICAP SPACES REQUIRED: NOT APPLICABLE
5. OFF-STREET PARKING SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
6. ALL REVISIONS TO THESE PLANS MUST BE SUBMITTED TO THE CITY OF ALPHARETTA COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO CONTINUING CONSTRUCTION.
7. ON-SITE BURIAL IS NOT ALLOWED.
8. IRRIGATION NOTES:

a. IRRIGATION SYSTEMS ARE NOT ALLOWED WITHIN THE PUBLIC RIGHT OF WAY.

b. IRRIGATION SPRAY ONTO PUBLIC ROADWAYS IS NOT ALLOWED.

c. IRRIGATION SYSTEMS MUST BE SHUT OFF OR OPERATED MANUALLY DURING WINTER MONTHS TO PREVENT UNNECESSARY ICE ON ROADS.

GENERAL NOTES

1. EXISTING UTILITIES, PAVEMENT STRUCTURES, AND OTHER FEATURES DEPICTED ON THESE DRAWINGS ARE SHOWN IN APPROXIMATE LOCATION ONLY. THE CONTRACTOR SHALL CALL A LOCAL UTILITY LOCATION SERVICE AND HAVE ALL UTILITIES IN THE WORK AREA LOCATED BEFORE STARTING WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IN THE FIELD, THE EXACT LOCATION OF THESE AND ANY OTHER EXISTING FEATURES IN OR ADJACENT TO THE PROJECT LIMITS.
2. THERE ARE NO KNOWN CEMETERIES OR AREAS OF HISTORICAL SIGNIFICANCE ON SITE.
3. IF THE CONTRACTOR, IN THE COURSE OF THE WORK, FINDS ANY DISCREPANCIES BETWEEN THE PLANS AND THE PHYSICAL CONDITIONS OF THE LOCALITY, OR ANY ERRORS OR OMISSIONS IN THE PLANS OR IN THE LAYOUT AS GIVEN BY THE ENGINEER, IT SHALL BE HIS DUTY TO IMMEDIATELY INFORM THE CITY AND ENGINEER IN WRITING. THE ENGINEER WILL PROMPTLY VERIFY CONTRACTOR’S RISK.
4. THE CONTRACTOR SHALL PROVIDE MATERIAL TESTING UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL MEET ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, LAWS, REGULATIONS, AND REQUIREMENTS.

CITY OF ALPHARETTA - SITE ENGINEERING NOTES

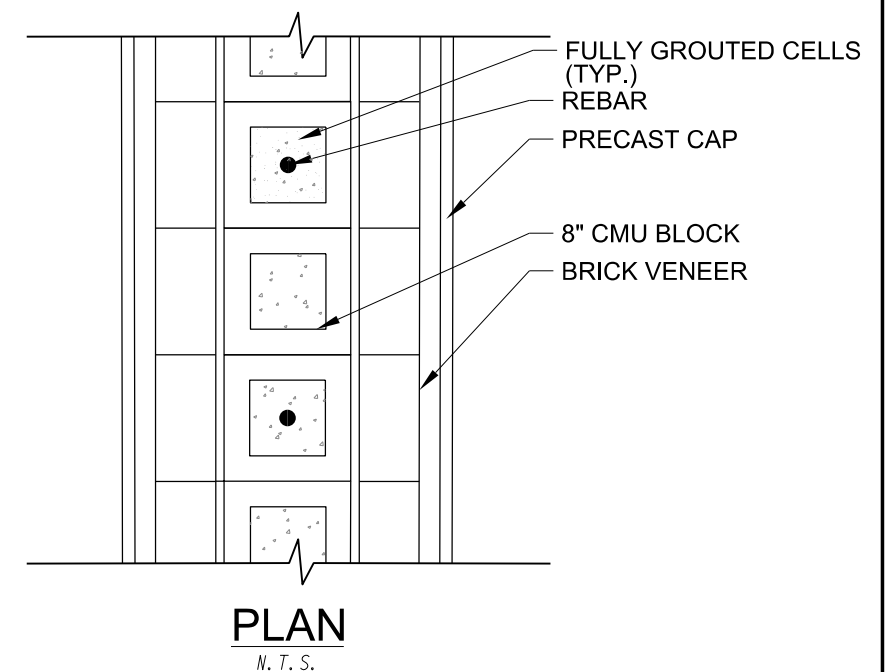
1. FAILURE OF THE CONTRACTOR TO PERFORM THE PRESCRIBED EROSION CONTROL PRACTICES SHALL RESULT IN THE IMMEDIATE ISSUANCE OF A STOP-WORK ORDER FOR THE PROJECT SITE, PURSUANT TO SECTION 3.1.1.F.2.d. OF THE CITY UNIFIED DEVELOPMENT CODE.
2. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE PROJECT LIMITS DO NOT CONTAIN STATE WATERS AND/OR WETLANDS.
4. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
5. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
6. ANY DISTURBED AREA LEFT EXPOSED FOR 14 DAYS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH.
7. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO ROADWAY OR INTO STORM DRAIN SYSTEM MUST BE REMOVED IMMEDIATELY BY SWEEPING. EXCESSIVE OFFSITE TRACKING MAY WARRANT THE INSTALLATION OF A CONSTRUCTION EXIT AT THE DISCRETION OF THE CITY OF ALPHARETTA INSPECTOR. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT THE TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND. CONCRETE WASHDOWN IS NOT ALLOWED.
8. THE CONTRACTOR WILL MAINTAIN STORM WATER RUNOFF CONTROLS AT ALL TIMES. ADDITIONAL CONTROLS WILL BE INSTALLED IF DETERMINED NECESSARY BY CITY INSPECTION.
9. IRRIGATION SYSTEMS ARE NOT ALLOWED WITHIN THE PUBLIC RIGHT-OF-WAY.
10. AT LEAST ONE PERSON ON A PROJECT OR SITE MUST HAVE COMPLETED THE LEVEL 1A EROSION EDUCATION & TRAINING COURSE AND BE CERTIFIED BY GSWCC.
11. SUBCONTRACTORS MUST COMPLETE EITHER LEVEL 1A EROSION EDUCATION & TRAINING COURSE OR ATTEND SUBCONTRACTOR AWARENESS SEMINAR.

REVISION DATES

GENERAL NOTES

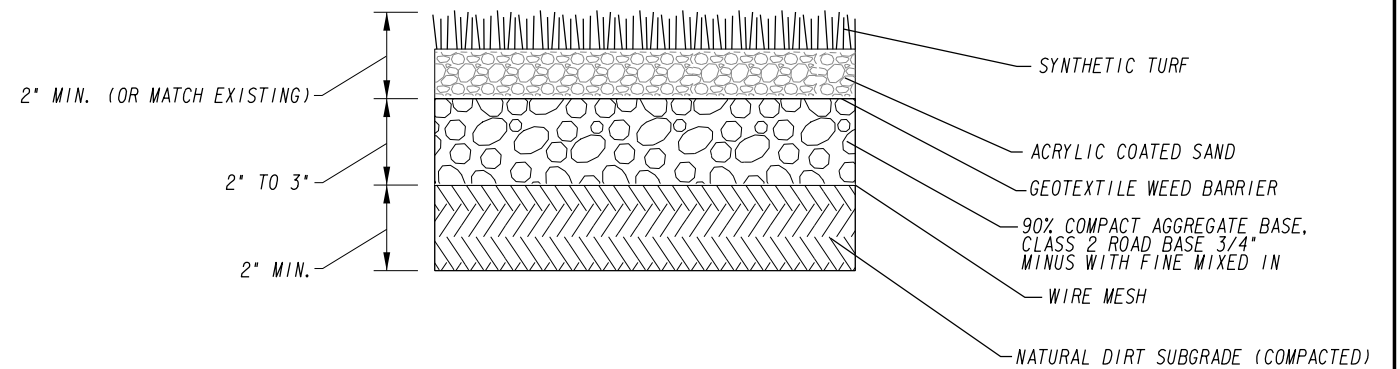
PEDESTRIAN SAFETY IMPROVEMENTS
WALL DESIGN ON HIGHWAY 9

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



1. MOCK UP: PRIOR TO COMMENCEMENT OF EXPOSED MASONRY WORK, CONTRACTOR SHALL ERECT A SAMPLE WALL (48" LONG X 36" HIGH X 20" WIDE). UPON OWNER'S REPRESENTATIVE'S APPROVAL, THE MOCK-UP WILL SERVE AS THE STANDARD APPEARANCE AND WORKMANSHIP FOR ALL BRICK WALLS. MOCK WALL SHALL SHOW TRANSITION TREATMENT BETWEEN WALL AND SYNTHETIC TURF.
2. PRECAST CONCRETE CAP TO MATCH EXISTING CONCRETE CAP ON BRICK WALLS AT ALPHARETTA TOWN CENTER.
3. BRICK TO MATCH COLOR SCHEME OF EXISTING TOWN CENTER BRICK WALLS. OWNER TO APPROVE BRICK COLOR DURING MOCK UP OF WALL.
4. ELECTRICAL CONDUIT TO BE COORDINATED WITH UTILITY PLANS. LEDGE LIGHTS PROVIDED ON BOTH SIDES OF THE WALL.
5. REFER TO WALL ENVELOPE SHEETS FOR ADDITIONAL INFORMATION.

REVISION DATES			GENERAL NOTES PEDESTRIAN SAFETY IMPROVEMENTS WALL DESIGN ON HIGHWAY 9				
			CHECKED:		DATE:		DRAWING No. 04-0002
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		



N. T. S.

N. T. S.

NOTE: SYNTHETIC TURF TO BE SECURED AS DIRECTED BY MANUFACTURER.



SEE SHEET 04-0002 FOR WALL DETAIL

CHECKED:	DATE:	DRAWING No. 13-0001
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

GENERAL NOTES:

- (1) WHERE INDICATED, UTILITY PIPE SIZE AND MATERIAL ARE BASED ON VISUAL EVIDENCE OR RECORD PLANS.
- (2) EMPTY CONDUITS, OVERHEAD COMMERCIAL LIGHTING, TRAFFIC CONTROL SENSORS IN PAVING, IRRIGATION/SPRINKLER, AND OTHER PRIVATELY OWNED UTILITY LINES WERE NOT INCLUDED IN THIS SUE PROJECT.
- (3) ALL UNDERGROUND TELEPHONE LINES ARE DIRECT-BURIED UNLESS OTHERWISE NOTED.
- (4) ALL FIRE HYDRANT CONNECTION MATERIAL SIZES AND TYPES ARE UNKNOWN UNLESS OTHERWISE NOTED ON THE PLANS.

UTILITY SUMMARY:

ALL THE FOLLOWING UTILITY OWNERS WERE REPORTED TO HAVE FACILITIES WITHIN THE VICINITY OF THIS PROJECT AT THE TIME OF THE SUE INVESTIGATION. UTILITIES FOUND WITHIN THE LOS AT THE TIME OF THE SUE INVESTIGATION ARE NOTED OR EACH UTILITY OWNER LISTED AND ARE SHOWN ON THE PLANS HEREON.

AMERICAN TELEPHONE & TELEGRAPH (ATT) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATIONS LINES FOUND WITHIN THE LOS
ARE OWNED BY AMERICAN TELEPHONE & TELEGRAPH UNLESS
OTHERWISE NOTED ON THE PLANS.

ZAYO FIBER SOLUTIONS (ZFS) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATION LINES FOUND WITHIN THE LOS THAT
ARE OWNED BY ZAYO ARE NOTED ON THE PLANS.

ATLANTA GAS LIGHT (AGL) - NATURAL GAS
NOTE: ALL NATURAL GAS LINES FOUND WITHIN THE LOS
ARE OWNED BY ATLANTA GAS LIGHT UNLESS
OTHERWISE NOTED ON THE PLANS.

CITY OF ALPHARETTA (COA) - TRAFFIC & ELECTRIC
NOTE: ALL TRAFFIC & ELECTRIC LINES FOUND WITHIN THE LOS
THAT ARE OWNED BY THE CITY OF ALPHARETTA ARE NOTED
ON THE PLANS

COMCAST (COM) - TELEVISION
NOTE: ALL TELEVISION LINES FOUND WITHIN THE LOS
ARE OWNED BY COMCAST UNLESS OTHERWISE NOTED ON THE PLANS.

FIBERLIGHT (FBL) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATION LINES FOUND WITHIN THE LOS
THAT ARE OWNED BY FIBERLIGHT ARE NOTED ON THE PLANS.

FULTON COUNTY (FC) - WATER & SEWER
NOTE: ALL WATER & SEWER LINES FOUND WITHIN THE LOS
ARE OWNED BY FULTON COUNTY UNLESS OTHERWISE NOTED
ON THE PLANS

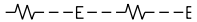
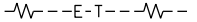
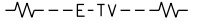
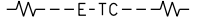
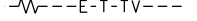
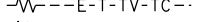
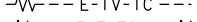
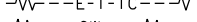
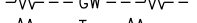
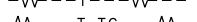
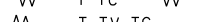
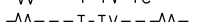
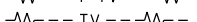
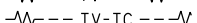
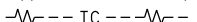
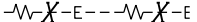
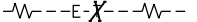
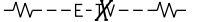
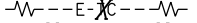
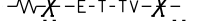
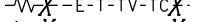
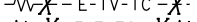
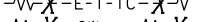
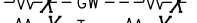
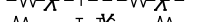
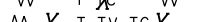
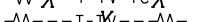
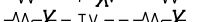
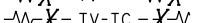
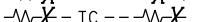
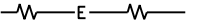
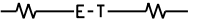
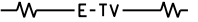
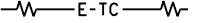
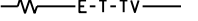
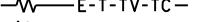
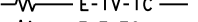
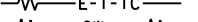
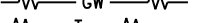
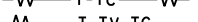
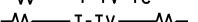
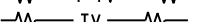
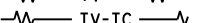
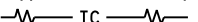
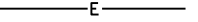
GEORGIA POWER COMPANY (GPC) - ELECTRIC DISTRIBUTION
NOTE: ALL ELECTRIC LINES FOUND WITHIN THE LOS
THAT ARE OWNED BY GEORGIA POWER COMPANY ARE
NOTED ON THE PLANS.

VERIZON BUSINESS (VZB) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATIONS LINES FOUND WITHIN THE LOS
THAT ARE OWNED BY VERIZON BUSINESS ARE NOTED ON THE PLANS.

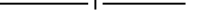
SUE INVESTIGATION DESCRIPTION:

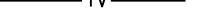
AN OVERHEAD/SUBSURFACE UTILITY ENGINEERING INVESTIGATION (SUE) WAS PERFORMED AND COMPLETED BY PLATINUM GEOMATICS ON 02/17/23 FOR THIS PROJECT. THE EXISTING OVERHEAD AND UNDERGROUND FACILITIES SHOWN HEREON WERE INCLUDED IN THIS SUE INVESTIGATION. THE PRESENCE OF THESE UTILITY FACILITIES HAS BEEN THOROUGHLY INVESTIGATED AND THE METHOD OF DETERMINING THEIR LOCATION IS INDICATED AS SHOWN IN THE PLANS. UTILITIES THAT HAVE BEEN INSTALLED AFTER THE DATE ABOVE HAVE NOT BEEN INCLUDED IN THIS INVESTIGATION AND SHOULD BE CONSIDERED AS FROM RECORD DRAWING ONLY. ALL OTHER EXISTING TOPOGRAPHIC FEATURES DEPICTED HEREON HAVE BEEN REFERENCED FROM A TOPOGRAPHIC / MAPPING SURVEY AND CONTROL PACKAGE PROVIDED BY PLATINUM GEOMATICS AND DATED FEBRUARY 23 .

PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES 10/23/2015 GPLN DATE PREPARED BY: GPLN DATE CHECKED BY: GPLN DATE DESIGNED BY: GPLN DATE REVISED BY: GPLN	BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA LIMIT OF ACCESS REQ'D R/W & LIMIT OF ACCESS ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	moffatt & nichol		REVISION DATES	UTILITY PLANS PEDESTRIAN SAFETY IMPROVEMENTS WALL DESIGN ON HIGHWAY 9 CHECKED: DATE: BACKCHECKED: DATE: CORRECTED: DATE: VERIFIED: DATE: DRAWING No. 24-000A

UTILITY LINECODES				UTILITY SYMBOLS						
EXISTING	TO BE REMOVED	PROPOSED	TYPE OF UTILITY	EXISTING	PROPOSED	TEMPORARY	EXISTING	PROPOSED	TEMPORARY	
               	               	               	ELECTRIC ELECTRIC/TELECOMMUNICATIONS ELECTRIC/CABLE TV ELECTRIC/TRAFFIC CONTROL ELECTRIC/TELECOMMUNICATIONS/CABLE TV ELECTRIC/TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL ELECTRIC/CABLE TV/TRAFFIC CONTROL ELECTRIC/TELECOMMUNICATIONS/TRAFFIC CONTROL GUY WIRE TELECOMMUNICATIONS TELECOMMUNICATIONS/TRAFFIC CONTROL TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL TELECOMMUNICATIONS/CABLE TV CABLE TV CABLE TV/TRAFFIC CONTROL TRAFFIC CONTROL							










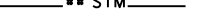


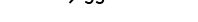








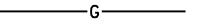



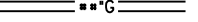



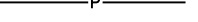


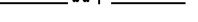


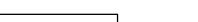
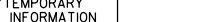
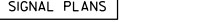




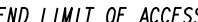



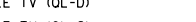




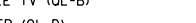


 | ELECTRIC (OL-D)
ELECTRIC (OL-C)
ELECTRIC (OL-B)
TELECOMMUNICATIONS (OL-D)
TELECOMMUNICATIONS (OL-C)
TELECOMMUNICATIONS (OL-B)
CABLE TV (OL-D)
CABLE TV (OL-C)
CABLE TV (OL-B)
WATER (OL-D)
WATER (OL-C)
WATER (OL-B)
WATER FOR LABELED PIPE SIZES (OL-D)
WATER FOR LABELED PIPE SIZES (OL-C)
WATER FOR LABELED PIPE SIZES (OL-B)
NON-POTABLE WATER (OL-D)
NON-POTABLE WATER (OL-C)
NON-POTABLE WATER (OL-B)
NON-POTABLE WATER FOR LABELED PIPE SIZES (OL-D)
NON-POTABLE WATER FOR LABELED PIPE SIZES (OL-C)
NON-POTABLE WATER FOR LABELED PIPE SIZES (OL-B)
STEAM (OL-D)
STEAM (OL-C)
STEAM (OL-B)
STEAM FOR LABELED PIPE SIZES (OL-D)
STEAM FOR LABELED PIPE SIZES (OL-C)
STEAM FOR LABELED PIPE SIZES (OL-B)
SANITARY SEWER WITH FLOW DIRECTION (OL-D)
SANITARY SEWER WITH FLOW DIRECTION (OL-C)
SANITARY SEWER WITH FLOW DIRECTION (OL-B)
SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (OL-D)
SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (OL-C)
SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (OL-B)
SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (OL-D)
SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION
(OL-C)
SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (OL-B)
GAS (OL-D)
GAS (OL-C)
GAS (OL-B)
GAS FOR LABELED PIPE SIZES (OL-D)
GAS FOR LABELED PIPE SIZES (OL-C)
GAS FOR LABELED PIPE SIZES (OL-B)
PETROLEUM (OL-D)
PETROLEUM (OL-C)
PETROLEUM (OL-B)
PETROLEUM FOR LABELED PIPE SIZES (OL-D)
PETROLEUM FOR LABELED PIPE SIZES (OL-C)
PETROLEUM FOR LABELED PIPE SIZES (OL-B)
TRAFFIC CONTROL (OL-D)
TRAFFIC CONTROL (OL-C)
TRAFFIC CONTROL (OL-B)
UNKNOWN UTILITY FOUND IN SUE INVESTIGATION (OL-B) | 











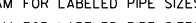
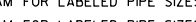




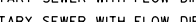






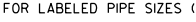
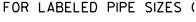


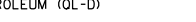
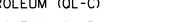
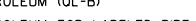
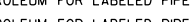
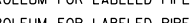
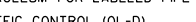
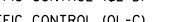
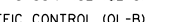
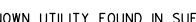


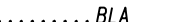
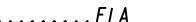







 |







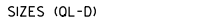
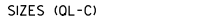
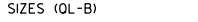










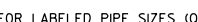
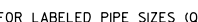
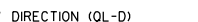
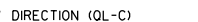
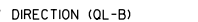















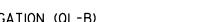











 |




















































 |



















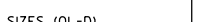
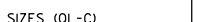
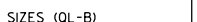






















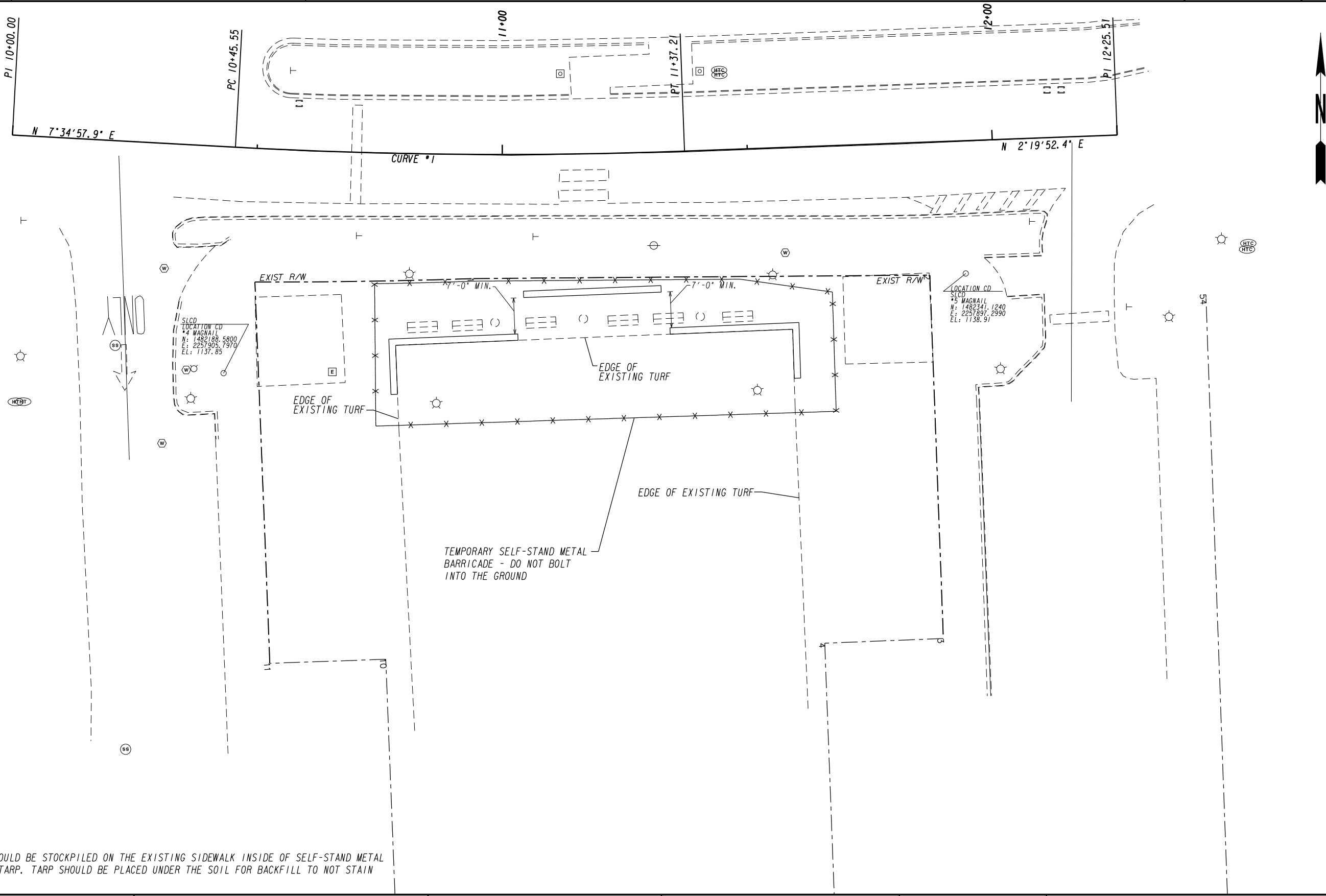







 | |

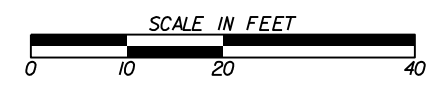
Curve* 1
PI Sta* 10+91.41
N* 1482240.0254
E* 2257866.0650
DELTA* 5°15'05.5" (LT)
D* 5°43'46.48"
T* 45.86
L* 91.66
R* 1000.00
E* 1.05



NOTE: SOIL FOR BACKFILL SHOULD BE STOCKPILED ON THE EXISTING SIDEWALK INSIDE OF SELF-STAND METAL BARRICADE AND COVERED WITH TARP. TARP SHOULD BE PLACED UNDER THE SOIL FOR BACKFILL TO NOT STAIN THE EXISTING SIDEWALK.

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR	---
& MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
LIMIT OF ACCESS	---
REQ'D R/W & LIMIT OF ACCESS	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA	---
(SEE ERIT TABLE)	---



REVISION DATES			CONSTRUCTION DETAILS		
			PEDESTRIAN SAFETY IMPROVEMENTS		
			WALL DESIGN ON HIGHWAY 9		
CHECKED:	DATE:		DRAWING No.		
BACKCHECKED:	DATE:		54-0001		
CORRECTED:	DATE:		Page 444 of 636		
VERIFIED:	DATE:				

Mr. Kurt Kirby
City of Alpharetta
1790 Hembree Road
Alpharetta, Georgia 30009

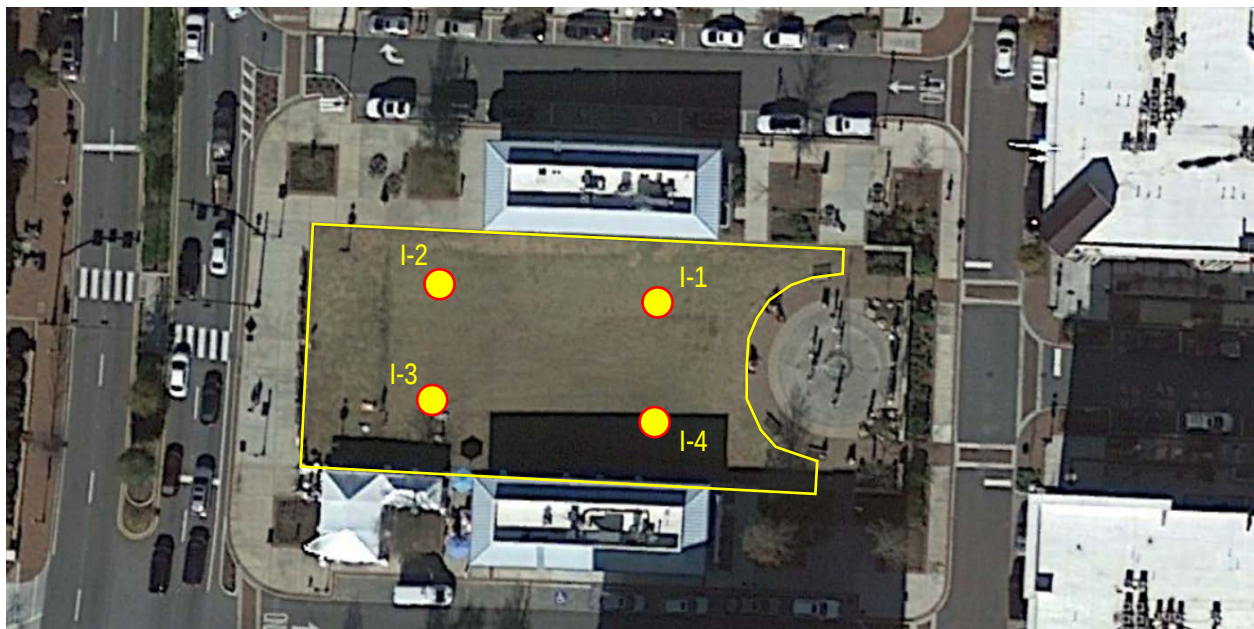
May 26, 2021

Report of Infiltration Testing
Alpharetta City Center Turf Installation
Alpharetta, Georgia
Project Number 210467.20

Dear Mr. Kirby:

Geo-Hydro Engineers, Inc. has completed the authorized infiltration testing for the above referenced project. The scope of services was outlined in our proposal number 26121.2 dated May 12, 2021.

We understand that the City of Alpharetta is planning to install artificial turf at an existing grass field at Alpharetta City Center. The project area has approximate plan dimensions of 75 feet by 150 feet. The annotated aerial photograph below shows the approximate limits of the turf installation. The contractor has proposed installing a turf system with a total depth of about 4 to 5 inches. The proposed system does not include an underdrain system and relies on surface runoff to infiltrate into the subsurface during rain events. You have requested infiltration testing to evaluate infiltration properties of the subsurface soils beneath the turf installation footprint. The annotated aerial photograph below shows the approximate locations of the four infiltration tests performed for the project.



TESTING PROCEDURES

The test holes were advanced to depths of about 1 to 4 feet at each test location using hand equipment producing a 4-inch diameter borehole. A layer of gravel was added to the bottom of the holes to protect the infiltration surface from scour during the tests. Water was then introduced to the hole and allowed to saturate the borehole for a minimum of four hours. Subsequently, the drop in water level was measured over time. Percolation testing was performed in accordance with the Modified Taft Engineering Center Method. The percolation rate was converted to a vertical infiltration rate by using the equation below.

$$\text{Infiltration Rate} = (\text{Percolation Rate})/(\text{Reduction Factor})$$

Where the Reduction Factor is given by:

$$Rf = (2d1 - \Delta d)/DIA + 1$$

With:

d1 = initial water depth (in)
 Δd = average/final water level drop (in)
 DIA = diameter of the percolation test area hole (in)

TEST RESULTS AND SUMMARY

The test results are presented in the following summary table.

Infiltration Test	Borehole Diameter (inches)	Test Depth (feet)	Infiltration Rate (inches/hour)
I-1	4	1.1	0.06
I-2	4	3.8	0.14
I-3	4	1.1	0.06
I-4	4	3.0	0.03

The infiltration test boreholes encountered fill materials classified as silty sand and sandy silt with varying amounts of rock fragments throughout the depths explored. Infiltration properties of fill materials are typically lower than undisturbed residual soils, which is reflected in the infiltration test results.

Based on the results of our exploration and testing, we do not expect that the subsurface soils within the horizon of the upper four feet will provide appreciable infiltration. We recommend that the artificial turf system be modified to include a drainage system which is connected to a stormwater management system.

During preparation of the artificial turf footprint, the soil subgrade should be thoroughly evaluated to identify areas of loose or debris-laden fill material. Any loose fill material should be excavated and replaced if it cannot be adequately densified in place. Debris-laden fill material should be removed from the installation footprint.

* * * * *

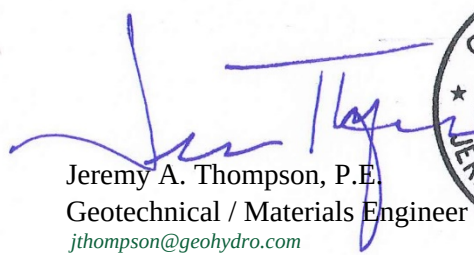
We appreciate the opportunity to serve as your geotechnical consultant for this project and are prepared to provide any additional services you may require. If you have any questions concerning this report or any of our services, please call us.

Sincerely,

GEO-HYDRO ENGINEERS, INC.


A. Marty Peninger, P.E.
Senior Geotechnical Engineer
mpeninger@geohydro.com




Jeremy A. Thompson, P.E.
Geotechnical / Materials Engineer
jthompson@geohydro.com



AMP/JAT/210467.20 - Alpharetta City Center Turf Installation - Infiltration Testing Report

City of Alpharetta
ITB 23-010, Pedestrian Safety Barrier at City Center
Bid Form

Enter Bidder/Company name here

Instructions for Bid Form Completion:

1. This form MUST be used to submit bid.
2. Do not include a copy of this bid form in your technical bid information.
3. Complete all fields. See end of form as well for bid authorization and contact info.
4. Verify all amounts entered. This form will be used for bid price award.
5. During bid opening, only bid grand total will be called.
6. Enter Unit Price only. Form will calculate the Bid Price by multiplying Quantity by Unit Price entered.

Item #	Item Description	Unit Price	Unit	QTY	Total
WALL					
1	CONSTRUCTION OF THE BRICK WALL*	\$ -	LF	99	\$ -
LANDSCAPE					
2	SYNTHETIC TURF PATCHING**	\$ -	SF	250	\$ -
LIGHTING					
3	REMOVAL OF EXISTING LIGHT POLE AND FOUNDATION AND CAP THE GAS LINES	\$ -	EA	2	\$ -
4	CONDUIT, 2 IN	\$ -	LF	200	\$ -
5	LED WALL LIGHT BY FX LUMINAIRE	\$ -	EA	34	\$ -
MISCELLANEOUS					
6	MISCELLANEOUS CONSTRUCTION	\$15,000.00	LS	1	\$ 15,000.00

GRAND TOTAL	\$ 15,000.00
--------------------	---------------------

ADDITIONAL ITEMS					
7	TRASH RECEPTACLE (PER SPECS IN BID DOCUMENT)	\$ -	EA	6	\$ -

GRAND TOTAL PLUS ADDITIONAL ITEMS	\$ 15,000.00
--	---------------------

* INCLUDES MOBILIZATION, BONDS, INSURANCE; EXCAVATION AND SAW CUT

** INCLUDING BASE COURSE, SAND, AND SOIL

Bid Price Certification

In compliance with Section 3 Scope of Project/Specifications, the undersigned offers and agrees that if this Bid is accepted by the City Council within sixty (60) days of the date of ITB Response Due Date and Bid opening, that the undersigned will furnish any or all of the deliverables upon which prices are quoted, at the price set opposite each, to the designated point(s) within the time specified.

Company Name: _____

Company Address: _____

Name and Title of Authorized Signer(s): _____

Print/Type Name(s)
and Title(s): _____

Contact Info -
Phone Number:

Contact Info -
E-mail Address:

CITY OF ALPHARETTA INVITATION TO BID (ITB)

ITB Number: 23-010

ITB Title: Pedestrian Safety Barrier at City Center

ITB Addendum Posting Date: June 8, 2023



ADDENDUM # 1

TO ALL BIDDERS:

1. The information included in this addendum is made part of the ITB noted above and part of any contract that may be awarded as a result of response to this ITB.
2. The purpose of this addendum is to supply additional information or documents; revised information or documents; or respond to Bidders' questions.
3. If a conflict between any previously provided information and the information contained in this addendum, the information contained in this addendum will prevail.
4. Bidders must acknowledge receipt of this addendum when submitting bid.
5. Remainder of this page intentionally blank. See addendum information beginning on the next page.

The invitation to bid documents are hereby modified in the following respects:

Questions received from Bidders and City's responses:

- Question 1. What are the liquidated damages for the project?
- Liquidated damages will apply per GDOT Standard Specifications for Construction of Transportation Systems, 2021, Section 108.08.
- Question 2. Is the grading Sub contractor required to have an Underground Utilities license?
- No.
- Question 3. What is the budget for this project?
- We do have a budget allocation for this project, however, as a matter of practice we do not disclose that figure during this stage of the procurement process. This avoids vendors simply submitting proposals based on the maximum budget or limiting their proposals based on that figure.
- Question 4. Does this project require permits? If so, who is responsible for permitting and the associated fees?
- This project does not require permits. The General Contractor is responsible for locating and making necessary coordination to secure all utilities.
- Question 5. Who is responsible for inspections and materials testing and the associated fees? If the General Contractor is responsible for the testing, please provide all the testing requirements for this project.
- The General Contractor is responsible for all inspections and materials testing and the associated fees. The contractor shall provide a full submittal to detail all materials that will be used such as the concrete specs for the foundations, the sidewalk concrete for patching, and replacement of existing turf.
- Question 6. How would the owner want to address soft soil conditions and rocks, if encountered? And who is responsible for the over-excavation?
- Soft soil and rock shall be confirmed by the Contractor's Geotechnical Testing Agency. The Agency shall recommend repair solutions. Repair solutions shall be discussed with the project owner (City of Alpharetta) to obtain necessary approvals. If the project owner approves the repair solution(s), the cost for remediation will be paid for by the project owner.
- Question 7. When is the anticipated start date?
- Upon executing the contract. Drafting the contract and execution may take 5-6 weeks from when we receive all bid documents.
- Question 8. Will weather days count against the project?
- Inclement and rainy weather would not count towards the 30-day project duration.
- Question 9. Does this project have a Force Majeure clause?

- a. Yes
- Question 10. Any restrictions during normal working hours (Mon-Fri from 7:00 AM to 5:00 PM) that we should be aware of?
- a. No.
- Question 11. Any events or special dates at the park that we should stop our work for?
- a. Not any event that we are aware of currently.
- Question 12. What are the requirements to safe-up the project site? Do you require screens for all chain-link fences? Any specific signage, and barricades requirements?
- a. The contractor shall be responsible for all safety measures such as fences, signage, barricades to secure the work zone. It is not necessary to put screens up.
- Question 13. What are the requirements for staging areas/ contractor's laydown area? Are there any designated parking areas for construction personnel? Any designated areas for dumpsters and equipment?
- a. Public parking decks on Park Plaza or at 92 Milton Avenue could be used by construction personnel. All construction equipment and materials shall be safely stored adjacent to the work zone. The contractor shall be responsible for restoring damaged areas to their original or better condition.
- Question 14. Are there any existing irrigation systems within the construction areas? If there are, how would you want us to address it? And who is responsible for the irrigation system repair?
- a. If encountered, the city project manager shall be notified to determine if it should be relocated out of conflict with proposed improvements or capped.
- Question 15. Do we have to use the services of a private underground utility locator for this project?
- a. The contractor shall be responsible for locating and securing all utilities.
- Question 16. Are there any restroom facilities on-site for the construction crew?
- a. There are restrooms at the Park Plaza Parking Deck.
- Question 17. Does this project have a subsurface investigation? If so, is the geotechnical report available?
- a. The infiltration testing was performed to evaluate infiltration properties of the subsurface soils beneath the turf installation footprint. The report is attached to this addendum.
- Question 18. Where is the location of the Construction Entrance and Concrete Wash Out?
- a. The project area can be reached through Highway 9, North Broad Street, or South Broad Street.
- Question 19. Does this project require a fuel station? If so, where is its designated location?
- a. No.

- Question 20. On sheet 04-0002, General Notes, Wall Section shows the footing is 30" wide, and located underneath the Adjacent Existing Sidewalk. The only feasible and reasonable way to accomplish this detail is to saw-cut the existing concrete sidewalk at the edge of the proposed concrete footing; then, patch the gap with new concrete sidewalk and expansion joints. Please advise.
- Yes, the existing sidewalk will require saw cutting to construct the footing and wall.
- Question 21. For the preparation of the proposed concrete footing, what is the extension of removing the synthetic turf and the existing solder brick paver? According to sheet 13-001, the proposed barrier walls are within the concrete sidewalk; however, sheet 04-0003 suggests the wall is 12" within the synthetic area.
- According to 04-003, the face of the proposed wall is at the edge of the existing synthetic turf. Removing the synthetic turf allows for construction of the wall and footing.
- Question 22. What's the brand/manufacturer of the existing synthetic turf?
- Sprinturf.
- Question 23. What is the size of the lighting foundation that is to be removed? How deep is the footing?
- Light foundations should be approximately 24" in diameter by 4' in depth.
- Question 24. What is the size of the existing gas line?
- The existing gas main was determined to be a 6" based on field evidence provided by the surveyor.
- Question 25. Will the Mock-Up Wall be used as part of the Proposed Wall, or separate? If separate, where is the location of the Mock-Up Wall, and will it also have footing?
- The main purpose of the dry-stack mock-up wall is just to make sure bricks and mortar sample match with other walls in the city center. The mock-up wall will not have foundation.
- Question 26. Will the middle safety barrier brick wall have LED lights as well? If so, where would the owner want to have the conduit run through?
- Yes, under the sidewalk.
- Question 27. Will LED lights be installed at all 4 sides of each wall?
- Yes.
- Question 28. Is there any activity on the site throughout the contract time involving the City's staff and machinery?
- There could be activities near the construction area. Only the project limit can be fenced out. To be specific, other parts adjacent to the project area such as the Town Green and sidewalk areas shall remain open to the public.

Mr. Kurt Kirby
City of Alpharetta
1790 Hembree Road
Alpharetta, Georgia 30009

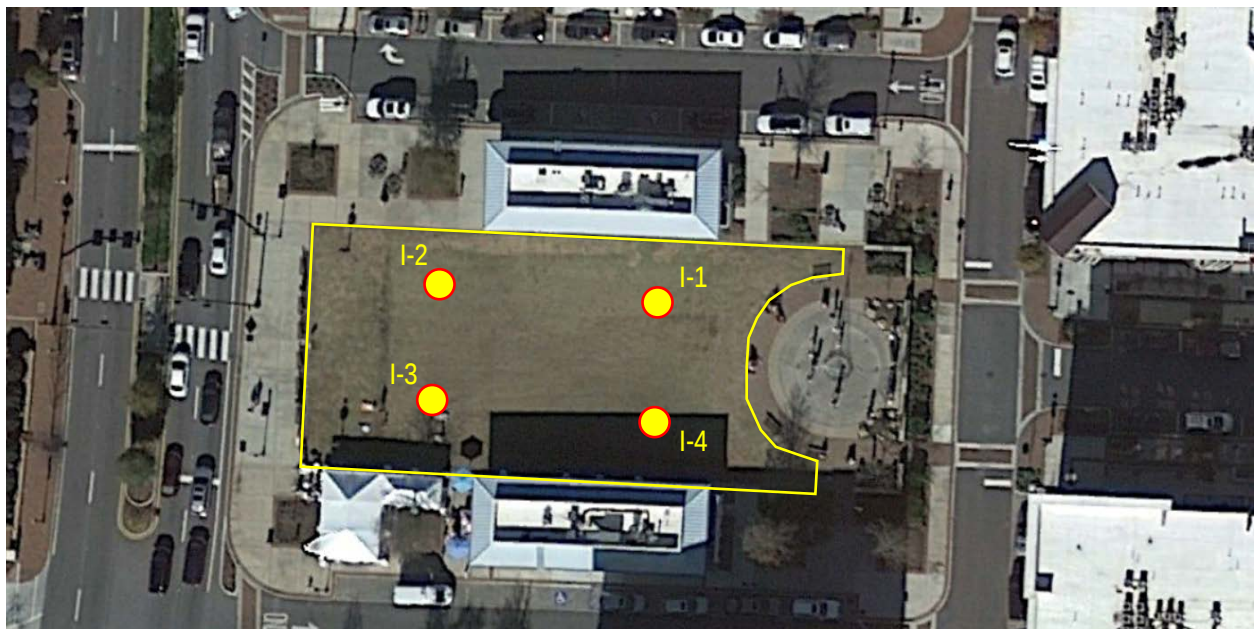
May 26, 2021

Report of Infiltration Testing
Alpharetta City Center Turf Installation
Alpharetta, Georgia
Project Number 210467.20

Dear Mr. Kirby:

Geo-Hydro Engineers, Inc. has completed the authorized infiltration testing for the above referenced project. The scope of services was outlined in our proposal number 26121.2 dated May 12, 2021.

We understand that the City of Alpharetta is planning to install artificial turf at an existing grass field at Alpharetta City Center. The project area has approximate plan dimensions of 75 feet by 150 feet. The annotated aerial photograph below shows the approximate limits of the turf installation. The contractor has proposed installing a turf system with a total depth of about 4 to 5 inches. The proposed system does not include an underdrain system and relies on surface runoff to infiltrate into the subsurface during rain events. You have requested infiltration testing to evaluate infiltration properties of the subsurface soils beneath the turf installation footprint. The annotated aerial photograph below shows the approximate locations of the four infiltration tests performed for the project.



TESTING PROCEDURES

The test holes were advanced to depths of about 1 to 4 feet at each test location using hand equipment producing a 4-inch diameter borehole. A layer of gravel was added to the bottom of the holes to protect the infiltration surface from scour during the tests. Water was then introduced to the hole and allowed to saturate the borehole for a minimum of four hours. Subsequently, the drop in water level was measured over time. Percolation testing was performed in accordance with the Modified Taft Engineering Center Method. The percolation rate was converted to a vertical infiltration rate by using the equation below.

$$\text{Infiltration Rate} = (\text{Percolation Rate})/(\text{Reduction Factor})$$

Where the Reduction Factor is given by:

$$Rf = (2d1 - \Delta d)/DIA + 1$$

With:

- d1 = initial water depth (in)
 Δd = average/final water level drop (in)
DIA = diameter of the percolation test area hole (in)

TEST RESULTS AND SUMMARY

The test results are presented in the following summary table.

Infiltration Test	Borehole Diameter (inches)	Test Depth (feet)	Infiltration Rate (inches/hour)
I-1	4	1.1	0.06
I-2	4	3.8	0.14
I-3	4	1.1	0.06
I-4	4	3.0	0.03

The infiltration test boreholes encountered fill materials classified as silty sand and sandy silt with varying amounts of rock fragments throughout the depths explored. Infiltration properties of fill materials are typically lower than undisturbed residual soils, which is reflected in the infiltration test results.

Based on the results of our exploration and testing, we do not expect that the subsurface soils within the horizon of the upper four feet will provide appreciable infiltration. We recommend that the artificial turf system be modified to include a drainage system which is connected to a stormwater management system.

During preparation of the artificial turf footprint, the soil subgrade should be thoroughly evaluated to identify areas of loose or debris-laden fill material. Any loose fill material should be excavated and replaced if it cannot be adequately densified in place. Debris-laden fill material should be removed from the installation footprint.

* * * * *

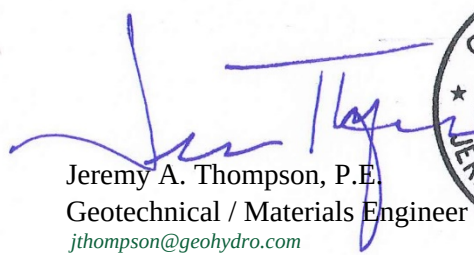
We appreciate the opportunity to serve as your geotechnical consultant for this project and are prepared to provide any additional services you may require. If you have any questions concerning this report or any of our services, please call us.

Sincerely,

GEO-HYDRO ENGINEERS, INC.


A. Marty Peninger, P.E.
Senior Geotechnical Engineer
mpeninger@geohydro.com




Jeremy A. Thompson, P.E.
Geotechnical / Materials Engineer
jthompson@geohydro.com



AMP/JAT/210467.20 - Alpharetta City Center Turf Installation - Infiltration Testing Report

CITY OF ALPHARETTA INVITATION TO BID (ITB)

ITB Number: 23-010

ITB Title: Pedestrian Safety Barrier at City Center

ITB Addendum Posting Date: June 15, 2023



ADDENDUM # 2

TO ALL BIDDERS:

1. The information included in this addendum is made part of the ITB noted above and part of any contract that may be awarded as a result of response to this ITB.
 2. The purpose of this addendum is to supply additional information or documents; revised information or documents; or respond to Bidders' questions.
 3. If a conflict between any previously provided information and the information contained in this addendum, the information contained in this addendum will prevail.
 4. Bidders must acknowledge receipt of this addendum when submitting bid.
 5. Remainder of this page intentionally blank. See addendum information beginning on the next page.
-

BEGIN ADDENDUM

The invitation to bid documents are hereby modified in the following respects:

1. The due date for all bids has been changed. **The revised due date/time is June 29, 2023, at 2:00 PM.**
2. Specifications-Instructions document, page 2, number 3, item A: The Bidder shall commence the Work with adequate force and equipment within **ten (10)** calendar days from receipt of Notice to Proceed and shall continuously pursue the work without interruption to completion and to achieve **Final Completion** of the Work no later than October 2, 2023. The NTP is anticipated to be issued August 7th.
3. Information and Contract-General Conditions document, page 3, item 4: The term of the Contract commences upon execution by both parties and shall terminate on October 2, 2023. The term of the Contract may be extended by the City, with the written consent of the Contractor, for such additional period of time as may be necessary or advantageous to the City.

END ADDENDUM

EXHIBIT B

BID DOCUMENTS FROM CONTRACTOR

City of Alpharetta

ITB 23-010 PEDESTRIAN SAFETY BARRIER AT CITY CENTER

Bid Bond



BID BOND

(Five Percent (5%) of Bid)

Bid Bond # N/A

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

Tri Scapes, Inc. as **CONTRACTOR**, and

Hartford Fire Insurance Company as **SURETY**, a corporation duly organized under the laws of the State of CT, are hereby held and firmly bound unto

CITY OF ALPHARETTA, GEORGIA
2 PARK PLAZA

ALPHARETTA, GA 30009 as **CITY** and hereafter called **OBLIGEE**, in the penal sum of

_____ Dollars (\$ _____), or Five Percent (5% %) of the bid amount, whichever is less, for the payment of which sum well and truly to be made, the said **CONTRACTOR** and the said **SURETY**, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns

Signed this 29th day of June, 2023.

The condition of the above obligation is such that whereas the **CONTRACTOR** has submitted to the **OBLIGEE** a certain bid attached hereto and hereby made a part hereof to enter into a contract in writing for the construction of

PEDESTRIAN SAFETY BARRIER AT CITY CENTER. The project scope includes, but is not limited to, construction of brick walls, removal of existing light poles and foundations, installation of LED lights on the brick walls, patching the synthetic turf, and related work. The location of the work is along Highway 9 just south of Academy Street / Milton Avenue, within the City of Alpharetta.

NOW, THEREFORE, if the **OBLIGEE** shall accept the bid of the **CONTRACTOR** and the **CONTRACTOR** shall enter into a Contract with the **OBLIGEE** in accordance with the terms of such bid and give such bonds or bond as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the **CONTRACTOR** to enter such Contract and give such bond or bonds, if the **CONTRACTOR** shall pay to the **OBLIGEE** the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the **OBLIGEE** may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

BID BOND

Page 2 of 2

The **SURETY**, for value received, hereby stipulates and agrees that the obligations of said **SURETY** and its bond shall be in no way impaired or affected by any extension of the time within which the **OBLIGEE** may accept such bids, and said **SURETY** does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the **CONTRACTOR** and the **SURETY** corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Tri Scapes, Inc.
CONTRACTOR

By: _____

Rebecca Martin, President/CFO

Tri Scapes, Inc.
SURETY

By: _____

Georgia Representative Christy Lackey, Attorney In Fact

(SEAL)

Surety Contact Information:Address: Hartford Fire Insurance CompanyPhone: 770-730-3397Fax: 866-695-7271Email: Michael.Duffy@thehartford.com

Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to conduct business in the State of Georgia.

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-11

One Hartford Plaza

Hartford, Connecticut 06155

Bond.Claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: POINTENORTH INSURANCE GROUP LLC

Agency Code: 20-262197

- | | |
|-------------------------------------|--|
| ☒ | Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut |
| ☒ | Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana |
| ☒ | Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut |
| ☐ | Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut |
| ☐ | Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana |
| ☐ | Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois |
| ☐ | Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana |
| ☐ | Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida |

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, up to the amount of Unlimited :

Marilyn Brown, Keith H. Dillon, Christy Lackey, John Langsfeld, Fred R. Mitchell, William H. Skeeles, Rita L. Smith, Carolyn F. Smith of ATLANTA, Georgia

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 23, 2016 the Companies have caused these presents to be signed by its Assistant Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



Shelby Wiggins

Shelby Wiggins, Assistant Secretary

Joelle L. LaPierre

Joelle L. LaPierre, Assistant Vice President

STATE OF FLORIDA

COUNTY OF SEMINOLE

ss. Lake Mary

On this 20th day of May, 2021, before me personally came Joelle LaPierre, to me known, who being by me duly sworn, did depose and say: that (s)he resides in Seminole County, State of Florida; that (s)he is the Assistant Vice President of the Companies, the corporations described in and which executed the above instrument; that (s)he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that (s)he signed his/her name thereto by like authority.



Jessica Ciccone

Jessica Ciccone
My Commission HH 122280
Expires June 20, 2025

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of 06/29/2023.

Signed and sealed in Lake Mary, Florida.



Keith D. Dozois

Keith D. Dozois, Assistant Vice President



BIDDER'S DISCLOSURES AND CERTIFICATIONS

PROCUREMENT NUMBER & TITLE: 23-010 PEDESTRIAN SAFETY BARRIER @ CITY CENTER

DISCLOSURE FORM AND CERTIFICATION OF NON-COLLUSION

Bidder must disclose any possible conflict of interest and/or any relationship that exists between any principal or employee of your corporation/firm/team/organization and with any City elected official and/or employee. Relationship may be financial, personal, or family or may be in the form of campaign contributions to elected officials. State whether Relationship DOES or DOES NOT exist. Failure to disclose or to submit this completed form may result in response being declared non-responsive and will not be considered further.

Check applicable box. Use additional forms if needed:	No known relationship exists ☒	Yes, Relationship does exist ☐	If this box checked, include the name and position of the City Official to whom a campaign contribution was made or official/employee relationship. Use a separate form for each official to whom a contribution has been made within the past two (2) years or for additional official/employee relationships.
City Elected Official and/or Employee Name and position			

Contribution Amount/Value (if any)	Contribution Date and Description
------------------------------------	-----------------------------------

List other Relationship if not contribution

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS

The Contractor certifies to the best of its knowledge and belief that neither it nor any of its principals:

1. are presently debarred, suspended, proposed for debarment, or declared ineligible from submitting bids or proposals by any federal, state or local entity, department or agency;
2. have within a three-year period preceding this bid/offer, been convicted or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performance of a public (Federal, state or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, tax evasion, or receiving stolen property;
3. are presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 2 of this certification;
4. have within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal, state or local public agency.

By signing this form, I certify that:

- As an officer of this firm, or per the attached letter of authorization, I am duly authorized to certify the information provided herein is accurate and true; and my firm shall comply with all State and Federal Equal Opportunity and Non-Discrimination requirements and conditions of employment.
- That the firm's response is made without prior understanding, agreement, or connection with any corporation, firm, team, organization, or person submitting a response for the same materials, supplies, equipment, opportunity, or services and is in all respects fair and without collusion or fraud. My firm understands and agrees that bid/proposal collusion is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards;
- Employees of this company or employees of any company supplying material or subcontracting to do work on this Contract will not engage in business ventures with employees of the CITY or Consulting Engineers nor shall they provide gifts, gratuities, favors, entertainment, loans or other items of value to employees of this Department, and
- That the provisions of the Official Code of Georgia Annotated, Sections 45-10-20 et seq. have not been violated and will not be violated in any respect. O.C.G.A. 45-10-20 through 45-10-28 provide that it is unlawful for a City elected official or employee to transact business with the City by which that person is employed for himself, on behalf of a business in which the employee or his/her spouse or dependents has a substantial interest, or on behalf of anyone as agent, broker, dealer, or representative.

Tri Scapes, Inc.

Company Name

Signature of Authorized Officer or Agent

06/29/2023

Date

Rebecca Martin, President

Printed Name & Title of Authorized Officer or Agent

1595 Peachtree Parkway, Suite 204-396, Cumming, GA 30041

Company Address

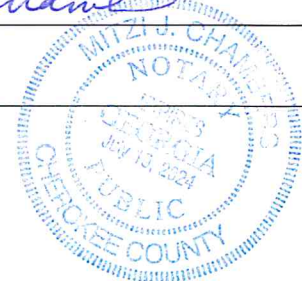
Subscribed and sworn before me on this the

29 day of June, 2023

Notary Public

07/19/2024

My Commission Expires
(Notary Stamp)





AFFIDAVIT VERIFYING CONTRACTOR PARTICIPATION IN FEDERAL WORK AUTHORIZATION PROGRAM (E-Verify)

The undersigned contractor ("Contractor") executes this Affidavit to comply with O.C.G.A. § 13-10-91 related to any contract to which Contractor is a party that is subject to O.C.G.A. § 13-10-91 and hereby verifies its compliance with O.C.G.A. § 13-10-91, attesting as follows:

- a) The Contractor has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program;
- b) The Contractor will continue to use the federal work authorization program throughout the contract period, including any renewal or extension thereof;
- c) The Contractor will notify the City of Alpharetta in the event the Contractor ceases to utilize the federal work authorization program during the contract period, including renewals or extensions thereof;
- d) The Contractor understands that ceasing to utilize the federal work authorization program constitutes a material breach of Contract;
- e) The Contractor will contract for the performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the Contractor with the information required by O.C.G.A. § 13-10-91(a), (b), and (c);
- f) The Contractor acknowledges and agrees that this Affidavit shall be incorporated into any contract(s) subject to the provisions of O.C.G.A. § 13-10-91 for the project listed below to which Contractor is a party after the date hereof without further action or consent by Contractor; and
- g) The Contractor acknowledges its responsibility to submit copies of any affidavits, drivers' licenses, and identification cards required pursuant to O.C.G.A. § 13-10-91 to the City of Alpharetta within five business days of receipt.

123689

Federal Work Authorization User Identification Number

Tri Scapes, Inc.

Name of Contractor

06/02/2008

Date of Authorization

PEDESTRIAN SAFETY BARRIER @ CITY CENTER

Name of Project

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed date 06/29/2023 in Cumming (city), GA (state).

Rebecca Martin
Signature of Authorized Officer or Agent

Rebecca Martin, President/CFO

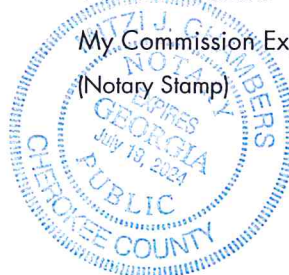
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE 29 DAY OF June, 2023.^{2,023.00}

Meggy Chambers
NOTARY PUBLIC

My Commission Expires: 07/19/2024



Request for Taxpayer Identification Number and Certification

Give Form to the
requester. Do not
send to the IRS.

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Tri Scapes, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC

☐ C Corporation

☒ S Corporation

☐ Partnership

☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

1595 Peachtree Parkway, Suite 204-396

6 City, state, and ZIP code

Cumming, GA 30041

7 List account number(s) here (optional)

Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

____ - ____ - ____

or

Employer identification number

5 8 - 2 0 7 7 6 1 5

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign
Here

Signature of
U.S. person ►

Date ►

06-29-2023

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
 - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
 - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
 - Form 1099-S (proceeds from real estate transactions)
 - Form 1099-K (merchant card and third party network transactions)
 - Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.



Bidder Qualification Statement

Tri Scapes, Inc. was founded to service the Georgia market in 1993 as an all-inclusive commercial contracting company who has successfully managed over \$220 million in commercial construction projects. Tri Scapes started and continues to maintain an office in Alpharetta, Georgia. We have been named in the 'Book of Lists' for Atlanta Business Chronicles Top 20 Commercial Landscape Companies every year since 2008. We were named Small Business of the Year through the Forsyth County Chamber of Commerce in 2011. We specialize in streetscape renovation that includes sidewalk improvements, sports field installation, multi-use trail systems, parks, maintenance, and utility services, and have provided these services for numerous municipalities, companies, and school systems throughout the state of Georgia. As a licensed General Contractor, Tri Scapes is capable of providing these services and managing any project with the professionalism that clients demand and expect.

Tri Scapes accomplishments can be attributed to our belief that successful business leaders build relationships first. Rebecca Martin is 51% owner of TSI and is a native of Forsyth County with over 30 years of industry experience. The company was built from the ground up over 29 years ago, and it has made a substantial contribution in helping customers keep Georgia beautiful.

Our in-house staff takes care of the daily needs of our crews, customers and projects. Our crew members are top notch, hardworking individuals who take pride in their work. Our management team consists of over 400 years of combined industry experience.

TSI's hardscape installation service covers everything from the curb to the building. Our skilled professionals work together to ensure client satisfaction with projects that include concrete sidewalks and curbs, storm sewer upgrades, brick, granite, and stone pavers, detail walls, fountains, gazebos, pedestrian pathways/multi-use trails and parks, asphalt paving, site furnishings, and pedestrian bridges. We have worked with some of Georgia's most prestigious hardscape projects including Lawrenceville Lawn and Mercedes Benz USA Headquarters.

Company Highlights:

- Name of Bidder: Tri Scapes, Inc.
- Main Office Address: 220 Curie Drive, Alpharetta, Georgia 30005
- Mailing Address: 1595 Peachtree Parkway, Suite 204-396, Cumming, Georgia 30041
- Phone: 770-752-4698 | Fax: 770-752-6792
- Contact for Contract Negotiations: Quinn Martin, Sr. VP|CEO
- Point of Contact - Project Manager: Ryan Hogan, Vice President
- Corporation organized in the State of Georgia
- When organized: October 26, 1993
- General Contractor License # GCCO003381
- Georgia DOT Qualified Contractor up to \$60,000,000.00
- Women's Business Enterprise (WBE)
- Annual Revenue: \$31,000,000.00

- Bonding Capacity: Aggregate \$40,000,000.00; Single Project \$20,000,000.00
- Certified Drug Free Workplace
- General character of work:
 - Landscape/Hardscape Installation
 - Irrigation Installation
 - Irrigation Pump Systems
 - Sports Field Installation
 - Streetscape Renovation/Enhancements
 - Storm Water System Improvements
 - Sidewalk/Pedestrian Improvements
 - Multi-Use Trails and Parks
 - Bio-Retention Cells
 - Large Scale Bulk Grinding
 - Cistern Construction
 - Green Roof Installation
- Line of Credit available: \$900,000.00

Principals of Corporation

Rebecca Martin, President|CFO

Rebecca Martin is President, CFO and Co-Founder of Tri Scapes, Inc. Rebecca is a lifelong resident of Forsyth County, Georgia and worked in the public job sector until delving into entrepreneurship in 1984. She has thirty plus years business ownership experience in several industries. Her duties include management of all office personnel, customer and vendor relations, overseeing the finance, and marketing departments. She also handles Contracts, bonds and insurance. Her experience, drive and day-to-day leadership are essential to the continued success of the company.

Quinn Martin, CEO|Secretary

Quinn has over 30 years of executive experience in the landscape industry. In 1984 he successfully started his own commercial and residential landscape company. Then in 1993 he Co-founded Tri Scapes Inc. He also has extensive experience managing his own plant nursey, both privately, and for Tri Scapes. With his leadership TSI has grown from a small business to one of the largest commercial landscape companies in Georgia. With his hands-on approach to leadership, his daily tasks include marketing for future business, providing detailed estimates for clients and managing daily operations. He assumes many positions to help his ability to successfully achieve customer satisfaction.

Project Team Qualifications

Ryan Hogan, Vice President | Construction Division

Ryan has extensive experience in both the horticulture and construction fields. He graduated from the University of Auburn in 1996 with a B.S. in Landscape Horticulture. Over his career he has experience working as a foreman, project superintendent, estimator and a project manager. Ryan joined the Tri Scapes team in 2008, since then he has experience managing maintenance, landscape construction, and Hardscape construction. To date Ryan has managed \$21 million in landscape installation /construction projects for construction division of Tri Scapes. He currently serves as the Vice President of construction, estimating new projects, directing work with field staff, meeting customer's onsite to discuss issues and concerns, manage payroll, materials ordering, and equipment movement with staff drivers. Ryan holds a Georgia General Contractors License and is a Certified Irrigation Contractor. He is also a Licensed Landscape Contractor in the state of North Carolina and is a Licensed Irrigation Contractor there as well.

Scott Conard, Sr. Project Manager

Scott is a seasoned veteran of the construction industry with over 25 years of experience in landscape, irrigation, and hardscape construction. His career has spanned the entire east coast, spending time with 2 of the largest, national, landscape construction firms in the United States. Scott is on his second stint with Tri Scapes, Inc. now as a senior project manager. Scott's in-depth horticulture knowledge is an asset to the field staff he manages, helping them make the right decisions in planting, and a comfort to customers as he can speak extensively to what he's seen over the many years. He has served as safety manager for many years, so a safe jobsite is a given when Scott is in charge. He led crews in the planting enhancements of Atlanta's interstate corridors leading up to the 1996 Olympics, so high pressure, dangerous work environments are not new to him. Over his career, Scott has managed over \$50 million in hardscape project work, successfully delivering a myriad of different "flat" work projects from roadways, streetscapes, retaining walls, paver parking lots, and sports fields. His no nonsense approach to the project gives customers the confidence he knows what he is doing, and reassurance he will deliver their vision.

Tyler Mathis, Project Manager

Tyler Mathis began working with Tri Scapes in 2009 while enrolled in college pursuing his degree at University of North Georgia. After graduation, he joined the company full time as a construction division project manager. During his tenure he has managed over \$14.5 million in construction projects, varying in scope from landscape and irrigation to streetscape and athletic field construction. Tyler possesses the cool temperament to handle stressful situations in the field as well as the determination to see all challenges through to the finish. He is well respected by our employees, project owners, architects, and engineers for his careful attention to detail and garnered valuable knowledge of the landscape and construction industry.

Ross Martin, Project Manager

Ross is an experienced foreman who specializes in sports field and landscape construction. He has led numerous crews on several Costco and Love's Travel Stops projects, and other high-profile projects in downtown Atlanta. He also has many hours of experience running various types of construction equipment. Ross is a hard worker who knows how to get the most out of his crews. He and his crew are referred to as the "A" team for their track record, as they are often assigned some of the toughest tasks with no complaints, and always exceeding expectations.

Luis Lopez, Superintendent

Luis has thirty-eight years of experience in landscape project management. He has been with Tri Scapes, Inc. for 25 years and successfully manages crews of five to ten men. Luis is our lead landscape installer and does what it takes to make the customer happy and complete projects in a timely manner.

Johnny Brister, Superintendent

Johnny joined the Tri Scapes team in May of 2015. He has over twenty years of experience in the construction industry. He specializes in streetscape, and sports field construction. He also has extensive experience in streetscape enhancements, and park construction as well as managing sports field installations. Johnny has successfully managed over \$100,000,000 in projects for various municipalities valued upwards to \$8,000,000. Johnny has the experience and capability to handle all aspects of any project including on-site supervision, scheduling, managing subcontractors, quality control and communication between owner, engineer, and architect. From time of award through the warranty period, Johnny is dedicated to providing a safe environment for our crews and completing the project on time and to the highest standards our clients expect.

Johnny's educational background and certifications include a Master of Business Administration from the University of West Georgia, Georgia Soil & Water Conservation Level 1A (Blue Card Certification), GA NPDES, Georgia DOT Worksite Erosion Control Supervisor (Green Card), and Competent Person-Excavation and Confined Spaces certified.

Joe Wilson, Superintendent

Joe has been in the construction industry performing field supervision and project management for over 10 years. He has extensive experience in roadway projects, including DOT level inspections. He has successfully managed two of Tri Scapes, Inc’s largest park projects over the last 18 months that included rest room buildings, stone retaining walls, asphalt paving, playground equipment, irrigation, landscape and sod installation. Joe has the experience and capability to handle all aspects of any project including on-site supervision, scheduling, managing subcontractors, quality control and communication between owner, engineer, and architect. From time of award through the warranty period, Joe is dedicated to providing a safe environment for our crews and completing the project on time and to the highest standards our clients expect. Joe’s educational background and certifications include studying finance and information systems at the University of West Georgia, Georgia Soil & Water Conservation Level 1A (Blue Card Certification), GA NPDES, OSHA 30hr Card, CPR trained and is a DOT Certified flagger.

Roberto Munoz, Foreman

Roberto Munoz has been employed by Tri Scapes Inc. for the past 16 years. He has a total of 26 years of construction and landscape experience. In that time, Roberto has completed over 50 sports field projects, and managed over \$15 million in landscape projects. He understands the intricate aspects of field building and has a well-respected reputation with our previous Sports Field clients. Roberto is a skilled laser tech operator and can run many types of construction equipment.

References:

Project Name:	<u>Flowery Branch Farmers Market Streetscapes & Pocket Park</u>
Location:	5505 Railroad Ave., Flowery Branch, GA 30542
Owner Contact:	Tonya Parrish, City Manager City of Flowery Branch 5410 Pine St., Flowery Branch, GA 30542 Phone: 770-967-6371 Email: tonya@flowerybranchga.org
Contract Amount:	\$4,149,554.00
Completion Date:	April 2024
Scope of Work:	Demolition, grading, asphalt paving, installation of concrete sidewalks, concrete steps & ramps, curb & gutter, storm drainage improvements including an underground detention system, pavilion, fountain, bollards, bike racks, picnic tables, trash receptacles, benches, seat walls, underground tree grates, sidewalk and vehicular pavers with concrete bands, pedestrian lighting, and landscaping.
Project Name:	<u>George Pierce Park Improvements</u>
Location:	55 Buford Highway NE, Suwanee, Georgia 30024
Owner Contact:	Glenn Boorman, Deputy Division Director Gwinnett County Parks & Recreation 75 Langley Drive, Lawrenceville, Georgia 30046 Phone: 770-822-8864 Email: Glenn.Boorman@gwinnettcounty.com
Contract Amount:	\$2,554,084.00
Completion Date:	April 2022
Scope of Work:	Installation of new restroom building, HVAC, plumbing, electric, construction of new plaza adjacent to existing pavilion, improvements to existing pavilion, installation of new playground equipment including surfacing, site furnishings, concrete trails including retaining walls, site walls, fencing, boardwalks, pedestrian bridge, storm drainage, sanitary sewer, concrete sidewalks, concrete stairs, asphalt paved parking lot, striping, signage, kiosks, and landscaping

Project Name: **Morgan Falls Road Improvements**
Location: From Morgan Falls Apartments to Overlook Park, Sandy Springs, Georgia
Owner Contact: Ashley Folmar, Project Engineer | City of Sandy Springs
1 Galambos Way, Sandy Springs, Georgia 30350
Phone: 770-206-2026 | Email: afolmar@sandyspringsga.gov
Contract Amount: \$738,114.00
Completion Date: February 2019
Scope of Work: Project includes grading, traffic control, erosion control, installation of modular block retaining wall, monument wall, storm drainage pipe improvements, concrete ditch paving, concrete pavers, ornamental fence, bio-retention rain garden, signage, site furnishings, mulch, sod, trees and shrubs.

Project Name: **Town Green Enhancements**
Location: 3775 Medlock Bridge Rd., Peachtree Corners, GA 30092
Owner Contact: Greg Ramsey, PE | The City of Peachtree Corners
310 Technology Parkway, Peachtree Corners, GA 30092
Phone: 678-395-7021 | Email: gramsey@peachtreecornersga.gov
Contract Amount: \$584,427.00
Completion Date: August 2022
Scope of Work: Grading, construction of 4" concrete sidewalk, ADA ramps, concrete steps with handrail, underdrain system, granite rubble seat wall, decorative fence, pedestrian lighting, concrete plaza, mondo grass, sod, and irrigation system.

Awarded Projects Not Yet Started:

Brookhaven Park Improvements – City of Brookhaven
Susan Hiott, City Clerk | 770-3589-9779 | susan.hiott@brookhavenga.gov

PTC Dog Park – City of Peachtree Corners
Seth Yurman, Asst. City Manager | 470-395-7022 | syurman@peachtreecornersga.gov

Rogers Bridge Park Trailhead Project – City of Duluth
Margie Shames Pozin, Director Community Development & Engineering
678-957-7284 | mpozin@duluthga.net

Timeline: 30 days per the bid documents

Wrap-Up: Tri Scapes, Inc. has almost 30 years of experience completing this type of project with its scope size. We understand the need to complete it on time and to the City of Alpharetta's satisfaction.



TRI SCAPES INC

Unique Entity ID J8Z5NKFHCCN2	CAGE / NCAGE 6NU00	Purpose of Registration All Awards
Registration Status Active Registration	Expiration Date Mar 29, 2024	
Physical Address 380 Mullinax RD Alpharetta, Georgia 30004-5220 United States	Mailing Address 1595 Peachtree Parkway Suite 204-396 Cumming, Georgia 30005 United States	

Business Information

Doing Business as (blank)	Division Name Tri Scapes Inc	Division Number (blank)
Congressional District Georgia 06	State / Country of Incorporation Georgia / United States	URL (blank)

Registration Dates

Activation Date Apr 3, 2023	Submission Date Mar 30, 2023	Initial Registration Date Feb 20, 2012
---------------------------------------	--	--

Entity Dates

Entity Start Date Oct 26, 1993	Fiscal Year End Close Date Dec 31
--	---

Immediate Owner

CAGE (blank)	Legal Business Name (blank)
------------------------	---------------------------------------

Highest Level Owner

CAGE (blank)	Legal Business Name (blank)
------------------------	---------------------------------------

Executive Compensation

Registrants in the System for Award Management (SAM) respond to the Executive Compensation questions in accordance with Section 6202 of P.L. 110-252, amending the Federal Funding Accountability and Transparency Act (P.L. 109-282). This information is not displayed in SAM. It is sent to USAspending.gov for display in association with an eligible award. Maintaining an active registration in SAM demonstrates the registrant responded to the questions.

Proceedings Questions

Registrants in the System for Award Management (SAM.gov) respond to proceedings questions in accordance with FAR 52.209-7, FAR 52.209-9, or 2. C.F.R. 200 Appendix XII. Their responses are displayed in the responsibility/qualification section of SAM.gov. Maintaining an active registration in SAM.gov demonstrates the registrant responded to the proceedings questions.

Exclusion Summary

Active Exclusions Records?

No

SAM Search Authorization

I authorize my entity's non-sensitive information to be displayed in SAM public search results:

Yes

Entity Types

Business Types

Entity Structure Corporate Entity (Not Tax Exempt)	Entity Type Business or Organization	Organization Factors Subchapter S Corporation
Profit Structure For Profit Organization		

Socio-Economic Types

Self Certified Small Disadvantaged Business
Women-Owned Business

Check the registrant's Reps & Certs, if present, under FAR 52.212-3 or FAR 52.219-1 to determine if the entity is an SBA-certified HUBZone small business concern. Additional small business information may be found in the SBA's Dynamic Small Business Search if the entity completed the SBA supplemental pages during registration.

Financial Information

Accepts Credit Card Payments No	Debt Subject To Offset No
EFT Indicator 0000	CAGE Code 6NU00

Points of Contact

Electronic Business

 MITZI CHAMBERS, ASSISTANT SECRETARY	1595 Peachtree Parkway Suite 204-396 Cumming, Georgia 30041 United States
MITZI CHAMBERS	1595 Peachtree Parkway Suite 204-396 Cumming, Georgia 30041 United States

Government Business

 REBECCA MARTIN	1595 Peachtree Parkway Suite 204-396 Cumming, Georgia 30041 United States
REBECCA MARTIN	1595 Peachtree Parkway Suite 204-396 Cumming, Georgia 30041 United States

Service Classifications

NAICS Codes

Primary	NAICS Codes	NAICS Title
Yes	238990	All Other Specialty Trade Contractors
	236220	Commercial And Institutional Building Construction
	238910	Site Preparation Contractors
	561730	Landscaping Services

Disaster Response

Yes, this entity appears in the disaster response registry.
No, this entity does not require bonding to bid on contracts.

Bonding Levels	Dollars
	(blank)

States	Counties	Metropolitan Statistical Areas
Alabama Florida Georgia	(blank)	(blank)

City of Alpharetta
ITB 23-010, Pedestrian Safety Barrier at City Center
Bid Form

Tri Scapes, Inc.

Instructions for Bid Form Completion:

1. This form MUST be used to submit bid.
2. Do not include a copy of this bid form in your technical bid information.
3. Complete all fields. See end of form as well for bid authorization and contact info.
4. Verify all amounts entered. This form will be used for bid price award.
5. During bid opening, only bid grand total will be called.
6. Enter Unit Price only. Form will calculate the Bid Price by multiplying Quantity by Unit Price entered.

Item #	Item Description	Unit Price	Unit	QTY	Total
WALL					
1	CONSTRUCTION OF THE BRICK WALL*	\$ 1,109.69	LF	99	\$ 109,859.31
LANDSCAPE					
2	SYNTHETIC TURF PATCHING**	\$ 54.25	SF	250	\$ 13,562.50
LIGHTING					
3	REMOVAL OF EXISTING LIGHT POLE AND FOUNDATION AND CAP THE GAS LINES	\$ 4,125.00	EA	2	\$ 8,250.00
4	CONDUIT, 2 IN	\$ 27.90	LF	200	\$ 5,580.00
5	LED WALL LIGHT BY FX LUMINAIRE	\$ 542.50	EA	34	\$ 18,445.00
MISCELLANEOUS					
6	MISCELLANEOUS CONSTRUCTION	\$15,000.00	LS	1	\$ 15,000.00

GRAND TOTAL	\$ 170,696.81
--------------------	----------------------

ADDITIONAL ITEMS					
7	TRASH RECEPTACLE (PER SPECS IN BID DOCUMENT)	\$ 5,981.25	EA	6	\$ 35,887.50

GRAND TOTAL PLUS ADDITIONAL ITEMS	\$ 206,584.31
--	----------------------

* INCLUDES MOBILIZATION, BONDS, INSURANCE; EXCAVATION AND SAW CUT

** INCLUDING BASE COURSE, SAND, AND SOIL

Bid Price Certification

In compliance with Section 3 Scope of Project/Specifications, the undersigned offers and agrees that if this Bid is accepted by the City Council within sixty (60) days of the date of ITB Response Due Date and Bid opening, that the undersigned will furnish any or all of the deliverables upon which prices are quoted, at the price set opposite each, to the designated point(s) within the time specified.

Company Name: **Tri Scapes, Inc.**

Company Address: **1595 Peachtree Parkway, Suite 204-396, Cumming, GA 30041**

Name and Title of Authorized Signer(s): **Rebecca Martin, President/CFO**

Print/Type Name(s)
and Title(s): **Rebecca Martin, President/CFO**

Contact Info -
Phone Number: **770-752-4698**

Contact Info -
E-mail Address: rmartin@triscapes.com

EXHIBIT C

SCOPE OF WORK

As provided in Exhibit A and Exhibit B, and as follows: The project scope includes, but is not limited to, construction of brick walls, removal of existing light poles and foundations, installation of LED lights on the brick walls, patching the synthetic turf, and related work. The location of the work is along Highway 9 just south of Academy Street / Milton Avenue, within the City of Alpharetta.

EXHIBIT D

ADDITIONAL PAYMENT/RETAINAGE TERMS

- A. **Defined Terms.** Terms used in this Agreement shall have their ordinary meaning, unless otherwise defined below or elsewhere in the Contract Documents.
- (i) “Substantial Completion” means when the Work or designated portion thereof is complete in accordance with the Contract Documents so that any remaining Work includes only (1) Minor Items that can be completed or corrected within the following thirty (30) calendar days, (2) Permitted Incomplete Work that will be completed by the date agreed upon by the Parties, and (3) any Warranty Work. Substantial Completion shall require complete operation of all applicable building systems including, but not limited to, mechanical, electrical, plumbing, fire protection, fire alarm, telecom, data, security, elevators, life safety, and accessibility (if any).
 - (ii) “Minor Item” means a portion or element of the Work that can be totally complete within thirty (30) calendar days.
 - (iii) “Permitted Incomplete Work” means Work that is incomplete through no fault of the Contractor, as determined by the City in its sole discretion.
 - (iv) “Final Completion” means when the Work has been completed in accordance with terms and conditions of the Contract Documents.
- B. **Payment for Work Completed and Costs Incurred.** City agrees to pay the Contractor for the Work performed and costs incurred by Contractor upon certification by the Contract Administrator and the City that the Work was actually performed and costs actually incurred in accordance with this Agreement. Payment shall be based on the value of the Work completed, as provided in the Contract Documents, plus the value of materials and equipment suitably stored, insured, and protected at the construction site, and, only if approved in writing by the City (which approval shall be given at the sole discretion of the City), such materials and equipment suitably stored, insured, and protected off site at a location approved by the City in writing, less retainage (as described below). Compensation for Work performed and reimbursement for costs incurred shall be paid to the Contractor upon receipt and approval by the City of invoices setting forth in detail the Work performed and costs incurred, along with all supporting documents required by the Contract Documents or requested by the City to process the invoice. Invoices shall be submitted on a monthly basis, and such invoices shall reflect costs incurred versus costs budgeted. Each invoice shall be accompanied by an Interim Waiver and Release upon Payment (or a Waiver and Release upon final payment in the case of the invoice for final payment) procured by the Contractor from all subcontractors in accordance with O.C.G.A. § 44-14-366. The final invoice shall also be accompanied by the Final Affidavit shown in **Exhibit A** of this Agreement.

The City shall pay the Contractor within thirty (30) calendar days after approval of the invoice by City staff, less any retainage as described in Section D below. No payments will be made for unauthorized work. Payment will be sent to the designated address by U. S. Mail only; payment will not be hand-delivered, though the Contractor may arrange to pick up payments directly from the City or may make written requests for the City to deliver payments to the Contractor by Federal Express delivery at the Contractor's expense.

- C. Evaluation of Payment Requests. The Contract Administrator will evaluate the Contractor's applications for payment and will either issue to the City a Certificate for Payment (with a copy of the Contractor's application for payment) for such amount as the Contract Administrator determines is properly due, or notify the Contractor and City in writing of the Contract Administrator's reasons for withholding certification in whole or in part. The Contract Administrator may reject Work that does not conform to the Contract Documents and may withhold a Certificate of Payment in whole or in part, to the extent reasonably necessary to protect the City. When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

Even following a Certificate of Payment, the City shall have the right to refuse payment of any invoice or part thereof that is not properly supported, or where requests for payment for Work or costs are in excess of the actual Work performed or costs incurred, or where the Work product provided is unacceptable or not in conformity with the Contract Documents, as determined by the City in its sole discretion. The City shall pay each such invoice or portion thereof as approved, provided that neither the approval or payment of any such invoice, nor partial or entire use or occupancy of the Project by the City, shall be considered to be evidence of performance by the Contractor to the point indicated by such invoice, or of receipt or acceptance by the City of Work covered by such invoice, where such work is not in accordance with the Contract Documents.

- D. Final Payment and Retainage. The City and Contractor shall comply with the provisions of O.C.G.A. § 13-10-80. The Contractor through each invoice may request payment of no more than ninety-five percent (95%) of that portion of the Work completed during the term covered by such invoice. Payment for the remaining five percent (5%) of Work completed and covered by such invoices shall be retained by the City until Substantial Completion. At the discretion of the City and with the written approval of the Contractor, the retainage of each subcontractor may be released separately as the subcontractor completes his or her work.

At Substantial Completion of the Work and as the Contract Administrator determines the Work to be reasonably satisfactory, the City shall, within thirty (30) days after the invoice and other appropriate documentation as may be required by the Contract Documents are provided to the City, pay the retainage to the Contractor. If at that time there are any remaining incomplete Minor Items or Permitted Incomplete Work, an amount equal to 200 percent (200%) of the value of each Minor Item or Permitted Incomplete Work, as determined by the Contract Administrator in its sole discretion, shall be withheld until such item, items or work are completed. The reduced retainage shall be shared by the Contractor and subcontractors as their interests may appear.

The Contractor shall, within ten (10) days from its receipt of retainage from the City, pass through payments to subcontractors and shall reduce each subcontractor's retainage in the same manner as the Contractor's retainage is reduced by the City, provided that the work of the subcontractor is proceeding satisfactorily and the subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his or her work including any warranty work as the Contractor in his or her reasonable discretion may require, including, but not limited to, a payment and performance bond.

The subcontractor shall, within ten (10) days from the subcontractor's receipt of retainage from the Contractor, pass through payments to lower tier subcontractors and shall reduce each lower tier subcontractor's retainage in the same manner as the subcontractor's retainage is reduced by the Contractor, provided that the work of the lower tier subcontractor is proceeding satisfactorily and the lower tier subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his or her work including any warranty work as the subcontractor in his or her reasonable discretion may require, including, but not limited to, a payment and performance bond.

Final payment of any retained amounts to the Contractor shall be made after certification by the Contract Administrator that the Work has been satisfactorily completed and is accepted in accordance with the Agreement and Contract Documents.

Neither final payment nor any remaining retainage shall become due until the Contractor submits to the Contract Administrator:

- (1) an affidavit (as exemplified in **Exhibit A** of this agreement) that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the City or City property might be responsible or encumbered (less amounts withheld by City) have been paid or otherwise satisfied; and
- (2) a certificate evidencing that insurance, required by the Contract Documents to remain in force after final payment, is currently in effect and will not be canceled or allowed to expire until at least thirty (30) calendar days prior written notice has been given to the City; and
- (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents; and
- (4) consent of surety, if any, to final payment; and
- (5) a release or waiver of liens, claims, security interests, and encumbrances by all subcontractors and material suppliers; and
- (6) if required by the City, other data establishing payment or satisfaction of

obligations, such as receipts, to the extent and in such form as may be designated by the City. If a subcontractor or material supplier refuses to furnish a release or waiver as required by the City, the Contractor may furnish a bond satisfactory to the City to indemnify the City against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the City all money that the City may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

Acceptance of final payment by the Contractor, a subcontractor or material supplier shall constitute a waiver of claims by that payee, except those claims previously made in writing and identified by that payee as unsettled at the time of final application for payment.

City of Alpharetta
ITB 23-010, Pedestrian Safety Barrier at City Center
Bid Form

Tri Scapes, Inc.

Instructions for Bid Form Completion:

1. This form MUST be used to submit bid.
2. Do not include a copy of this bid form in your technical bid information.
3. Complete all fields. See end of form as well for bid authorization and contact info.
4. Verify all amounts entered. This form will be used for bid price award.
5. During bid opening, only bid grand total will be called.
6. Enter Unit Price only. Form will calculate the Bid Price by multiplying Quantity by Unit Price entered.

Item #	Item Description	Unit Price	Unit	QTY	Total
WALL					
1	CONSTRUCTION OF THE BRICK WALL*	\$ 1,109.69	LF	99	\$ 109,859.31
LANDSCAPE					
2	SYNTHETIC TURF PATCHING**	\$ 54.25	SF	250	\$ 13,562.50
LIGHTING					
3	REMOVAL OF EXISTING LIGHT POLE AND FOUNDATION AND CAP THE GAS LINES	\$ 4,125.00	EA	2	\$ 8,250.00
4	CONDUIT, 2 IN	\$ 27.90	LF	200	\$ 5,580.00
5	LED WALL LIGHT BY FX LUMINAIRE	\$ 542.50	EA	34	\$ 18,445.00
MISCELLANEOUS					
6	MISCELLANEOUS CONSTRUCTION	\$15,000.00	LS	1	\$ 15,000.00

GRAND TOTAL	\$ 170,696.81
--------------------	----------------------

ADDITIONAL ITEMS					
7	TRASH RECEPTACLE (PER SPECS IN BID DOCUMENT)	\$ 5,981.25	EA	6	\$ 35,887.50

GRAND TOTAL PLUS ADDITIONAL ITEMS	\$ 206,584.31
--	----------------------

* INCLUDES MOBILIZATION, BONDS, INSURANCE; EXCAVATION AND SAW CUT

** INCLUDING BASE COURSE, SAND, AND SOIL

Bid Price Certification

In compliance with Section 3 Scope of Project/Specifications, the undersigned offers and agrees that if this Bid is accepted by the City Council within sixty (60) days of the date of ITB Response Due Date and Bid opening, that the undersigned will furnish any or all of the deliverables upon which prices are quoted, at the price set opposite each, to the designated point(s) within the time specified.

Company Name: Tri Scapes, Inc.

Company Address: 1595 Peachtree Parkway, Suite 204-396, Cumming, GA 30041

Name and Title of Authorized Signer(s): Rebecca Martin, President|CFO

Print/Type Name(s)
and Title(s): Rebecca Martin, President|CFO

Contact Info -
Phone Number: 770-752-4698

Contact Info -
E-mail Address: rmartin@triscapes.com

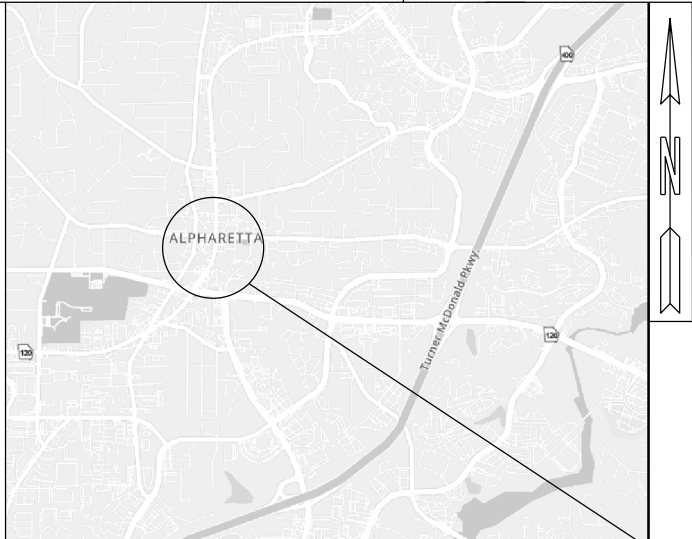
CITY OF ALPHARETTA

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED

PEDESTRIAN SAFETY IMPROVEMENTS

WALL DESIGN ON HIGHWAY 9



LOCATION SKETCH NTS

PROJECT LOCATION

DESIGNED IN ENGLISH UNITS

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

END PROJECT
STA. 11+75.00

BEGIN PROJECT
STA. 10+50.00

12+00

11+00

10+00

N. BROAD ST

SR 9/ S. MAIN STREET

EXIST R/W

S. BROAD ST

36" HT. WALL

36" HT. WALL

36" HT. WALL



Fahim Attar

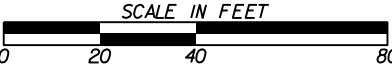
PLANS PREPARED BY:



moﬀatt & nichol

UNDER THE SUPERVISION OF: FAHIM ATTAR, PE

PLANS COMPLETED	- -
REVISIONS	



THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE CITY OF ALPHARETTA IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO OBTAIN ALL BORROW AND WASTE PITS AT NO ADDITIONAL COST TO THE CITY.
2. NOI WILL NOT BE REQUIRED FOR THIS PROJECT.
3. ALL CONSTRUCTION VEHICLES SHALL PARK IN AREAS OUT OF PUBLIC ROADWAY RIGHT-OF-WAY.
4. CONTRACTOR IS CAUTIONED ABOUT THE PRESENCE OF UNDERGROUND UTILITIES AT OR NEAR THE PROPOSED IMPROVEMENTS THROUGHOUT THIS PROJECT. CALL BEFORE YOU DIG: GEORGIA811.
5. ALL EXISTING UTILITIES AND STRUCTURES SHALL BE MAINTAINED, UNLESS OTHERWISE NOTED.
6. ALL FILL AREAS MUST BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE CONSTRUCTION INSPECTOR FOR ALL FILL AREAS WITHIN THE RIGHT-OF-WAY.

PROJECT NOTES

DEMOLITION NOTES:

1. DEMOLITION WORK SHALL NOT BEGIN UNTIL PHASE I EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVED BY CITY INSPECTOR.
2. SAWCUT CONCRETE AT INSIDE EDGE OF GREEN SPACE TO PROVIDE SMOOTH EDGE FOR WALL INSTALLATION.
3. EXISTING BENCHES TO BE REMOVED PRIOR TO THE WALL INSTALLATION.
4. THE CONTRACTOR SHOULD INFORM THE CITY CONSTRUCTION MANAGER AT 678-297-6227 WHEN LIGHT POLES AND BENCHES ARE REMOVED AND DELIVER THEM TO PUBLIC WORKS DEPARTMENT AT 1790 HEMBREE ROAD, ALPHARETTA, GA 30009.
5. CONTRACTOR IS RESPONSIBLE FOR PATCHING THE SYNTHETIC TURF WHERE DAMAGED PER DETAIL ON SHEET 04-0003.
6. CONTRACTOR IS RESPONSIBLE FOR REMOVING THE LIGHT POLE FOUNDATION SPECIFIED ON THE CONSTRUCTION PLANS AND PATCHING THE SYNTHETIC TURF PER DETAIL ON SHEET 04-0003.

GRADING NOTES:

1. CONTRACTOR MUST ATTEND CITY OF ALPHARETTA PRE-CONSTRUCTION CLASS PRIOR TO SITE INITIATION.
2. THE PROJECT WILL HAVE NO IMPACT ON THE OVERALL STORM WATER RUN OFF FOR THE PROJECT BASIN.
3. THIS PROJECT DOES NOT DISCHARGE WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT.
4. CRITICAL AREAS: NONE
5. APPROVED PLANS MUST BE ON SITE AT ALL TIMES.

SITE NOTES

1. THERE ARE NO KNOWN EXISTING WELLS OR SEPTIC SYSTEMS WITHIN THE PROJECT LIMITS. NO NEW WELLS OR SEPTIC SYSTEMS ARE PROPOSED.
2. THE BOUNDARY AND TOPOGRAPHIC INFORMATION CONTAINED IN THESE PLANS WAS TAKEN FROM A BOUNDARY & TOPOGRAPHIC SURVEY BY PLATINUM GEOMATICS, DATED 02-27-2023.
3. THE PROJECT LIMITS DO NOT CONTAIN STATE WATERS AND/OR WETLANDS. NO PORTION OF THIS PROJECT IS WITHIN 200 LF OF STATE WATERS.

CITY OF ALPHARETTA - TRAFFIC NOTES

1. ALL UTILITY LOCATES AND RELOCATIONS, AND/OR DAMAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MUST CONTACT CITY OF ALPHARETTA LOCATE PERSONNEL DIRECTLY FOR TRAFFIC SIGNAL UTILITY LOCATES. PHONE 678-297-6200.
2. ALL REQUIRED TRAFFIC SIGNAGE MUST MEET MUTCD STANDARDS.

UTILITY NOTES:

1. THE CITY WILL CONTRACT DIRECTLY WITH THE AFFECTED UTILITY OWNERS FOR PURPOSES OF RELOCATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THEIR CONSTRUCTION EFFORTS WITH THE RELOCATION ACTIVITIES.



CITY OF ALPHARETTA - COMMUNITY DEVELOPMENT NOTES

1. CURRENT SITE ZONING: PUBLIC RIGHT-OF-WAY
2. PROPOSED USE: PUBLIC SAFETY IMPROVEMENTS
3. PARKING REQUIRED: NOT APPLICABLE
4. HANDICAP SPACES REQUIRED: NOT APPLICABLE
5. OFF-STREET PARKING SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
6. ALL REVISIONS TO THESE PLANS MUST BE SUBMITTED TO THE CITY OF ALPHARETTA COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO CONTINUING CONSTRUCTION.
7. ON-SITE BURIAL IS NOT ALLOWED.
8. IRRIGATION NOTES:

a. IRRIGATION SYSTEMS ARE NOT ALLOWED WITHIN THE PUBLIC RIGHT OF WAY.

b. IRRIGATION SPRAY ONTO PUBLIC ROADWAYS IS NOT ALLOWED.

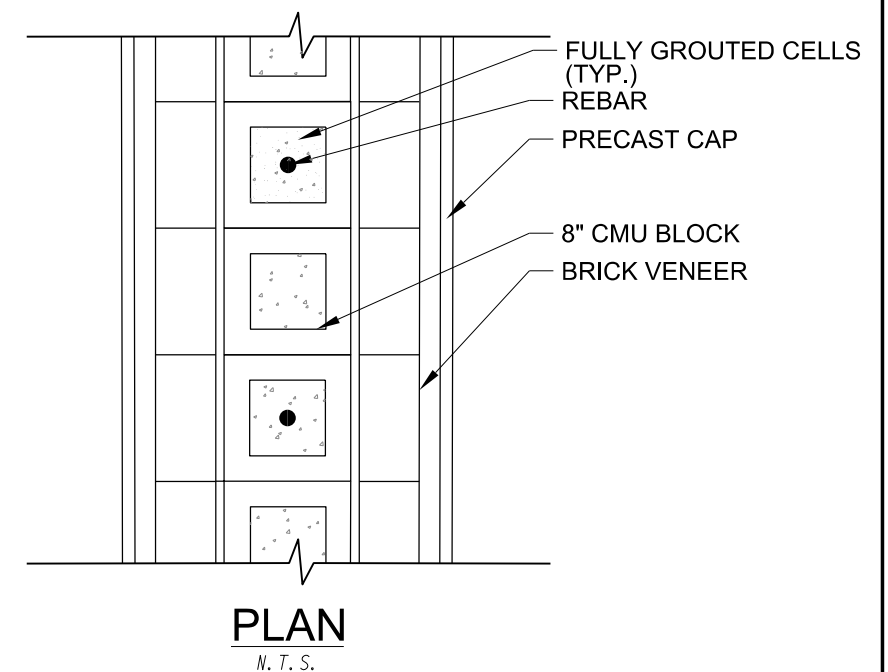
c. IRRIGATION SYSTEMS MUST BE SHUT OFF OR OPERATED MANUALLY DURING WINTER MONTHS TO PREVENT UNNECESSARY ICE ON ROADS.

GENERAL NOTES

1. EXISTING UTILITIES, PAVEMENT STRUCTURES, AND OTHER FEATURES DEPICTED ON THESE DRAWINGS ARE SHOWN IN APPROXIMATE LOCATION ONLY. THE CONTRACTOR SHALL CALL A LOCAL UTILITY LOCATION SERVICE AND HAVE ALL UTILITIES IN THE WORK AREA LOCATED BEFORE STARTING WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IN THE FIELD, THE EXACT LOCATION OF THESE AND ANY OTHER EXISTING FEATURES IN OR ADJACENT TO THE PROJECT LIMITS.
2. THERE ARE NO KNOWN CEMETERIES OR AREAS OF HISTORICAL SIGNIFICANCE ON SITE.
3. IF THE CONTRACTOR, IN THE COURSE OF THE WORK, FINDS ANY DISCREPANCIES BETWEEN THE PLANS AND THE PHYSICAL CONDITIONS OF THE LOCALITY, OR ANY ERRORS OR OMISSIONS IN THE PLANS OR IN THE LAYOUT AS GIVEN BY THE ENGINEER, IT SHALL BE HIS DUTY TO IMMEDIATELY INFORM THE CITY AND ENGINEER IN WRITING. THE ENGINEER WILL PROMPTLY VERIFY CONTRACTOR’S RISK.
4. THE CONTRACTOR SHALL PROVIDE MATERIAL TESTING UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL MEET ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, LAWS, REGULATIONS, AND REQUIREMENTS.

CITY OF ALPHARETTA - SITE ENGINEERING NOTES

1. FAILURE OF THE CONTRACTOR TO PERFORM THE PRESCRIBED EROSION CONTROL PRACTICES SHALL RESULT IN THE IMMEDIATE ISSUANCE OF A STOP-WORK ORDER FOR THE PROJECT SITE, PURSUANT TO SECTION 3.1.1.F.2.d. OF THE CITY UNIFIED DEVELOPMENT CODE.
2. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE PROJECT LIMITS DO NOT CONTAIN STATE WATERS AND/OR WETLANDS.
4. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
5. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
6. ANY DISTURBED AREA LEFT EXPOSED FOR 14 DAYS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH.
7. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO ROADWAY OR INTO STORM DRAIN SYSTEM MUST BE REMOVED IMMEDIATELY BY SWEEPING. EXCESSIVE OFFSITE TRACKING MAY WARRANT THE INSTALLATION OF A CONSTRUCTION EXIT AT THE DISCRETION OF THE CITY OF ALPHARETTA INSPECTOR. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT THE TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND. CONCRETE WASHDOWN IS NOT ALLOWED.
8. THE CONTRACTOR WILL MAINTAIN STORM WATER RUNOFF CONTROLS AT ALL TIMES. ADDITIONAL CONTROLS WILL BE INSTALLED IF DETERMINED NECESSARY BY CITY INSPECTION.
9. IRRIGATION SYSTEMS ARE NOT ALLOWED WITHIN THE PUBLIC RIGHT-OF-WAY.
10. AT LEAST ONE PERSON ON A PROJECT OR SITE MUST HAVE COMPLETED THE LEVEL 1A EROSION EDUCATION & TRAINING COURSE AND BE CERTIFIED BY GSWCC.
11. SUBCONTRACTORS MUST COMPLETE EITHER LEVEL 1A EROSION EDUCATION & TRAINING COURSE OR ATTEND SUBCONTRACTOR AWARENESS SEMINAR.



Page 481 of 636

SUMMARY OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QTY.
CONSTRUCTION OF THE BRICK WALL*	LF	99
REMOVAL OF EXISTING LIGHT POLE AND FOUNDATION	EA	2
LED WALL LIGHT BY FX LUMINAIRE	EA	34
SYNTHETIC TURF PATCHING**	SF	250
CONDUIT, 2 IN	LF	200
MISCELLANEOUS CONSTRUCTION	LS	1

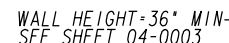
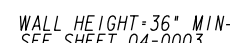
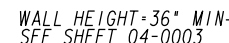
*EXCAVATION AND SAW CUT INCLUDED.
** INCLUDING BASE COURSE, SAND, AND SOIL.



REVISION DATES

SUMMARY QUANTITIES
PEDESTRIAN SAFETY IMPROVEMENTS

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		



06.86 — WALL 3 PROFILE
SEE SHEET 04-0002 FOR WALL DETAIL

CHECKED:		DATE:	DRAWING No. 13-000
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

GENERAL NOTES:

- (1) WHERE INDICATED, UTILITY PIPE SIZE AND MATERIAL ARE BASED ON VISUAL EVIDENCE OR RECORD PLANS.
- (2) EMPTY CONDUITS, OVERHEAD COMMERCIAL LIGHTING, TRAFFIC CONTROL SENSORS IN PAVING, IRRIGATION/SPRINKLER, AND OTHER PRIVATELY OWNED UTILITY LINES WERE NOT INCLUDED IN THIS SUE PROJECT.
- (3) ALL UNDERGROUND TELEPHONE LINES ARE DIRECT-BURIED UNLESS OTHERWISE NOTED.
- (4) ALL FIRE HYDRANT CONNECTION MATERIAL SIZES AND TYPES ARE UNKNOWN UNLESS OTHERWISE NOTED ON THE PLANS.

UTILITY SUMMARY:

ALL THE FOLLOWING UTILITY OWNERS WERE REPORTED TO HAVE FACILITIES WITHIN THE VICINITY OF THIS PROJECT AT THE TIME OF THE SUE INVESTIGATION. UTILITIES FOUND WITHIN THE LOS AT THE TIME OF THE SUE INVESTIGATION ARE NOTED OR EACH UTILITY OWNER LISTED AND ARE SHOWN ON THE PLANS HEREON.

AMERICAN TELEPHONE & TELEGRAPH (ATT) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATIONS LINES FOUND WITHIN THE LOS ARE OWNED BY AMERICAN TELEPHONE & TELEGRAPH UNLESS OTHERWISE NOTED ON THE PLANS.

ZAYO FIBER SOLUTIONS (ZFS) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATION LINES FOUND WITHIN THE LOS THAT ARE OWNED BY ZAYO ARE NOTED ON THE PLANS.

ATLANTA GAS LIGHT (AGL) - NATURAL GAS
NOTE: ALL NATURAL GAS LINES FOUND WITHIN THE LOS ARE OWNED BY ATLANTA GAS LIGHT UNLESS OTHERWISE NOTED ON THE PLANS.

CITY OF ALPHARETTA (COA) - TRAFFIC & ELECTRIC
NOTE: ALL TRAFFIC & ELECTRIC LINES FOUND WITHIN THE LOS THAT ARE OWNED BY THE CITY OF ALPHARETTA ARE NOTED ON THE PLANS

COMCAST (COM) - TELEVISION
NOTE: ALL TELEVISION LINES FOUND WITHIN THE LOS ARE OWNED BY COMCAST UNLESS OTHERWISE NOTED ON THE PLANS.

FIBERLIGHT (FBL) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATION LINES FOUND WITHIN THE LOS THAT ARE OWNED BY FIBERLIGHT ARE NOTED ON THE PLANS.

FULTON COUNTY (FC) - WATER & SEWER
NOTE: ALL WATER & SEWER LINES FOUND WITHIN THE LOS ARE OWNED BY FULTON COUNTY UNLESS OTHERWISE NOTED ON THE PLANS

GEORGIA POWER COMPANY (GPC) - ELECTRIC DISTRIBUTION
NOTE: ALL ELECTRIC LINES FOUND WITHIN THE LOS THAT ARE OWNED BY GEORGIA POWER COMPANY ARE NOTED ON THE PLANS.

VERIZON BUSINESS (VZB) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATIONS LINES FOUND WITHIN THE LOS THAT ARE OWNED BY VERIZON BUSINESS ARE NOTED ON THE PLANS.

SUE INVESTIGATION DESCRIPTION:

AN OVERHEAD/SUBSURFACE UTILITY ENGINEERING INVESTIGATION (SUE) WAS PERFORMED AND COMPLETED BY PLATINUM GEOMATICS ON 02/17/23 FOR THIS PROJECT. THE EXISTING OVERHEAD AND UNDERGROUND FACILITIES SHOWN HEREON WERE INCLUDED IN THIS SUE INVESTIGATION. THE PRESENCE OF THESE UTILITY FACILITIES HAS BEEN THOROUGHLY INVESTIGATED AND THE METHOD OF DETERMINING THEIR LOCATION IS INDICATED AS SHOWN IN THE PLANS. UTILITIES THAT HAVE BEEN INSTALLED AFTER THE DATE ABOVE HAVE NOT BEEN INCLUDED IN THIS INVESTIGATION AND SHOULD BE CONSIDERED AS FROM RECORD DRAWING ONLY. ALL OTHER EXISTING TOPOGRAPHIC FEATURES DEPICTED HEREON HAVE BEEN REFERENCED FROM A TOPOGRAPHIC / MAPPING SURVEY AND CONTROL PACKAGE PROVIDED BY PLATINUM GEOMATICS AND DATED FEBRUARY 23 .

REVISION DATES

UTILITY PLANS

PEDESTRIAN SAFETY IMPROVEMENTS
WALL DESIGN ON HIGHWAY 9

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	24-000A
CORRECTED:	DATE:	
VERIFIED:	DATE:	

UTILITY LINECODES				UTILITY SYMBOLS								
EXISTING		TO BE REMOVED		PROPOSED	TYPE OF UTILITY		EXISTING	PROPOSED	TEMPORARY	EXISTING	PROPOSED	TEMPORARY
OVERHEAD				ELECTRIC		UTILITY POLE/GUY POLE		CLEANOUT				
				ELECTRIC/TELECOMMUNICATIONS		LIGHT POLE		SANITARY SEWER MANHOLE				
				ELECTRIC/CABLE TV		GUY ANCHOR		AIR RELEASE VALVE				
				ELECTRIC/TRAFFIC CONTROL		MARKER		GREASE TRAP				
				ELECTRIC/TELECOMMUNICATIONS/CABLE TV		SPLICE BOX		SANITARY SEWER FORCE MAIN VALVE				
				ELECTRIC/TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL		CABINET		GAS VALVE				
				ELECTRIC/CABLE TV/TRAFFIC CONTROL		VENT		GAS METER				
				ELECTRIC/TELECOMMUNICATIONS/TRAFFIC CONTROL		ELECTRIC MANHOLE		GAS MANHOLE				
				GUY WIRE		HAND HOLE		GAS PRESSURE REGULATOR				
				TELECOMMUNICATIONS		TRANSFORMER		GAS VAULT				
				TELECOMMUNICATIONS/TRAFFIC CONTROL		ELECTRIC METER		GAS TEST STATION				
				TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL		ELECTRIC BOX		PETROLEUM VALVE				
				TELECOMMUNICATIONS/CABLE TV		TRANSMISSION TOWER		TRAFFIC CONTROL MANHOLE/ ELECTRIC COMMUNICATIONS BOX				
				CABLE TV		TELECOMMUNICATIONS MANHOLE		TRAFFIC CONTROL PEDESTRIAN SIGNAL/BUTTON POST				
				CABLE TV/TRAFFIC CONTROL		TELECOMMUNICATIONS PEDESTAL						
			TRAFFIC CONTROL		SUBSCRIBER LOOP CARRIER (aka 'SLICK')							
UNDERGROUND				ELECTRIC (OL-D)		PHONE BOOTH						
				ELECTRIC (OL-C)		CABLE TV PEDESTAL						
				ELECTRIC (OL-B)		CABLE TV MANHOLE						
				TELECOMMUNICATIONS (OL-D)		WATER VALVE						
				TELECOMMUNICATIONS (OL-C)		WATER METER						
				TELECOMMUNICATIONS (OL-B)		WATER MANHOLE						
				CABLE TV (OL-D)		FIRE HYDRANT ASSEMBLY (INCLUDES ASSOCIATED VALVE)						
				CABLE TV (OL-C)		BACKFLOW PREVENTER						
				CABLE TV (OL-B)		PRESSURE INDICATOR VALVE						
				WATER (OL-D)		AIR RELEASE VALVE						
				WATER (OL-C)		WELL						
				WATER (OL-B)		WATER VAULT						
				WATER FOR LABELED PIPE SIZES (OL-D)		WATER VALVE MARKER						
				WATER FOR LABELED PIPE SIZES (OL-C)		STAND PIPE						
				WATER FOR LABELED PIPE SIZES (OL-B)								
				NON-POTABLE WATER (OL-D)								
				NON-POTABLE WATER (OL-C)								
				NON-POTABLE WATER (OL-B)								
				NON-POTABLE WATER FOR LABELED PIPE SIZES (OL-D)								
				NON-POTABLE WATER FOR LABELED PIPE SIZES (OL-C)								
				NON-POTABLE WATER FOR LABELED PIPE SIZES (OL-B)								
				STEAM (OL-D)								
				STEAM (OL-C)								
				STEAM (OL-B)								
				STEAM FOR LABELED PIPE SIZES (OL-D)								
				STEAM FOR LABELED PIPE SIZES (OL-C)								
				STEAM FOR LABELED PIPE SIZES (OL-B)								
				SANITARY SEWER WITH FLOW DIRECTION (OL-D)								
				SANITARY SEWER WITH FLOW DIRECTION (OL-C)								
				SANITARY SEWER WITH FLOW DIRECTION (OL-B)								
				SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (OL-D)								
				SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (OL-C)								
				SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (OL-B)								
				SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (OL-D)								
			SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (OL-C)									
			SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (OL-B)									
			GAS (OL-D)									
			GAS (OL-C)									
			GAS (OL-B)									
			GAS FOR LABELED PIPE SIZES (OL-D)									
			GAS FOR LABELED PIPE SIZES (OL-C)									
			GAS FOR LABELED PIPE SIZES (OL-B)									
			PETROLEUM (OL-D)									
			PETROLEUM (OL-C)									
			PETROLEUM (OL-B)									
			PETROLEUM FOR LABELED PIPE SIZES (OL-D)									
			PETROLEUM FOR LABELED PIPE SIZES (OL-C)									
			PETROLEUM FOR LABELED PIPE SIZES (OL-B)									
			TRAFFIC CONTROL (OL-D)									
			TRAFFIC CONTROL (OL-C)									
			TRAFFIC CONTROL (OL-B)									
			UNKNOWN UTILITY FOUND IN SUE INVESTIGATION (OL-B)									
FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS												

QUALITY LEVELS AND DEFINITIONS

OL-D DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

OL-C EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

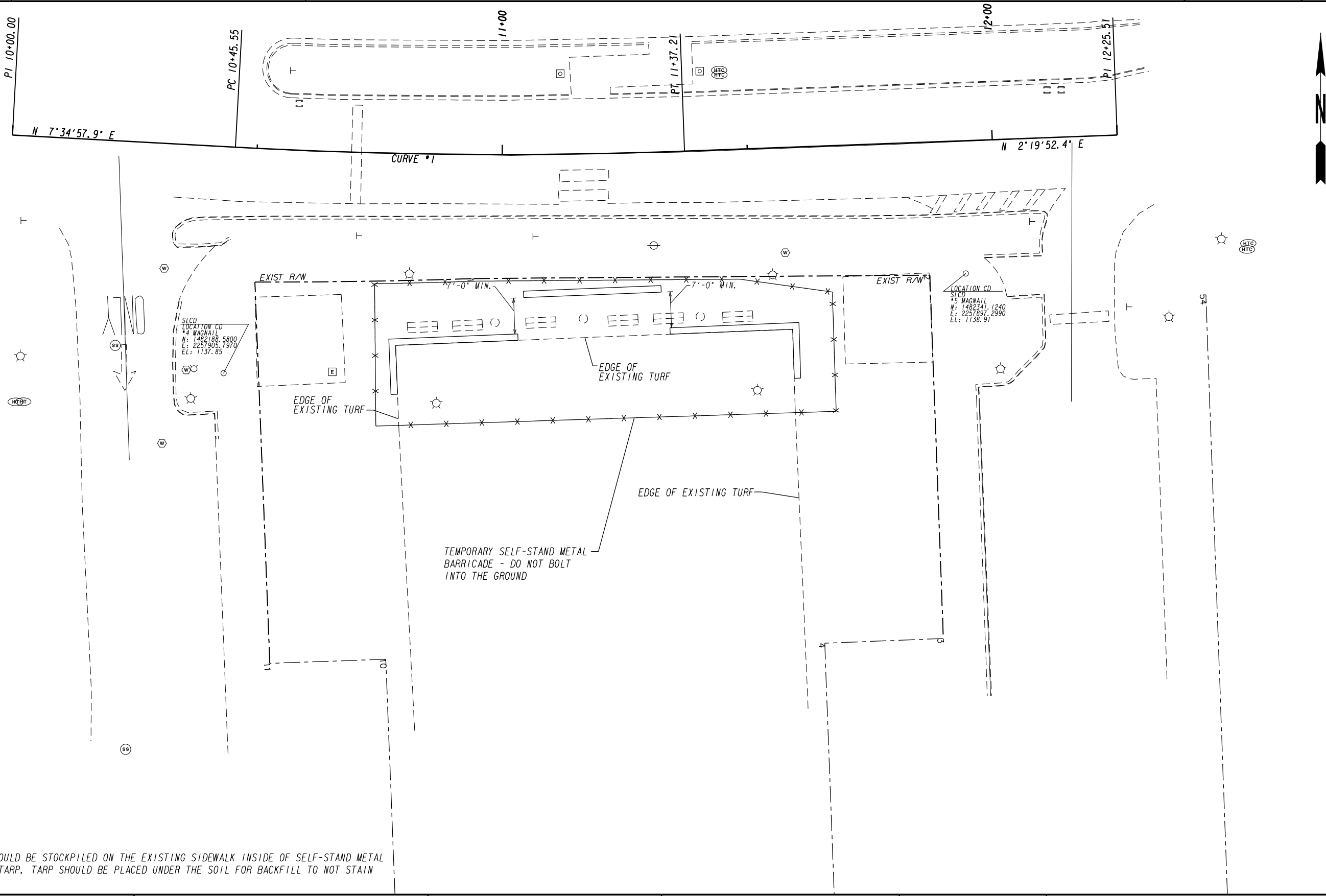
OL-B INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. OL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

OL-A OBTAIN PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE BY EXCAVATING A TEST HOLE. THE TEST HOLE SHALL BE DONE USING VACUUM EXCAVATION OR COMPARABLE NONDESTRUCTIVE EQUIPMENT IN A MANNER AS TO CAUSE NO DAMAGE TO THE UTILITY LINE. AFTER EXCAVATING A TEST HOLE, A FIELD SURVEY SHALL BE PERFORMED TO DETERMINE THE EXACT LOCATION AND POSITION OF THE UTILITY LINE.

TELEPHONE PAIR SIZE TABLE

TELEPHONE PAIR SIZE	TELEPHONE CABLE DIAMETER
5 - 100	0.50 TO 2.00 IN
101 - 2400	UP TO 3.50 IN

Curve* 1
PI Sta* 10+91.41
N= 1482240.0254
E= 2257866.0650
DELTA= 5°15'05.5" (LT)
D= 5°43'46.48"
T= 45.86
L= 91.66
R= 1000.00
E= 1.05



NOTE: SOIL FOR BACKFILL SHOULD BE STOCKPILED ON THE EXISTING SIDEWALK INSIDE OF SELF-STAND METAL BARRICADE AND COVERED WITH TARP. TARP SHOULD BE PLACED UNDER THE SOIL FOR BACKFILL TO NOT STAIN THE EXISTING SIDEWALK.

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR	---
& MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
LIMIT OF ACCESS	---
REQ'D R/W & LIMIT OF ACCESS	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA	---
(SEE ERIT TABLE)	---



REVISION DATES				CONSTRUCTION DETAILS			
				PEDESTRIAN SAFETY IMPROVEMENTS			
				WALL DESIGN ON HIGHWAY 9			
CHECKED:		DATE:		DRAWING No.			
BACKCHECKED:		DATE:		54-0001			
CORRECTED:		DATE:					
VERIFIED:		DATE:					



STAFF REPORT

Department: Public Works
Submitted By: Krista McDowell
Meeting Date: July 17, 2023

AGENDA ITEM:

Purchase Approval: Fleet Replacement for Freightliner Tandem Dump Truck

Consideration of approval of the purchase of a 2024 Freightliner 114SD Plus Tandem Dump Truck utilizing State Contract 9999-SPD-SPD0000155-007 from Peach State Truck Center in the amount of \$172,280.00.

STAFF RECOMMENDATION:

Approve the purchase of a 2024 Freightliner 114SD Plus Tandem Dump Truck utilizing State Contract 9999-SPD-SPD0000155-007 from Peach State Truck Center in the amount of \$172,280.00.

BUDGET & PROCUREMENT:

BUDGETED ITEM: YES

FISCAL IMPACT: YES

INCLUDED IN CURRENT FY CPTL BUDGET: YES

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST: \$190,000

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
Fleet/30141100-542200-C1223	\$172,280

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-	\$0.00

ITEM DESCRIPTION:

The Public Works Department budgeted for a Tandem Dump Truck to replace a 2001 LT9500 Tandem Dump Truck. This vehicle enables staff to haul materials such as dirt and rock to job sites, as well as, hauling debris and construction waste to the proper disposal facilities. This vehicle is also used to pull equipment and materials by trailer to job sites and will provide training opportunities for staff seeking to obtain their Class A License.

This tandem dump is overdue to be replaced. We have tried diligently to continue to utilize it for our hauling needs, however, due to the age and wear and tear on the vehicle, this vehicle is scheduled for replacement.

Staff recommends to purchase a Freightliner 114SD Plus Tandem Dump Truck utilizing State Contract 9999-SPD-SPD0000155-007 from Peach State Truck Center in the amount of \$172,280.00. Public Works compared pricing and delivery time of other vendors to the state contract and the vendor under State contract had a lower price and our order would be initiated sooner. Delivery is expected August 2024. Per policy, the vehicle being replaced will be surplus by the Finance Department.

ALTERNATIVES:

Do not approve purchase of tandem dump truck through state contract and purchase at a higher cost through other procurement methods.

ATTACHMENTS:

1. Peach State Truck Centers Quote

2. Peach State Truck Centers State Contract
3. Truck Chassis Information Sheet 2024 State Contract

Prepared for:
 Krista
 McDowell
 GADOAS ALPHARETTA CITY OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

STATE CONTRACT #
99999 - SPD - SPD0000155 - 0007
QUOTATION

114SD PLUS CONVENTIONAL CHASSIS

SET FORWARD AXLE - TRUCK	20,000# FLAT LEAF FRONT SUSPENSION
CUM X12 430V HP @ 1900 RPM, 1550 LB-FT @ 1000 RPM, 2000 GOV RPM, VOC	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
ALLISON 4500 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION	5600MM (220 INCH) WHEELBASE
RT-46-160 46,000# R-SERIES TANDEM REAR AXLE	1/2X3.64X11-7/8 INCH STEEL FRAME (12.7MMX301.6MM/0.5X11.88 INCH) 120KSI
HENDRICKSON RT463 @46,000# REAR SUSPENSION	1775MM (70 INCH) REAR FRAME OVERHANG
DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE	

			PER UNIT		TOTAL
VEHICLE PRICE	TOTAL # OF UNITS (1)	\$	137,643	\$	137,643
EXTENDED WARRANTY		\$	405	\$	405
16' OX MAVERICK DUMP		\$	32,328	\$	32,328
CUSTOMER PRICE BEFORE TAX		\$	170,376	\$	170,376

TAXES AND FEES

1% DOAS STATE CONTRACT FEE	\$	1,704	\$	1,704
DOC FEE	\$	200	\$	200

TRADE-IN

TRADE-IN ALLOWANCE	\$	(0)	\$	(0)
---------------------------	----	-----	----	-----

BALANCE DUE	(LOCAL CURRENCY)	\$	172,280	\$	172,280
--------------------	-------------------------	-----------	----------------	-----------	----------------

COMMENTS:

Projected delivery on ___ / ___ / ___ provided the order is received before ___ / ___ / ___.

APPROVAL:

Please indicate your acceptance of this quotation by signing below:

Customer: X_____ Date: ___ / ___ / ___.



Prepared for:
Krista McDowell
GADOAS ALPHARETTA CITY
OF
1790 Hembree Road
Alpharetta, GA 30009
Phone: 770-480-0314

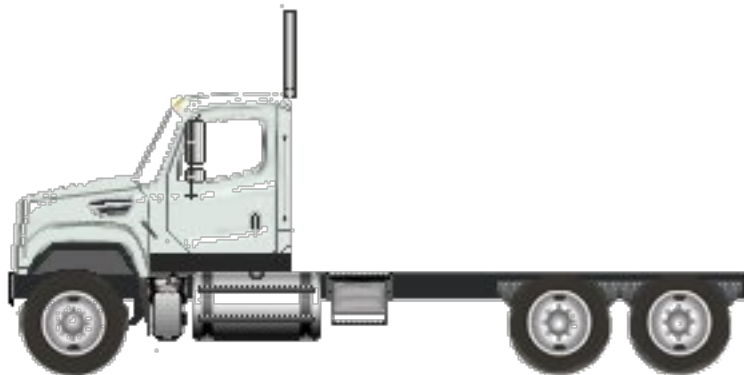
Prepared by:
Joshua Little
PEACH STATE TRUCK
CENTERS
6535 CRESCENT DRIVE
NORCROSS, GA 30071
Phone: 770-449-5300

A proposal for
GADOAS ALPHARETTA CITY OF

Prepared by
PEACH STATE TRUCK CENTERS
Joshua Little

Jun 10, 2023

Freightliner 114SD Plus



Components shown may not reflect all spec'd options and are not to scale

Application Version 11.8.106
Data Version PRL-27D.045
GADOAS - City of Alpharetta - Tandem
Dump



06/10/2023 1:04 PM

Page 1 of 16

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

S P E C I F I C A T I O N P R O P O S A L

	Description	Weight Front	Weight Rear
Price Level			
	SD PRL-27D (EFF:MY24 ORDERS)		
Data Version			
	SPECPRO21 DATA RELEASE VER 045		
Vehicle Configuration			
	114SD PLUS CONVENTIONAL CHASSIS	7,934	6,476
	2024 MODEL YEAR SPECIFIED		
	SET FORWARD AXLE - TRUCK		
	TRAILER TOWING PROVISION AT END OF FRAME WITH SAE J560	10	10
	LH PRIMARY STEERING LOCATION		
General Service			
	TRUCK/TRAILER CONFIGURATION		
	DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
	CONSTRUCTION SERVICE		
	GOVERNMENT BUSINESS SEGMENT		
	DIRT/SAND/ROCK COMMODITY		
	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
	MAXIMUM 8% EXPECTED GRADE		
	SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
	FREIGHTLINER LEVEL II WARRANTY		
	EXPECTED FRONT AXLE(S) LOAD : 20000.0 lbs		
	EXPECTED REAR DRIVE AXLE(S) LOAD : 46000.0 lbs		
	EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 66000.0 lbs		
	EXPECTED GROSS COMBINATION WEIGHT : 80000.0 lbs		

Application Version 11.8.106
 Data Version PRL-27D.045
 GADOAS - City of Alpharetta - Tandem
 Dump



06/10/2023 1:04 PM

Page 2 of 16

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
Truck Service		
END DUMP BODY		
OX BODIES (TBEI)		
Engine		
CUM X12 430V HP @ 1900 RPM, 1550 LB-FT @ 1000 RPM, 2000 GOV RPM, VOC	-390	-45
Electronic Parameters		
70 MPH ROAD SPEED LIMIT		
CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		
PTO MODE ENGINE RPM LIMIT - 900 RPM		
PTO RPM WITH CRUISE SET SWITCH - 700 RPM		
PTO RPM WITH CRUISE RESUME SWITCH - 800 RPM		
PTO MODE CANCEL VEHICLE SPEED - 7 MPH		
PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND		
FUEL DOSING OF AFTERTREATMENT ENABLED IN PTO MODE-CLEANS HYDROCARBONS AT HIGH TEMPERATURES ONLY		
ONE REMOTE PTO SPEED		
PTO SPEED 1 SETTING - 800 RPM		
PTO MINIMUM RPM - 700		
REGEN INHIBIT SPEED THRESHOLD - 5 MPH		
PTO 1, DASH SWITCH, ROLLING ENGAGEMENT (ENGAGE IN NEUTRAL), BEFORE DRIVING		
Engine Equipment		
2010 EPA/CARB/GHG21 CONFIGURATION		
2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)		
STANDARD OIL PAN		
ENGINE MOUNTED OIL CHECK AND FILL		
SIDE OF HOOD AIR INTAKE WITH DONALDSON HIGH CAPACITY AIR CLEANER WITH SAFETY ELEMENT, FIREWALL MOUNTED		
DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE		
(3) DTNA GENUINE, FLOODED STARTING, MIN 3000CCA, 555RC, THREADED STUD BATTERIES		

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
BATTERY BOX FRAME MOUNTED		
STANDARD BATTERY JUMPERS		
SINGLE BATTERY BOX FRAME MOUNTED LH SIDE BACK OF CAB		
WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
NON-POLISHED BATTERY BOX COVER		
POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH MOUNTED OUTBOARD DRIVER SEAT	2	
POSITIVE AND NEGATIVE POSTS FOR JUMPSTART CHASSIS MOUNTED LH BACK OF CAB	4	
PROGRESSIVE LOW VOLTAGE DISCONNECT AT 12.3 VOLTS FOR DESIGNATED CIRCUITS		
CUMMINS NATURALLY ASPIRATED 25.9 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM		
CUMMINS INTEBRAKE BRAKE WITH HIGH MED LOW BRAKE		
RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE	30	25
ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND VIRTUAL REGENERATION REQUEST SWITCH IN CLUSTER		
10 FOOT 06 INCH (126 INCH+0/-5.9 INCH) EXHAUST SYSTEM HEIGHT		
RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP		
13 GALLON DIESEL EXHAUST FLUID TANK		
100 PERCENT DIESEL EXHAUST FLUID FILL		
STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
STANDARD DIESEL EXHAUST FLUID TANK CAP		
ALUMINUM AFTERTREATMENT DEVICE/MUFFLER/TAILOPIPE SHIELD(S)		
AIR POWERED ON/OFF ENGINE FAN CLUTCH		



Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON ENGINE MOUNTED		
CUMMINS SPIN ON FUEL FILTER		
COMBINATION FULL FLOW/BYPASS OIL FILTER		
1500 SQUARE INCH ALUMINUM RADIATOR		
ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT		
GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		
RADIATOR DRAIN VALVE		
PHILLIPS-TEMRO 1500 WATT/115 VOLT BLOCK HEATER	4	
BLACK PLASTIC ENGINE HEATER RECEPTACLE MOUNTED UNDER LH DOOR		
DELCO 12V 39MT HD/OCF STARTER WITH THERMAL PROTECTION AND INTEGRATED MAGNETIC SWITCH	-45	
Transmission		
ALLISON 4500 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION	260	100

Transmission Equipment

ALLISON VOCATIONAL PACKAGE 223 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODELS RDS, HS, MH AND TRV

ALLISON VOCATIONAL RATING FOR ON/OFF HIGHWAY APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES

PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY

SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY

PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE

SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE

PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE



Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
FUEL SENSE 2.0 DISABLED - PERFORMANCE - TABLE BASED		
DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES		
DIRECTION CHANGE ENABLED WITH MULTIPLEXED SERVICE BRAKES - ALLISON 5TH GEN TRANSMISSIONS		
QUICKFIT BODY LIGHTING CONNECTOR UNDER CAB, WITH BLUNTCUTS		
ELECTRONIC TRANSMISSION WIRING TO CUSTOMER INTERFACE CONNECTOR		
CUSTOMER INSTALLED CHELSEA 870 SERIES PTO		
PTO MOUNTING, LH SIDE OF MAIN TRANSMISSION ALLISON		
MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
TRANSMISSION PROGNOSTICS - ENABLED 2013		
WATER TO OIL TRANSMISSION COOLER, FRAME MOUNTED		
TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK		
SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)		

Front Axle and Equipment

DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE	190
MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES	10
NON-ASBESTOS FRONT BRAKE LINING	
CAST IRON OUTBOARD FRONT BRAKE DRUMS	
FRONT OIL SEALS	
VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL	
STANDARD SPINDLE NUTS FOR ALL AXLES	
MERITOR AUTOMATIC FRONT SLACK ADJUSTERS	



Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
STANDARD KING PIN BUSHINGS		
TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR	130	
POWER STEERING PUMP		
4 QUART POWER STEERING RESERVOIR		
OIL/AIR POWER STEERING COOLER		
CURRENT AVAILABLE SYNTHETIC 75W-90 FRONT AXLE LUBE		
Front Suspension		
20,000# FLAT LEAF FRONT SUSPENSION	310	
GRAPHITE BRONZE BUSHINGS WITH SEALS - FRONT SUSPENSION		
NO FRONT SHOCK ABSORBERS	-30	
Rear Axle and Equipment		
RT-46-160 46,000# R-SERIES TANDEM REAR AXLE		420
4.56 REAR AXLE RATIO		
IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
MXL 18T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES	-10	-10
MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES		
DRIVER CONTROLLED TRACTION DIFFERENTIAL - BOTH TANDEM REAR AXLES		30
(1) INTERAXLE LOCK VALVE, (1) DRIVER CONTROLLED DIFFERENTIAL LOCK FORWARD- REAR AXLE VALVE AND (1) REAR-REAR AXLE VALVE		
INDICATOR LIGHT FOR EACH INTERAXLE LOCKOUT SWITCH, DISENGAGE INTERAXLE LOCK WITH IGNITION OFF		
INDICATOR LIGHT AND BUZZER FOR EACH DIFFERENTIAL LOCKOUT SWITCH, ENGAGE AT SPEEDS 5 MPH PR LESS, DISENGAGE W/IGN OFF OR SPEEDS EXCEEDING 25 MPH		
MERITOR 16.5X8.62 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
NON-ASBESTOS REAR BRAKE LINING		
ASPHALT SPREADER CLEARANCE REAR BRAKE GEOMETRY		
CAST IRON OUTBOARD REAR BRAKE DRUMS		40

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
REAR OIL SEALS		
WABCO TRISTOP D LONGSTROKE 2-DRIVE AXLE SPRING PARKING CHAMBERS		
HALDEX AUTOMATIC REAR SLACK ADJUSTERS		
CURRENT AVAILABLE SYNTHETIC 75W-90 REAR AXLE LUBE		
STANDARD REAR AXLE BREATHER(S)		
Rear Suspension		
HENDRICKSON RT463 @46,000# REAR SUSPENSION		750
HENDRICKSON RT/RTE - 7.19" SADDLE		
STANDARD AXLE SEATS IN AXLE CLAMP GROUP		
54 INCH AXLE SPACING		10
STEEL BEAMS AND BRONZE CENTER BUSHINGS WITH BAR PIN ADJUSTABLE END CONNECTIONS		
FORE/AFT CONTROL RODS		
Brake System		
WABCO 4S/4M ABS WITH TRACTION CONTROL		
REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES		
FIBER BRAID PARKING BRAKE HOSE		
STANDARD BRAKE SYSTEM VALVES		
STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM		
STD U.S. FRONT BRAKE VALVE		
RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE		
WABCO SYSTEM SAVER HP WITH INTEGRAL AIR GOVERNOR AND HEATER		
AIR DRYER FRAME MOUNTED		
STEEL AIR TANKS MOUNTED FOR MAX GROUND CLEARANCE, (BELLY PLOW - AA3-073)		
PULL CABLES ON ALL AIR RESERVOIR(S)		
Trailer Connections		
AIR CONNECTIONS TO END OF FRAME WITH GLAD HANDS FOR TRUCK AND NO DUST COVERS		

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
(1) QUICKFIT PROGRAMMABLE SOLENOID W/STATE RETENTION PLUMBED TO BACK OF CAB PRIMARY CONNECTOR/RECEPTACLE WIRED FOR SEPARATE STOP/TURN, ABS CENTER PIN POWERED THROUGH IGNITION SAE J560 7-WAY PRIMARY TRAILER CABLE RECEPTACLE MOUNTED END OF FRAME		
Wheelbase & Frame		
5600MM (220 INCH) WHEELBASE		
1/2X3.64X11-7/8 INCH STEEL FRAME (12.7MMX301.6MM/0.5X11.88 INCH) 120KSI	480	190
1775MM (70 INCH) REAR FRAME OVERHANG		
FRAME OVERHANG RANGE: 61 INCH TO 70 INCH		
CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 137.01 in		
CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 134.01 in		
CALC'D FRAME LENGTH - OVERALL : 307.34 in		
CALCULATED FRAME SPACE LH SIDE : 63.53 in		
CALCULATED FRAME SPACE RH SIDE : 43.79 in		
SQUARE END OF FRAME		
FRONT CLOSING CROSSMEMBER		
STANDARD WEIGHT ENGINE CROSSMEMBER		
STANDARD MIDSHIP #1 CROSSMEMBER(S)		
STANDARD REARMOST CROSSMEMBER		
STANDARD SUSPENSION CROSSMEMBER		
Chassis Equipment		
16.5 INCH PAINTED STEEL STRAIGHT BUMPER		
REMOVABLE FRONT TOW/RECOVERY DEVICE, STORED ON CHASSIS FRAME	15	
BUMPER MOUNTING FOR SINGLE LICENSE PLATE		
GRADE 8 THREADED HEX HEADED FRAME FASTENERS		
EXTERIOR HARNESES WRAPPED IN ABRASION TAPE		
CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD		

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
Fuel Tanks		
80 GALLON/302 LITER ALUMINUM FUEL TANK - LH	10	
25 INCH DIAMETER FUEL TANK(S) PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS FUEL TANK(S) FORWARD PLAIN STEP FINISH FUEL TANK CAP(S) ALLIANCE FUEL FILTER/WATER SEPARATOR WITH HEATED BOWL AND PRIMER PUMP EQUIFLO INBOARD FUEL SYSTEM HIGH TEMPERATURE REINFORCED NYLON FUEL LINE	15	
Tires		
MICHELIN XZY-3 425/65R22.5 20 PLY RADIAL FRONT TIRES	196	
MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES		120
Hubs		
CONMET PRESET PLUS PREMIUM IRON FRONT HUBS CONMET PRESET PLUS PREMIUM IRON REAR HUBS		
Wheels		
MAXION WHEELS 10035 22.5X12.25 10-HUB PILOT 4.75 INSET 5-HAND STEEL DISC FRONT WHEELS	102	
MAXION WHEELS 90260 22.5X8.25 10-HUB PILOT 2-HAND HD STEEL DISC REAR WHEELS FRONT WHEEL MOUNTING NUTS REAR WHEEL MOUNTING NUTS		160
Cab Exterior		
114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB AIR CAB MOUNTING NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE FRONT FENDERS 3-1/2 INCH FENDER EXTENSIONS	15	

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

Description	Weight Front	Weight Rear
SAFETY YELLOW LH AND RH INTERIOR GRAB HANDLES AND LH AND RH EXTERIOR GRAB HANDLES WITH SINGLE RUBBER INSERT		
STATIONARY BLACK GRILLE		
BLACK HOOD MOUNTED AIR INTAKE GRILLE		
FIBERGLASS HOOD		
SINGLE 14 INCH ROUND POLISHED AIR HORN ROOF MOUNTED		
DUAL ELECTRIC HORNS		
SINGLE HORN SHIELD		
REAR LICENSE PLATE MOUNT END OF FRAME		
HALOGEN COMPOSITE HEADLAMPS WITH BLACK BEZELS		
LED AERODYNAMIC MARKER LIGHTS		
HEADLIGHTS ON WITH WIPERS, NO DAYTIME RUNNING LIGHTS		
INTEGRAL STOP/TAIL/BACKUP LIGHTS		
STANDARD FRONT TURN SIGNAL LAMPS		
DUAL WEST COAST MOLDED-IN COLOR HEATED MIRRORS WITH LH AND RH REMOTE		
DOOR MOUNTED MIRRORS		
102 INCH EQUIPMENT WIDTH		
LH AND RH 8 INCH MOLDED-IN COLOR CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
RH AND LH 8 INCH STAINLESS STEEL FENDER MOUNTED CONVEX MIRRORS WITH TRIPOD BRACKETS	8	
STANDARD SIDE/REAR REFLECTORS		
RH AFTERTREATMENT SYSTEM CAB ACCESS WITH PLAIN SHIELDING		
63X14 INCH TINTED REAR WINDOW		
TINTED DOOR GLASS LH AND RH WITH TINTED OPERATING WING WINDOWS		
RH AND LH ELECTRIC POWERED WINDOWS	4	4
1-PIECE SOLAR GREEN GLASS WINDSHIELD		
8 LITER (2 GAL) WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITH FLUID LEVEL INDICATOR		
Cab Interior		
RUGGED TRIM PACKAGE		
GRAY & CARBON VINYL INTERIOR "RUGGED"		

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

	Description	Weight Front	Weight Rear
	CARBON WITH PREMIUM GUNMETAL ACCENT (RUGGED)		
	MOLDED PLASTIC DOOR PANEL		
	MOLDED PLASTIC DOOR PANEL		
	BLACK MATS WITH SINGLE INSULATION		
	ASH CUP AND (1)LIGHTER, (1)12V POWER OUTLET, (1)DASH MTD DUAL USB-C OUTLET		
	FORWARD ROOF MOUNTED CONSOLE		
	LH AND RH KICKPLATES		
	DIGITAL ALARM CLOCK IN DRIVER DISPLAY		
	(2) CUP HOLDERS LH AND RH DASH		
	M2/SD DASH		
	2-1/2 LB. FIRE EXTINGUISHER	5	
	HEATER, DEFROSTER AND AIR CONDITIONER		
	STANDARD HVAC DUCTING		
	MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH		
	STANDARD HEATER PLUMBING		
	VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR		
	BINARY CONTROL, R-134A		
	STANDARD INSULATION		
	SOLID-STATE CIRCUIT PROTECTION AND FUSES		
	12V NEGATIVE GROUND ELECTRICAL SYSTEM		
	STANDARD LED CAB LIGHTING		
	DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME		
	KEY QUANTITY OF 4		
	LH AND RH ELECTRIC DOOR LOCKS		
	TRIANGULAR REFLECTORS KIT WITHOUT FLARES SHIPPED LOOSE IN CAB	10	
	BASIC ISRINGHAUSEN HIGH BACK AIR SUSPENSION DRIVERS SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION	30	
	2 MAN TOOL BOX MID BACK NON SUSPENSION PASSENGER SEAT, SEATS INC	20	
	LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
N	VINYL WITH VINYL INSERT DRIVER SEAT		
N	VINYL WITH VINYL INSERT PASSENGER SEAT		

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

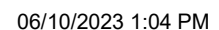
Description	Weight Front	Weight Rear
BLACK SEAT BELTS		
ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN	10	
4-SPOKE 18 INCH (450MM) LEATHER WRAPPED STEERING WHEEL WITH CHROME SWITCH BEZELS		
DRIVER AND PASSENGER INTERIOR SUN VISORS		

Instruments & Controls

* DIGITAL PANEL LAMP DIMMER SWITCH IN DRIVER DISPLAY		
2 EXTRA PROGRAMMABLE SWITCHES/INDICATORS		
ELECTRONIC ACCELERATOR CONTROL		
NO INSTRUMENT PANEL-DRIVER		
FULLY CONFIGURABLE CENTER INSTRUMENT PANELS		
ENGINE REMOTE INTERFACE WITH PARK BRAKE INTERLOCK		
BRIGHT ARGENT FINISH GAUGE BEZELS		
LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM		
DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE		
DASH MOUNTED AIR RESTRICTION INDICATOR WITH GRADUATIONS		
87 DECIBELS TO 112 DECIBELS AUTOMATIC SELF-ADJUSTING BACKUP ALARM		3
ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES		
KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY		
MANUAL REMOTE ENGINE STOP/START		
PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY		
HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH		
2 INCH ELECTRIC FUEL GAUGE		
ENGINE REMOTE INTERFACE WITH ONE OR MORE SET SPEEDS		
QUICKFIT POWERTRAIN INTERFACE CONNECTOR UNDER CAB WITH BLUNTCUTS		

Prepared by:
Joshua Little
PEACH STATE TRUCK
CENTERS
6535 CRESCENT DRIVE
NORCROSS, GA 30071
Phone: 7704495300

Application Version 11.8.106
Data Version PRL-27D.045
GADOAS - City of Alpharetta - Tandem
Dump



Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

	Description	Weight Front	Weight Rear
	PRE-TRIP INSPECTION FEATURE FOR EXTERIOR LAMPS AND SERVICE BRAKES (1) OVERHEAD MOUNTED LANYARD CONTROL FOR DRIVER AIR HORN BW TRACTOR PROTECTION VALVE TRAILER HAND CONTROL BRAKE VALVE DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY PROGRAMMED TO SLOWEST SPEED WITH PARK BRAKE SET ROTARY HEADLAMP SWITCH, MARKER LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT FOR OPTIONAL FOG/ROAD LAMPS TWO VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, HEADLAMP FLASH, WASH/WIPE/INTERMITTENT INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH 40 AMP (20 AMP PER SIDE) TRAILER LAMP CAPACITY		
Design	PAINT: ONE SOLID COLOR		
Color	CAB COLOR A: L0006EY WHITE ELITE EY BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT POWDER WHITE (N0006EA) FRONT WHEELS/RIMS (PKWHT21, TKWHT21, W, TW) POWDER WHITE (N0006EA) REAR WHEELS/RIMS (PKWHT21, TKWHT21, W, TW) STANDARD BLACK BUMPER PAINT STANDARD E COAT/UNDERCOATING		
Certification / Compliance	U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS		
Sales Programs	SD QUOTE SALES PROGRAM		

Prepared for:
 Krista McDowell
 GADOAS ALPHARETTA CITY
 OF
 1790 Hembree Road
 Alpharetta, GA 30009
 Phone: 770-480-0314

Prepared by:
 Joshua Little
 PEACH STATE TRUCK
 CENTERS
 6535 CRESCENT DRIVE
 NORCROSS, GA 30071
 Phone: 7704495300

TOTAL VEHICLE SUMMARY

Weight Summary

	Weight Front	Weight Rear	Total Weight
Factory Weight ⁺	9349 lbs	8283 lbs	17632 lbs
Dealer Installed Options	0 lbs	0 lbs	0 lbs
Total Weight⁺	9349 lbs	8283 lbs	17632 lbs

Extended Warranty

TOWING: 1 YEAR/UNLIMITED MILES/KM EXTENDED TOWING
 COVERAGE \$1200 CAP FEX APPLIES

Dealer Installed Options

	Weight Front	Weight Rear
OX MAVERICK 16' DUMP BODY	0	0
Total Dealer Installed Options	0 lbs	0 lbs

(+) Weights shown are estimates only.
 If weight is critical, contact Customer Application Engineering.

(***) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.





Ox Bodies | Crysteel | Duraclass | Rugby | J-Craft | Travis

PROUDLY MADE IN THE USA
719 Columbus Street East
Fayette AL. 35555

Quote Response Form

6/12/2023 8:27:48 AM

Salesperson: Shannon Johnson

800-844-2519

End User: City of Alpharetta

Route To: 35865
PEACH STATE TRUCK SALES
P.O. BOX 808
NORCROSS GA 30091
USA

Ship To: 13
PEACH STATE
6536 CRESCENT DRIVE
NORCROSS, GA 30071

Quote	Revision	Ship Via	Terms
FAC5163	1	CPU - CUSTOMER PICKUP	Net 90 Days

Line	UM	Quantity	Item	Description	Unit Price	Extended Price
1	EA	1.00	2527008	MABMV87-1600-1518YD-74133-56/42/50-BLK-T	\$ 27,522.60	\$ 27,522.60

Yardage 15/18

BASE OPTIONS:

Body Style: MAVERICK
Body ID: 87
Body Length: 16'
Hoist Model: 74133
Frame Style: TUBE w/CHANNEL X-MEM 12 C/L
Front Style: STRAIGHT
Rear Style: STRAIGHT
Front Height: 56
Side Height Front: 42
Side Height Rear: 42
Rear Height: 50
Side Material: SHEET-10GA-A36
Front Material: SHEET-10GA-A36
Tailgate Material: PLATE-1/4-AR450
Floor Material: PLATE-1/4-AR450
Cabshield Style: STANDARD
Cabshield Projection: 24
Cabshield Width: 87
Cabshield Oval Light Cutouts: YES
Tarp Style: MOUNTAIN
Tailgate Type: TWO WAY
Tailgate Bracing Style: 1 HORIZONTAL
Side Top Rail Style: 4x4x.120 (Standard)
Lineposts: YES
Dump Apron: HEAVY DUTY
Dump Apron Size: 10
Side Light Cutouts: LOWER - FRONT
Metro Light Quantity: 2
Board Holder Height: 8

CUSTOM OPTIONS:

Metal / Wood Boards: 8 INCH WOOD BOARDS (UP TO 17FT)

PAINT OPTIONS:

Paint Color: BLACK

INSTALL OPTIONS:

Rear Hinge: REMOVABLE PIN

Hydraulic Cylinder: 74133 (STD)

Hydraulic Reservoir: NESTLED PYRAMID FLAT BOTTOM STD

Power Take Off: AUTOMATIC TRANSMISSION - INSTALL PTO

Hydraulic Pump: AIR SHIFTED G SERIES AUTOMATIC

In-Cab Controls: ELECTRIC SHIFT PTO/AIR SHIFT PUMP

Mud Flaps: 30 INCH OX MUD FLAPS

Gravel Guards: STEEL-NO FLAPS-MV/CHIS

Reversing Alarm: YES

Body Prop: ONE

Tailgate Closing Operation: TAILGATE KIT AIR

Exhaust Turnout: 5 INCH

Decals: STD 2WAY OX LOGOS

Cab Shield Lights: LTS KIT C/S 2 C/M 2 OVL STB AMB

Side Lights: LTS KIT SIDE LWR FRT C/M - MAVR UP TO 16FT

Rear Lights: LTS KIT REAR 1SET MET 1SET OVL STB AMB

Polished Aluminum Front/Sides: POLISHED ALUMINUM INSUL FRNT/SIDES 42IN SIDES/16FT LONG

2	EA	1.00	2262591	TARP ELEC-MOUNTAIN-10-16FT-VNYL-W/FL-INST	\$ 1,869.09	\$ 1,869.09
3	EA	1.00	1273754	HITCH 22IN 50T W/GLADS AIR CHAM 7PIN INST	\$ 1,723.48	\$ 1,723.48
4	EA	1.00	1484705	TOOL BOX 18 X 18 X 48 -PN 1702310-INST	\$ 1,213.44	\$ 1,213.44

PTO Maintenance:

Per OEM manufacturer guidelines the following recommendations should be followed. Failure to follow OEM guidelines can result in non warrantable failure.

Within the first week of use, recheck the installation of the PTO. Check for leaks and loose mounting hardware (studs, cap screws, nuts). Recheck the cable or lever connections for proper adjustment and tighten any loose connections. At regular maintenance intervals, check adjustments and lubricate moving parts, tighten and repair the connections, mounting hardware, cable or lever linkage. Refer to OEM owners manual for regular maintenance intervals.

****By signing below I acknowledge that I have reviewed the specs above and confirmed they are correct. I understand that once my order is placed and sent into production that I will not be able to make changes to the order.**

I assume full ownership of the body once production begins.

Due to the current volatility of the metals market, effective February 23, 2021 quotes will be valid for 7 days.

X _____

TRUCK YEAR/MAKE/MODEL _____ CLEAR CT: _____

VIN _____ TRANS _____

ETA _____ DUMP BODY COLOR _____

****Pto switch in dash is recommended for all automatic or automated transmissions.****

****Tractor valve must be in cab for glads to be plumbed ****

****Verify ship to address on quote.****

Gross Sales:	\$	33,875.55
Order Disc	\$	1,546.93
Sale Amount:	\$	32,328.62
Freight:	\$	-
Sales Tax:	\$	-
FET Charges:	\$	-
Total Amount:	\$	32,328.62



**CONTRACT AMENDMENT # 5
EXTENSION # 1**

This amendment by and between the Contractor and State Entity defined below shall be effective as of the date this Amendment is fully executed.

STATE OF GEORGIA CONTRACT	
State Entity's Name:	Department of Administrative Services
Contractor's Full Legal Name:	Peach State Truck Centers, LLC
Contract No.:	99999-SPD-SPD0000155-0007
Solicitation Title/Event Name:	Truck Chassis and Truck Bodies
Contract Award Date:	07/17/2018
Current Contract Term:	09-01-2022 – 08/31/2023

BACKGROUND AND PURPOSE. The Contract is in effect through the Current Term provided above. The parties hereto now desire to amend the contract to extend for an additional term of twelve months.

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties do hereby agree as follows:

1. **CONTRACT EXTENSION.** The parties hereby agree that the contract will be extended for an additional period of time as follows:

NEW CONTRACT TERM	
Beginning Date of New Contract Term:	09//01/2023
End Date of New Contract Term:	08/31/2024

Revised 7/1/15

SPD-CP010

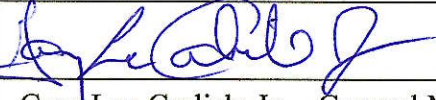
CONTRACT NUMBER: 99999-SPD-SPD0000155-0007

The parties agree the contract will expire at midnight on the date defined as the "End Date of the New Contract Term" unless the parties agree to extend the contract for an additional period of time.

2. SUCCESSORS AND ASSIGNS. This Amendment shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties hereto.
3. ENTIRE AGREEMENT. Except as expressly modified by this Amendment, the contract shall be and remain in full force and effect in accordance with its terms and shall constitute the legal, valid, binding and enforceable obligations to the parties. This Amendment and the contract (including any written amendments thereto), collectively, are the complete agreement of the parties and supersede any prior agreements or representations, whether oral or written, with respect thereto. Should the State of Georgia (DOAS) enter into a new contract for these products and/or services, during the term of this Extension, the new contract shall supersede this Extension.

IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed by their authorized representatives.

CONTRACTOR

Contractor's Full Legal Name: (PLEASE TYPE OR PRINT)	Peach State Truck Centers LLC.
Authorized Signature:	
Printed Name and Title of Person Signing:	Gary Lee Carlisle Jr. – General Manager
Date:	05/24/2023
Company Address:	6535 Crescent Drive Norcross, Ga 30071

STATE ENTITY

Authorized Signature:	
Printed Name and Title of Person Signing:	Jim Barnaby Deputy Commissioner State Purchasing Division
Date:	6/9/2023
Company Address:	200 Piedmont Avenue, S.E., Suite 1302, West Tower Atlanta, Georgia 30334-9010



Statewide Information Sheet

Statewide Contract Number		99999-001-SPD00000155		
Name of Contract	Truck Chassis and Truck Bodies			
Effective Date	08/08/2018	Effective Date	08/31/2024	
Contract Table of Contents				
Vendors Awarded	7	Contract Information:	Mandatory Contract	
Contract Information for Vendor			Page Number	
Rush Truck Center of Ga, Inc.			2	
MHC Kenworth-Atlanta			3	
Hardy Chevrolet, Inc.			4	
Hardy Family Ford, Inc.			5	
Wade Ford, Inc			6	
Peach State Truck Centers, LLC.			7	
Additional Contract Information				
General Contract Information			8	
Specifications			9	
Pricing			10	
Changes/Renewals/Extension			11	



Vendor Information Sheet

Contract Information	
Statewide Contract Number	99999-SPD-SPD000155-0001
PeopleSoft Vendor Number	0000496074
Vendor Name & Address	
Rush Truck Centers of GA, Inc. 2560 Moreland Avenue Atlanta, GA 30315	
Contract Administrator	
Kurt Hohlstein hohlsteinw@rushenterprises.com Telephone: 678-420-7530 Fax: 678-420-7694	
Contact Details	
Ordering Information	Fleet Manager 2560 Moreland Avenue Atlanta, GA 30315
Remitting Information	<u>Rush Truck Centers of GA</u> <u>Fleet Manager</u> <u>2560 Moreland Avenue</u> <u>Atlanta, Georgia 30315</u>
Delivery Days	Determined at time of order
Discounts	None
Payment Terms	Net 30 Days
Bid Offer includes	State and Local Government
Acceptable payment method	Purchase Order



Vendor Information Sheet

Contract Information	
Statewide Contract Number	99999-SPD-SPD0000155-0002
PeopleSoft Vendor Number	0000445640
Vendor Name & Address	
MHC Kenworth-Atlanta 5860 Riverview Road Mableton, GA 30126	
Contract Administrator	
Bryon Franklin New Truck Sales byron.franklin@mhc.com Telephone: 706-847-0480 Fax: 404-691-0057	
Contact Details	
Ordering Information	MHC Kenworth-Atlanta Bryon Franklin 5860 Riverview Road Mableton, GA 30126
Remitting Information	MHC Kenworth-Atlanta 5860 Riverview Road Mableton, GA 30126
Delivery Days	Determined at time of order
Discounts	None
Payment Terms	Net 30 Days
Bid Offer includes	State and Local Government
Acceptable payment method	Purchase Order



Vendor Information Sheet

Contract Information	
Statewide Contract Number	99999-SPD-SPD000155-0003
PeopleSoft Vendor Number	0000066877
Vendor Name & Address	
Hardy Chevrolet, Inc. 1249 Charles Hardy Parkway Dallas, GA 30157	
Contract Administrator	
Juan Lizano jlizano@hardyautomotive.com Telephone: 770-445-9411 X 198 Fax: 770-445-9659	
Contact Details	
Ordering Information	Juan Lizano GM Fleet Manager jlizano@hardyautomotive.com Telephone: 770-445-9411 X 198 Fax: 770-445-9659
Remitting Information	Hardy Chevrolet, Inc. 1249 Charles Hardy Parkway Dallas, GA 30157
Delivery Days	Determined at time of order
Discounts	None
Payment Terms	Net 30 Days
Bid Offer includes	State and Local Government
Acceptable payment method	Purchase Order



Vendor Information Sheet

Contract Information	
Statewide Contract Number	99999-SPD-SPD0000155-0005
PeopleSoft Vendor Number	0000012021
Vendor Name & Address	
Hardy Family Ford 1249 Charles Hardy Parkway Dallas, GA 30157	
Contract Administrator	
Alex Arnold aarnold@hardyautomotive.com Telephone: 770-445-8891 X 206 Fax: 770-445-9659	
Contact Details	
Ordering Information	Alex Arnold aarnold@hardyautomotive.com Telephone: 770-445-8891 X 206 Fax: 770-445-9659
Remitting Information	Hardy Family Ford, Inc. 1249 Charles Hardy Parkway Dallas, GA 30157
Delivery Days	Determined at time of order
Discounts	None
Payment Terms	Net 30 Days
Bid Offer includes	State and Local Government
Acceptable payment method	Purchase Order



Vendor Information Sheet

Contract Information	
Statewide Contract Number	99999-SPD-SPD0000155-0006
PeopleSoft Vendor Number	0000011786
Vendor Name & Address	
Wade Ford Inc 38600 South Cobb Drive Smyrna, GA 30080 TIN: 58-1544317	
Contract Administrator	
Roger Moore 678-460-3881 rmoore@wade.com	
Contact Details	
Ordering Information	Wade Ford Inc 38600 South Cobb Drive Smyrna, GA 30080
Remitting Information	<u>Fleet and Government Sales</u> <u>3680 South Cobb Drive</u> <u>Smyrna, Georgia 30080</u>
Delivery Days	Orders will be shipped within 120 days after receipt of Purchase Order
Discounts	<u>Determined at time of order</u>
Payment Terms	Net 30 Days
Bid Offer includes	State and Local Government
Acceptable payment method	Purchase Ordere



Vendor Information Sheet

Contract Information	
Statewide Contract Number	99999-SPD-SPD0000155-0007
PeopleSoft Vendor Number	0000010849
Vendor Name & Address	
Peach State Truck Centers 6535 Crescent Drive Norcross, GA 30071	
Contract Administrator	
Joshua Little Government Sales Manager jlittle@peachstatetrucks.com Telephone: 678-476-5660 Fax: 770-449-1136	
Contact Details	
Ordering Information	Government Sales Manager 6535 Crescent Drive Norcross, Georgia 30071
Remitting Information	<u>Government Sales Manager</u> <u>6535 Crescent Drive</u> <u>Norcross, Georgia 30071</u>
Delivery Days	Determined at time of order
Discounts	None
Payment Terms	Net 30 Days
Bid Offer includes	State and Local Government
Acceptable payment method	Purchase Order



General Contract Information:

This contract provides a variety of Truck Chassis and Truck Bodies in the following Gross Vehicle Weight Rating (GVWR) categories: 12,500 GVWR, 15,000 GVWR, 19,500 GVWR, 19,500 GVWR DOT HERO, 26,000 GVWR, 36,000 GVWR, 52,000 GVWR, and 56,000 GVWR.

Each awarded supplier provided Truck Bodies with their pricing sheets. For a description and price of the available bodies per GVWR on each awarded pricing sheet for that weight category. To find the bodies available, review the suppliers pricing sheet that are linked to the pricing pages.



Specifications

See Specifications in Team Georgia Marketplace (TGM)
TGM



Pricing:

See Pricing Sheets in Team Georgia Marketplace (TGM)



Renewals/Extensions:

Base Term: 8/8/2018 – 8/31/2019

Renewal #1: 9/1/2019-8/31/2020

Renewal #2: 9/1/2020-8/31/2021

Renewal #3: 9/1/2021-8/31/2022

Renewal #4: 9/1/2022-8/31/2023

Changes:

Akins Ford did not renew this contract for FY23.



STAFF REPORT

Department: Information Technology
Submitted By: Adam Montgomery
Meeting Date: July 17, 2023

AGENDA ITEM:

Geographic Information System (GIS) Enterprise Agreement and Annual Subscription with Environmental Systems Research Institute, Inc.

Consideration of approval of the procurement of the enterprise agreement annual subscription from Environmental Systems Research Institute, Inc. (ESRI) for three years at a fixed cost that is renewed annually in the amount of \$62,375.00, and authorize the Mayor to execute all necessary documents.

STAFF RECOMMENDATION:

Approve the procurement of the enterprise agreement annual subscription from Environmental Systems Research Institute, Inc. (ESRI) for three years at a fixed cost that is renewed annually in the amount of \$62,375.00, and authorize the Mayor to execute all necessary documents.

BUDGET & PROCUREMENT:

BUDGETED ITEM: YES

FISCAL IMPACT: NO

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: YES

TOTAL PROJECT COST:

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
IT Prof Services/523900	\$62,375.00

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
IT Prof Services/523900	\$62,375.00

ITEM DESCRIPTION:

This agreement allows the City to deploy as many licenses to desktops and servers as needed to support the GIS needs of the City, including support for several systems that use location-based information. This is the first year of a three-year agreement at a fixed cost that is renewed annually.

This Environmental Systems Research Institute, Inc. (ESRI) enterprise agreement annual subscription is funded in the 2024 budget. A single quote is provided because ESRI is the only provider of the ESRI annual subscription.

ALTERNATIVES:

There are no viable alternatives, as Environmental Systems Research Institute is the only provider of the ESRI GIS subscription.

ATTACHMENTS:

1. FY24 ESRI Contract and Agreement



Environmental Systems Research Institute, Inc.
380 New York St
Redlands, CA 92373-8100
Phone: (909) 793-2853
DUNS Number: 06-313-4175 CAGE Code: 0AMS3

Quotation # Q-485663

Date: June 29, 2023

Customer # 41131 Contract #

City of Alpharetta
Information Technology Dept
2 Park Plz Rm 226
Alpharetta, GA 30009-3680

ATTENTION: Steven Wardrup
PHONE: (678) 297-6027
EMAIL: swardrup@alpharetta.ga.us

To expedite your order, please attach a copy of this quotation to your purchase order.
Quote is valid from: 5/25/2023 To: 8/23/2023

Material	Qty	Term	Unit Price	Total
168179	1	Year 1	\$56,700.00	\$56,700.00
Populations of 50,001 to 100,000 Small Government Enterprise Agreement Annual Subscription				
168179	1	Year 2	\$56,700.00	\$56,700.00
Populations of 50,001 to 100,000 Small Government Enterprise Agreement Annual Subscription				
168179	1	Year 3	\$56,700.00	\$56,700.00
Populations of 50,001 to 100,000 Small Government Enterprise Agreement Annual Subscription				
168441	1	Year 1	\$5,675.00	\$5,675.00
ArcGIS GeoEvent Server Populations of 50,001 to 100,000 Small Government Enterprise Agreement Annual Subscription				
168441	1	Year 2	\$5,675.00	\$5,675.00
ArcGIS GeoEvent Server Populations of 50,001 to 100,000 Small Government Enterprise Agreement Annual Subscription				
168441	1	Year 3	\$5,675.00	\$5,675.00
ArcGIS GeoEvent Server Populations of 50,001 to 100,000 Small Government Enterprise Agreement Annual Subscription				

Esri may charge a fee to cover expenses related to any customer requirement to use a proprietary vendor management, procurement, or invoice program.

For questions contact: Tyler Nuttall	Email: tnuttall@esri.com	Phone: (909) 793-2853 x5410
The items on this quotation are subject to and governed by the terms of this quotation, the most current product specific scope of use document found at https://assets.esri.com/content/dam/esrisites/media/legal/product-specific-terms-of-use/e300.pdf, and your applicable signed agreement with Esri. If no such agreement covers any item quoted, then Esri's standard terms and conditions found at https://go.esri.com/MAPS apply to your purchase of that item. If any item is quoted with a multi-year payment schedule, then unless otherwise stated in this quotation, Customer is required to make all payments without right of cancellation. Third-party data sets included in a quotation as separately licensed items will only be provided and invoiced if Esri is able to provide such data and will be subject to the applicable third-party's terms and conditions. If Esri is unable to provide any such data set, Customer will not be responsible for any further payments for the data set. US Federal government entities and US government prime contractors authorized under FAR 51.1 may purchase under the terms of Esri's GSA Federal Supply Schedule. Supplemental terms and conditions found at https://www.esri.com/en-us/legal/terms/state-supplemental apply to some US state and local government purchases. All terms of this quotation will be incorporated into and become part of any additional agreement regarding Esri's offerings. Acceptance of this quotation is limited to the terms of this quotation. Esri objects to and expressly rejects any different or additional terms contained in any purchase order, offer, or confirmation sent to or to be sent by buyer. Unless prohibited by law, the quotation information is confidential and may not be copied or released other than for the express purpose of system selection and purchase/license. The information may not be given to outside parties or used for any other purpose without consent from Esri. Delivery is FOB Origin for customers located in the USA.		



Environmental Systems Research Institute, Inc.
380 New York St
Redlands, CA 92373-8100
Phone: (909) 793-2853
DUNS Number: 06-313-4175 CAGE Code: 0AMS3

*To expedite your order, please attach a copy of
this quotation to your purchase order.
Quote is valid from: 5/25/2023 To: 8/23/2023*

Quotation # Q-485663

Date: June 29, 2023

Customer # 41131 Contract #

City of Alpharetta
Information Technology Dept
2 Park Plz Rm 226
Alpharetta, GA 30009-3680

ATTENTION: Steven Wardrup
PHONE: (678) 297-6027
EMAIL: swardrup@alpharetta.ga.us

Subtotal:	\$187,125.00
Sales Tax:	\$0.00
Estimated Shipping and Handling (2 Day Delivery):	\$0.00
Contract Price Adjust:	\$0.00
Total:	\$187,125.00

Esri may charge a fee to cover expenses related to any customer requirement to use a proprietary vendor management, procurement, or invoice program.

For questions contact:

Tyler Nuttall

Email:

tnuttall@esri.com

Phone:

(909) 793-2853 x5410

The items on this quotation are subject to and governed by the terms of this quotation, the most current product specific scope of use document found at <https://assets.esri.com/content/dam/esrisites/media/legal/product-specific-terms-of-use/e300.pdf>, and your applicable signed agreement with Esri. If no such agreement covers any item quoted, then Esri's standard terms and conditions found at <https://go.esri.com/MAPS> apply to your purchase of that item. If any item is quoted with a multi-year payment schedule, then unless otherwise stated in this quotation, Customer is required to make all payments without right of cancellation. Third-party data sets included in a quotation as separately licensed items will only be provided and invoiced if Esri is able to provide such data and will be subject to the applicable third-party's terms and conditions. If Esri is unable to provide any such data set, Customer will not be responsible for any further payments for the data set. US Federal government entities and US government prime contractors authorized under FAR 51.1 may purchase under the terms of Esri's GSA Federal Supply Schedule. Supplemental terms and conditions found at <https://www.esri.com/en-us/legal/terms/state-supplemental> apply to some US state and local government purchases. All terms of this quotation will be incorporated into and become part of any additional agreement regarding Esri's offerings. Acceptance of this quotation is limited to the terms of this quotation. Esri objects to and expressly rejects any different or additional terms contained in any purchase order, offer, or confirmation sent to or to be sent by buyer. Unless prohibited by law, the quotation information is confidential and may not be copied or released other than for the express purpose of system selection and purchase/license. The information may not be given to outside parties or used for any other purpose without consent from Esri. Delivery is FOB Origin for customers located in the USA.

Esri Use Only:

Cust. Name _____

Cust. # _____

PO # _____

Esri Agreement # _____



SMALL ENTERPRISE AGREEMENT COUNTY AND MUNICIPALITY GOVERNMENT (E214-3)

This Agreement is by and between the organization identified in the Quotation ("**Customer**") and **Environmental Systems Research Institute, Inc. ("Esri")**.

This Agreement sets forth the terms for Customer's use of Products and incorporates by reference (i) the Quotation and (ii) the Master Agreement. Should there be any conflict between the terms and conditions of the documents that comprise this Agreement, the order of precedence for the documents shall be as follows: (i) the Quotation, (ii) this Agreement, and (iii) the Master Agreement. This Agreement shall be governed by and construed in accordance with the laws of the state in which Customer is located without reference to conflict of laws principles, and the United States of America federal law shall govern in matters of intellectual property. The modifications and additional rights granted in this Agreement apply only to the Products listed in Table A.

Table A
List of Products

Uncapped Quantities**Desktop Software and Extensions (Single Use)**

ArcGIS Desktop Advanced

ArcGIS Desktop Standard

ArcGIS Desktop Basic

ArcGIS Desktop Extensions: ArcGIS 3D Analyst,
ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst,
ArcGIS Publisher, ArcGIS Network Analyst, ArcGIS
Schematics, ArcGIS Workflow Manager, ArcGIS Data
Reviewer

Enterprise Software and Extensions

ArcGIS Enterprise (Advanced and Standard)

ArcGIS Monitor

ArcGIS Enterprise Extensions: ArcGIS 3D Analyst,
ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst,
ArcGIS Network Analyst, ArcGIS Schematics, ArcGIS
Workflow Manager, ArcGIS Data Reviewer

Enterprise Additional Capability Servers

ArcGIS Image Server

Developer Tools

ArcGIS Runtime Standard

ArcGIS Runtime Analysis Extension

Limited Quantities

One (1) Professional subscription to ArcGIS Developer

Two (2) ArcGIS CityEngine Single Use Licenses

250 ArcGIS Online Viewers

250 ArcGIS Online Creators

37,500 ArcGIS Online Service Credits

250 ArcGIS Enterprise Creators

5 ArcGIS Insights in ArcGIS Enterprise

5 ArcGIS Insights in ArcGIS Online

50 ArcGIS Location Sharing for ArcGIS Enterprise

50 ArcGIS Location Sharing for ArcGIS Online

4 ArcGIS Parcel Fabric User Type Extensions (Enterprise)

4 ArcGIS Utility Network User Type Extensions (Enterprise)

4 ArcGIS Trace Network User Type Extensions (Enterprise)

OTHER BENEFITS

Number of Esri User Conference registrations provided annually	4
Number of Tier 1 Help Desk individuals authorized to call Esri	4
Maximum number of sets of backup media, if requested*	2
Five percent (5%) discount on all individual commercially available instructor-led training classes at Esri facilities purchased outside this Agreement	

*Additional sets of backup media may be purchased for a fee

Customer may accept this Agreement by signing and returning the whole Agreement with (i) the Quotation attached, (ii) a purchase order, or (iii) another document that matches the Quotation and references this Agreement ("**Ordering Document**"). **ADDITIONAL OR CONFLICTING TERMS IN CUSTOMER'S PURCHASE ORDER OR OTHER DOCUMENT WILL NOT APPLY, AND THE TERMS OF THIS AGREEMENT WILL GOVERN.** This Agreement is effective as of the date of Esri's receipt of an Ordering Document, unless otherwise agreed to by the parties ("**Effective Date**").

Term of Agreement: Three (3) years

This Agreement supersedes any previous agreements, proposals, presentations, understandings, and arrangements between the parties relating to the licensing of the Products. Except as provided in Article 4—Product Updates, no modifications can be made to this Agreement.

Accepted and Agreed:

(Customer)

By: _____
Authorized Signature

Printed Name: _____

Title: _____

Date: _____

CUSTOMER CONTACT INFORMATION

Contact: _____

Telephone: _____

Address: _____

Fax: _____

City, State, Postal Code: _____

E-mail: _____

Country: _____

Quotation Number (if applicable): _____

1.0—ADDITIONAL DEFINITIONS

In addition to the definitions provided in the Master Agreement, the following definitions apply to this Agreement:

"Case" means a failure of the Software or Online Services to operate according to the Documentation where such failure substantially impacts operational or functional performance.

"Deploy", "Deployed" and "Deployment" mean to redistribute and install the Products and related Authorization Codes within Customer's organization(s).

"Fee" means the fee set forth in the Quotation.

"Maintenance" means Tier 2 Support, Product updates, and Product patches provided to Customer during the Term of Agreement.

"Master Agreement" means the applicable master agreement for Esri Products incorporated by this reference that is (i) found at <https://www.esri.com/en-us/legal/terms/full-master-agreement> and available in the installation process requiring acceptance by electronic acknowledgment or (ii) a signed Esri master agreement or license agreement that supersedes such electronically acknowledged master agreement.

"Product(s)" means the products identified in Table A—List of Products and any updates to the list Esri provides in writing.

"Quotation" means the offer letter and quotation provided separately to Customer.

"Technical Support" means the technical assistance for attempting resolution of a reported Case through error correction, patches, hot fixes, workarounds, replacement deliveries, or any other type of Product corrections or modifications.

"Tier 1 Help Desk" means Customer's point of contact(s) to provide all Tier 1 Support within Customer's organization(s).

"Tier 1 Support" means the Technical Support provided by the Tier 1 Help Desk.

"Tier 2 Support" means the Esri Technical Support provided to the Tier 1 Help Desk when a Case cannot be resolved through Tier 1 Support.

2.0—ADDITIONAL GRANT OF LICENSE

2.1 Grant of License. Subject to the terms and conditions of this Agreement, Esri grants to Customer a personal, nonexclusive, nontransferable license solely to use, copy, and Deploy quantities of the Products listed in Table A—List of Products for the Term of Agreement (i) for the applicable Fee and (ii) in accordance with the Master Agreement.

2.2 Consultant Access. Esri grants Customer the right to permit Customer's consultants or contractors to use the Products exclusively for Customer's benefit. Customer will be solely responsible for compliance by consultants and contractors with this Agreement and will ensure that the consultant or contractor discontinues use of Products upon completion of work for Customer. Access to or use of Products by consultants or contractors not exclusively for Customer's benefit is prohibited. Customer may not permit its consultants or contractors to install Software or Data on consultant, contractor, or third-party computers or remove Software or Data from Customer locations, except for the purpose of hosting the Software or Data on Contractor servers for the benefit of Customer.

3.0—TERM, TERMINATION, AND EXPIRATION

3.1 Term. This Agreement and all licenses hereunder will commence on the Effective Date and continue for the duration identified in the Term of Agreement, unless this Agreement is terminated earlier as provided herein. Customer is only authorized to use Products during the Term of Agreement. For an Agreement with a limited term, Esri does not grant Customer an indefinite or a perpetual license to Products.

3.2 No Use upon Agreement Expiration or Termination. All Product licenses, all Maintenance, and Esri User Conference registrations terminate upon expiration or termination of this Agreement.

3.3 Termination for a Material Breach. Either party may terminate this Agreement for a material breach by the other party. The breaching party will have thirty (30) days from the date of written notice to cure any material breach.

3.4 Termination for Lack of Funds. For an Agreement with government or government-

owned entities, either party may terminate this Agreement before any subsequent year if Customer is unable to secure funding through the legislative or governing body's approval process.

3.5 Follow-on Term. If the parties enter into another agreement substantially similar to this Agreement for an additional term, the effective date of the follow-on agreement will be the day after the expiration date of this Agreement.

4.0—PRODUCT UPDATES

4.1 Future Updates. Esri reserves the right to update the list of Products in Table A—List of Products by providing written notice to Customer. Customer may continue to use all Products that have been Deployed, but support and upgrades for deleted items may not be available. As new Products are incorporated into the standard program, they will be offered to Customer via written notice for incorporation into the Products schedule at no additional charge. Customer's use of new or updated Products requires Customer to adhere to applicable additional or revised terms and conditions in the Master Agreement.

4.2 Product Life Cycle. During the Term of Agreement, some Products may be retired or may no longer be available to Deploy in the identified quantities. Maintenance will be subject to the individual Product Life Cycle Support Status and Product Life Cycle Support Policy, which can be found at <https://support.esri.com/en/other-resources/product-life-cycle>. Updates for Products in the mature and retired phases may not be available. Customer may continue to use Products already Deployed, but Customer will not be able to Deploy retired Products.

5.0—MAINTENANCE

The Fee includes standard maintenance benefits during the Term of Agreement as specified in the most current applicable Esri Maintenance and Support Program document (found at <https://www.esri.com/en-us/legal/terms/maintenance>). At Esri's sole discretion, Esri may make patches, hot fixes, or updates available for download. No Software other

than the defined Products will receive Maintenance. Customer may acquire maintenance for other Software outside this Agreement.

a. Tier 1 Support

1. Customer will provide Tier 1 Support through the Tier 1 Help Desk to all Customer's authorized users.
2. The Tier 1 Help Desk will be fully trained in the Products.
3. At a minimum, Tier 1 Support will include those activities that assist the user in resolving how-to and operational questions as well as questions on installation and troubleshooting procedures.
4. The Tier 1 Help Desk will be the initial point of contact for all questions and reporting of a Case. The Tier 1 Help Desk will obtain a full description of each reported Case and the system configuration from the user. This may include obtaining any customizations, code samples, or data involved in the Case.
5. If the Tier 1 Help Desk cannot resolve the Case, an authorized Tier 1 Help Desk individual may contact Tier 2 Support. The Tier 1 Help Desk will provide support in such a way as to minimize repeat calls and make solutions to problems available to Customer's organization.
6. Tier 1 Help Desk individuals are the only individuals authorized to contact Tier 2 Support. Customer may change the Tier 1 Help Desk individuals by written notice to Esri.

b. Tier 2 Support

1. Tier 2 Support will log the calls received from Tier 1 Help Desk.
2. Tier 2 Support will review all information collected by and received from the Tier 1 Help Desk including preliminary documented troubleshooting provided by the Tier 1 Help Desk when Tier 2 Support is required.
3. Tier 2 Support may request that Tier 1 Help Desk individuals provide verification of information, additional information, or answers to additional questions to

supplement any preliminary information gathering or troubleshooting performed by Tier 1 Help Desk.

4. Tier 2 Support will attempt to resolve the Case submitted by Tier 1 Help Desk.
5. When the Case is resolved, Tier 2 Support will communicate the information to Tier 1 Help Desk, and Tier 1 Help Desk will disseminate the resolution to the user(s).

6.0—ENDORSEMENT AND PUBLICITY

This Agreement will not be construed or interpreted as an exclusive dealings agreement or Customer's endorsement of Products. Either party may publicize the existence of this Agreement.

7.0—ADMINISTRATIVE REQUIREMENTS

7.1 OEM Licenses. Under Esri's OEM or Solution OEM programs, OEM partners are authorized to embed or bundle portions of Esri products and services with their application or service. OEM partners' business model, licensing terms and conditions, and pricing are independent of this Agreement. Customer will not seek any discount from the OEM partner or Esri based on the availability of Products under this Agreement. Customer will not decouple Esri products or services from the OEM partners' application or service.

7.2 Annual Report of Deployments. At each anniversary date and ninety (90) calendar days prior to the expiration of this Agreement, Customer will provide Esri with a written report detailing all Deployments. Upon request, Customer will provide records sufficient to verify the accuracy of the annual report.

8.0—ORDERING, ADMINISTRATIVE PROCEDURES, DELIVERY, AND DEPLOYMENT

8.1 Orders, Delivery, and Deployment

- a. Upon the Effective Date, Esri will invoice Customer and provide Authorization Codes to activate the nondestructive copy protection program that enables Customer to download,

operate, or allow access to the Products. If this is a multi-year Agreement, Esri may invoice the Fee up to thirty (30) calendar days before the annual anniversary date for each year.

- b. Undisputed invoices will be due and payable within thirty (30) calendar days from the date of invoice. Esri reserves the right to suspend Customer's access to and use of Products if Customer fails to pay any undisputed amount owed on or before its due date. Esri may charge Customer interest at a monthly rate equal to the lesser of one percent (1.0%) per month or the maximum rate permitted by applicable law on any overdue fees plus all expenses of collection for any overdue balance that remains unpaid ten (10) days after Esri has notified Customer of the past-due balance.

- c. Esri's federal ID number is 95-2775-732.

- d. If requested, Esri will ship backup media to the ship-to address identified on the Ordering Document, FOB Destination, with shipping charges prepaid. Customer acknowledges that should sales or use taxes become due as a result of any shipments of tangible media, Esri has a right to invoice and Customer will pay any such sales or use tax associated with the receipt of tangible media.

8.2 Order Requirements. Esri does not require Customer to issue a purchase order. Customer may submit a purchase order in accordance with its own process requirements, provided that if Customer issues a purchase order, Customer will submit its initial purchase order on the Effective Date. If this is a multi-year Agreement, Customer will submit subsequent purchase orders to Esri at least thirty (30) calendar days before the annual anniversary date for each year.

- a. All orders pertaining to this Agreement will be processed through Customer's centralized point of contact.
- b. The following information will be included in each Ordering Document:
 - (1) Customer name; Esri customer number, if known; and bill-to and ship-to addresses
 - (2) Order number
 - (3) Applicable annual payment due

9.0—MERGERS, ACQUISITIONS, OR DIVESTITURES

If Customer is a commercial entity, Customer will notify Esri in writing in the event of (i) a consolidation, merger, or reorganization of Customer with or into another corporation or entity; (ii) Customer's acquisition of another entity; or (iii) a transfer or sale of all or part of Customer's organization (subsections i, ii, and iii, collectively referred to as "**Ownership Change**"). There will be no decrease in Fee as a result of any Ownership Change.

- 9.1 If an Ownership Change increases the cumulative program count beyond the maximum level for this Agreement, Esri reserves the right to increase the Fee or terminate this Agreement and the parties will negotiate a new agreement.
- 9.2 If an Ownership Change results in transfer or sale of a portion of Customer's organization, that portion of Customer's organization will transfer the Products to Customer or uninstall, remove, and destroy all copies of the Products.
- 9.3 This Agreement may not be assigned to a successor entity as a result of an Ownership Change unless approved by Esri in writing in advance. If the assignment to the new entity is not approved, Customer will require any successor entity to uninstall, remove, and destroy the Products. This Agreement will terminate upon such Ownership Change.

**AGREEMENT BETWEEN
ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE, INC. AND
CITY OF ALPHARETTA, GEORGIA**

Contract Addendum

This Contract Addendum supplements that certain Enterprise Agreement County and Municipal Government and Master Agreement between **ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE, INC.**, a foreign corporation (the “Contractor”), and **CITY OF ALPHARETTA** a Georgia municipal corporation (the “City”) (the “Agreement”) of even date herewith, to add the following provisions thereto:

1. Conflicting Provisions.

The provisions of this Contract Addendum supersede and control over any conflicting provisions written into the Agreement to which this Contract Addendum is attached.

2. Term of Agreement.

The term of this Agreement (“Term”) shall commence as of July 23, 2023, and the Agreement shall terminate on July 22, 2026 (provided that certain obligations will survive termination/expiration of this Agreement). As the Term of this Agreement is longer than one year, the Parties agree that this Agreement, as required by O.C.G.A. § 36-60-13, shall terminate absolutely and without further obligation on the part of City on July 22 of each calendar (contract) year of the Term, and further, that this Agreement shall automatically renew on July 23 of each subsequent calendar (contract) year absent City’s provision of written notice of non-renewal for lack of funds to Contractor at least five (5) days prior to the end of the then-current calendar (contract) year.

3. Nondiscrimination.

In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and all other provisions of Federal law, Contractor agrees that, during performance of this Agreement, Contractor, for itself, its assignees and successors in interest, will not discriminate against any employee or applicant for employment, any subcontractor, or any supplier because of race, color, creed, national origin, gender, age or disability. In addition, Contractor agrees to comply with all applicable implementing regulations and shall include the provisions of this Section in every subcontract for services contemplated under this Agreement.

4. **Confidentiality.**

Contractor acknowledges that City's disclosure of documentation is governed by Georgia's Open Records Act. Contractor further acknowledges that if Contractor submits records containing trade secret information, and if Contractor wishes to keep such records confidential, Contractor must submit and attach to such records an affidavit affirmatively declaring that specific information in the records constitutes trade secrets pursuant to Article 27 of Chapter 1 of Title 10. The Parties shall follow the requirements of O.C.G.A. § 50-18-72(a)(34) related thereto.

5. **Sovereign Immunity.**

Nothing contained in the Agreement shall be construed to be a waiver of City's sovereign immunity or any individual's qualified, good faith or official immunities. Ratification of this Agreement by a majority of the City Council shall authorize the Mayor to execute this Agreement on behalf of the City. Any provision of the Agreement requiring the City to indemnify the Contractor is only valid to the extent allowed by Georgia law.

6. **Governing Law.**

This Agreement is governed by the laws of the State of Georgia to the extent that such laws apply to the City as municipality of Georgia and as a party to this Agreement.

7. **Force Majeure.**

Neither City nor Contractor shall be liable for its respective non-negligent or non-willful failure to perform or shall be deemed in default with respect to the failure to perform (or cure a failure to perform) any of its respective duties or obligations under this Agreement or for any delay in such performance due to: (i) any cause beyond its respective reasonable control; (ii) any act of God; (iii) any change in applicable governmental rules or regulations rendering the performance of any portion of this Agreement legally impossible; (iv) earthquake, fire, explosion or flood; (v) strike or labor dispute, excluding strikes or labor disputes by employees and/or agents of Contractor; (vi) delay or failure to act by any governmental or military body; or (vii) any war, hostility, embargo, sabotage, civil disturbance, riot, insurrection or invasion. In such event, the time for performance shall be extended by an amount of time equal to the period of delay caused by such acts, and all other obligations shall remain intact.

8. **Assignment of Agreement; Subcontractors.**

Except for a sale of all or substantially all of the assets of Esri, neither party may assign, sublicense, or transfer their rights or delegate their obligations under this Agreement, in whole or in part without the prior written consent of the other party, which consent shall not be unreasonably withheld. Any assignment, transfer or delegation of rights, duties or obligations hereunder in contravention of the preceding sentence shall be null and void. This Agreement shall be binding upon and shall inure to the benefit of, and be enforceable by, the parties to this Agreement and their respective successors and permitted assigns.

9. Employment of Unauthorized Aliens Prohibited – E-Verify Affidavits.

Pursuant to O.C.G.A. § 13-10-91, City shall not enter into a contract  the physical performance of services unless Contractor shall provide evidence of compliance with the E-Verify program and agrees that Contractor will continue to use the federal work authorization program throughout the contract period. Further, Contractor hereby agrees to comply with the requirements of the federal Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603, O.C.G.A. § 13-10-91, and Georgia Department of Labor Rule 300-10-1-.02.

Contractor asserts that the “500 or more employees” employee-number category is applicable to it.

The above requirements shall be in addition to the requirements of state and federal law and shall be construed to be in conformity with those laws.

(Signatures on following page)

IN WITNESS WHEREOF, City and Contractor have executed this Agreement, including this Contract Addendum, effective as of this _____ day of _____, 2023.

**ENVIRONMENTAL SYSTEMS RESEARCH
INSTITUTE, INC.,
a foreign corporation**

By: _____
Name (printed): _____
Title (printed): _____

ATTEST:

By: _____
Name (printed): _____
Title (printed): _____

CITY OF ALPHARETTA, GEORGIA

By: _____
Jim Gilvin, Mayor

Approved as to substance:

By: _____
Chris Lagerbloom, City Administrator

Approved as to form:
JARRARD & DAVIS, LLP

By: _____
Molly Esswein, City Attorney

Company ID Number: 121529

**THE E-VERIFY
MEMORANDUM OF UNDERSTANDING
FOR EMPLOYERS**

**ARTICLE I
PURPOSE AND AUTHORITY**

The parties to this agreement are the Department of Homeland Security (DHS) and the Environmental Systems Research Institute Inc. (Employer). The purpose of this agreement is to set forth terms and conditions which the Employer will follow while participating in E-Verify.

E-Verify is a program that electronically confirms an employee's eligibility to work in the United States after completion of Form I-9, Employment Eligibility Verification (Form I-9). This Memorandum of Understanding (MOU) explains certain features of the E-Verify program and describes specific responsibilities of the Employer, the Social Security Administration (SSA), and DHS.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note). The Federal Acquisition Regulation (FAR) Subpart 22.18, "Employment Eligibility Verification" and Executive Order 12989, as amended, provide authority for Federal contractors and subcontractors (Federal contractor) to use E-Verify to verify the employment eligibility of certain employees working on Federal contracts.

**ARTICLE II
RESPONSIBILITIES**

A. RESPONSIBILITIES OF THE EMPLOYER

1. The Employer agrees to display the following notices supplied by DHS in a prominent place that is clearly visible to prospective employees and all employees who are to be verified through the system:
 - a. Notice of E-Verify Participation
 - b. Notice of Right to Work
2. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted about E-Verify. The Employer also agrees to keep such information current by providing updated information to SSA and DHS whenever the representatives' contact information changes.
3. The Employer agrees to grant E-Verify access only to current employees who need E-Verify access. Employers must promptly terminate an employee's E-Verify access if the employer is separated from the company or no longer needs access to E-Verify.

Company ID Number: 121529

4. The Employer agrees to become familiar with and comply with the most recent version of the E-Verify User Manual.

5. The Employer agrees that any Employer Representative who will create E-Verify cases will complete the E-Verify Tutorial before that individual creates any cases.

a. The Employer agrees that all Employer representatives will take the refresher tutorials when prompted by E-Verify in order to continue using E-Verify. Failure to complete a refresher tutorial will prevent the Employer Representative from continued use of E-Verify.

6. The Employer agrees to comply with current Form I-9 procedures, with two exceptions:

a. If an employee presents a "List B" identity document, the Employer agrees to only accept "List B" documents that contain a photo. (List B documents identified in 8 C.F.R. § 274a.2(b)(1)(B)) can be presented during the Form I-9 process to establish identity.) If an employee objects to the photo requirement for religious reasons, the Employer should contact E-Verify at 888-464-4218.

b. If an employee presents a DHS Form I-551 (Permanent Resident Card), Form I-766 (Employment Authorization Document), or U.S. Passport or Passport Card to complete Form I-9, the Employer agrees to make a photocopy of the document and to retain the photocopy with the employee's Form I-9. The Employer will use the photocopy to verify the photo and to assist DHS with its review of photo mismatches that employees contest. DHS may in the future designate other documents that activate the photo screening tool.

Note: Subject only to the exceptions noted previously in this paragraph, employees still retain the right to present any List A, or List B and List C, document(s) to complete the Form I-9.

7. The Employer agrees to record the case verification number on the employee's Form I-9 or to print the screen containing the case verification number and attach it to the employee's Form I-9.

8. The Employer agrees that, although it participates in E-Verify, the Employer has a responsibility to complete, retain, and make available for inspection Forms I-9 that relate to its employees, or from other requirements of applicable regulations or laws, including the obligation to comply with the antidiscrimination requirements of section 274B of the INA with respect to Form I-9 procedures.

a. The following modified requirements are the only exceptions to an Employer's obligation to not employ unauthorized workers and comply with the anti-discrimination provision of the INA: (1) List B identity documents must have photos, as described in paragraph 6 above; (2) When an Employer confirms the identity and employment eligibility of newly hired employee using E-Verify procedures, the Employer establishes a rebuttable presumption that it has not violated section 274A(a)(1)(A) of the Immigration and Nationality Act (INA) with respect to the hiring of that employee; (3) If the Employer receives a final nonconfirmation for an employee, but continues to employ that person, the Employer must notify DHS and the Employer is subject to a civil money penalty between \$550 and \$1,100 for each failure to notify DHS of continued employment following a final nonconfirmation; (4) If the Employer continues to employ an employee after receiving a final nonconfirmation, then the Employer is subject to a rebuttable presumption that it has knowingly

Company ID Number: 121529

employed an unauthorized alien in violation of section 274A(a)(1)(A); and (5) no E-Verify participant is civilly or criminally liable under any law for any action taken in good faith based on information provided through the E-Verify.

b. DHS reserves the right to conduct Form I-9 compliance inspections, as well as any other enforcement or compliance activity authorized by law, including site visits, to ensure proper use of E-Verify.

9. The Employer is strictly prohibited from creating an E-Verify case before the employee has been hired, meaning that a firm offer of employment was extended and accepted and Form I-9 was completed. The Employer agrees to create an E-Verify case for new employees within three Employer business days after each employee has been hired (after both Sections 1 and 2 of Form I-9 have been completed), and to complete as many steps of the E-Verify process as are necessary according to the E-Verify User Manual. If E-Verify is temporarily unavailable, the three-day time period will be extended until it is again operational in order to accommodate the Employer's attempting, in good faith, to make inquiries during the period of unavailability.

10. The Employer agrees not to use E-Verify for pre-employment screening of job applicants, in support of any unlawful employment practice, or for any other use that this MOU or the E-Verify User Manual does not authorize.

11. The Employer must use E-Verify for all new employees. The Employer will not verify selectively and will not verify employees hired before the effective date of this MOU. Employers who are Federal contractors may qualify for exceptions to this requirement as described in Article II.B of this MOU.

12. The Employer agrees to follow appropriate procedures (see Article III below) regarding tentative nonconfirmations. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending. Further, when employees contest a tentative nonconfirmation based upon a photo mismatch, the Employer must take additional steps (see Article III.B. below) to contact DHS with information necessary to resolve the challenge.

13. The Employer agrees not to take any adverse action against an employee based upon the employee's perceived employment eligibility status while SSA or DHS is processing the verification request unless the Employer obtains knowledge (as defined in 8 C.F.R. § 274a.1(l)) that the employee is not work authorized. The Employer understands that an initial inability of the SSA or DHS automated verification system to verify work authorization, a tentative nonconfirmation, a case in continuance (indicating the need for additional time for the government to resolve a case), or the finding of a photo mismatch, does not establish, and should not be interpreted as, evidence that the employee is not work authorized. In any of such cases, the employee must be provided a full and fair opportunity to contest the finding, and if he or she does so, the employee may not be terminated or suffer any adverse employment consequences based upon the employee's perceived employment eligibility status

Company ID Number: 121529

(including denying, reducing, or extending work hours, delaying or preventing training, requiring an employee to work in poorer conditions, withholding pay, refusing to assign the employee to a Federal contract or other assignment, or otherwise assuming that he or she is unauthorized to work) until and unless secondary verification by SSA or DHS has been completed and a final nonconfirmation has been issued. If the employee does not choose to contest a tentative nonconfirmation or a photo mismatch or if a secondary verification is completed and a final nonconfirmation is issued, then the Employer can find the employee is not work authorized and terminate the employee's employment. Employers or employees with questions about a final nonconfirmation may call E-Verify at 1-888-464-4218 (customer service) or 1-888-897-7781 (worker hotline).

14. The Employer agrees to comply with Title VII of the Civil Rights Act of 1964 and section 274B of the INA as applicable by not discriminating unlawfully against any individual in hiring, firing, employment eligibility verification, or recruitment or referral practices because of his or her national origin or citizenship status, or by committing discriminatory documentary practices. The Employer understands that such illegal practices can include selective verification or use of E-Verify except as provided in part D below, or discharging or refusing to hire employees because they appear or sound "foreign" or have received tentative nonconfirmations. The Employer further understands that any violation of the immigration-related unfair employment practices provisions in section 274B of the INA could subject the Employer to civil penalties, back pay awards, and other sanctions, and violations of Title VII could subject the Employer to back pay awards, compensatory and punitive damages. Violations of either section 274B of the INA or Title VII may also lead to the termination of its participation in E-Verify. If the Employer has any questions relating to the anti-discrimination provision, it should contact OSC at 1-800-255-8155 or 1-800-237-2515 (TDD).

15. The Employer agrees that it will use the information it receives from E-Verify only to confirm the employment eligibility of employees as authorized by this MOU. The Employer agrees that it will safeguard this information, and means of access to it (such as PINS and passwords), to ensure that it is not used for any other purpose and as necessary to protect its confidentiality, including ensuring that it is not disseminated to any person other than employees of the Employer who are authorized to perform the Employer's responsibilities under this MOU, except for such dissemination as may be authorized in advance by SSA or DHS for legitimate purposes.

16. The Employer agrees to notify DHS immediately in the event of a breach of personal information. Breaches are defined as loss of control or unauthorized access to E-Verify personal data. All suspected or confirmed breaches should be reported by calling 1-888-464-4218 or via email at E-Verify@dhs.gov. Please use "Privacy Incident – Password" in the subject line of your email when sending a breach report to E-Verify.

17. The Employer acknowledges that the information it receives from SSA is governed by the Privacy Act (5 U.S.C. § 552a(i)(1) and (3)) and the Social Security Act (42 U.S.C. 1306(a)). Any person who obtains this information under false pretenses or uses it for any purpose other than as provided for in this MOU may be subject to criminal penalties.

18. The Employer agrees to cooperate with DHS and SSA in their compliance monitoring and evaluation of E-Verify, which includes permitting DHS, SSA, their contractors and other agents, upon

Company ID Number: 121529

reasonable notice, to review Forms I-9 and other employment records and to interview it and its employees regarding the Employer's use of E-Verify, and to respond in a prompt and accurate manner to DHS requests for information relating to their participation in E-Verify.

19. The Employer shall not make any false or unauthorized claims or references about its participation in E-Verify on its website, in advertising materials, or other media. The Employer shall not describe its services as federally-approved, federally-certified, or federally-recognized, or use language with a similar intent on its website or other materials provided to the public. Entering into this MOU does not mean that E-Verify endorses or authorizes your E-Verify services and any claim to that effect is false.

20. The Employer shall not state in its website or other public documents that any language used therein has been provided or approved by DHS, USCIS or the Verification Division, without first obtaining the prior written consent of DHS.

21. The Employer agrees that E-Verify trademarks and logos may be used only under license by DHS/USCIS (see [M-795 \(Web\)](#)) and, other than pursuant to the specific terms of such license, may not be used in any manner that might imply that the Employer's services, products, websites, or publications are sponsored by, endorsed by, licensed by, or affiliated with DHS, USCIS, or E-Verify.

22. The Employer understands that if it uses E-Verify procedures for any purpose other than as authorized by this MOU, the Employer may be subject to appropriate legal action and termination of its participation in E-Verify according to this MOU.

B. RESPONSIBILITIES OF FEDERAL CONTRACTORS

1. If the Employer is a Federal contractor with the FAR E-Verify clause subject to the employment verification terms in Subpart 22.18 of the FAR, it will become familiar with and comply with the most current version of the E-Verify User Manual for Federal Contractors as well as the E-Verify Supplemental Guide for Federal Contractors.

2. In addition to the responsibilities of every employer outlined in this MOU, the Employer understands that if it is a Federal contractor subject to the employment verification terms in Subpart 22.18 of the FAR it must verify the employment eligibility of any "employee assigned to the contract" (as defined in FAR 22.1801). Once an employee has been verified through E-Verify by the Employer, the Employer may not create a second case for the employee through E-Verify.

a. An Employer that is not enrolled in E-Verify as a Federal contractor at the time of a contract award must enroll as a Federal contractor in the E-Verify program within 30 calendar days of contract award and, within 90 days of enrollment, begin to verify employment eligibility of new hires using E-Verify. The Employer must verify those employees who are working in the United States, whether or not they are assigned to the contract. Once the Employer begins verifying new hires, such verification of new hires must be initiated within three business days after the hire date. Once enrolled in E-Verify as a Federal contractor, the Employer must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

Company ID Number: 121529

b. Employers enrolled in E-Verify as a Federal contractor for 90 days or more at the time of a contract award must use E-Verify to begin verification of employment eligibility for new hires of the Employer who are working in the United States, whether or not assigned to the contract, within three business days after the date of hire. If the Employer is enrolled in E-Verify as a Federal contractor for 90 calendar days or less at the time of contract award, the Employer must, within 90 days of enrollment, begin to use E-Verify to initiate verification of new hires of the contractor who are working in the United States, whether or not assigned to the contract. Such verification of new hires must be initiated within three business days after the date of hire. An Employer enrolled as a Federal contractor in E-Verify must begin verification of each employee assigned to the contract within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever is later.

c. Federal contractors that are institutions of higher education (as defined at 20 U.S.C. 1001(a)), state or local governments, governments of Federally recognized Indian tribes, or sureties performing under a takeover agreement entered into with a Federal agency under a performance bond may choose to only verify new and existing employees assigned to the Federal contract. Such Federal contractors may, however, elect to verify all new hires, and/or all existing employees hired after November 6, 1986. Employers in this category must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

d. Upon enrollment, Employers who are Federal contractors may elect to verify employment eligibility of all existing employees working in the United States who were hired after November 6, 1986, instead of verifying only those employees assigned to a covered Federal contract. After enrollment, Employers must elect to verify existing staff following DHS procedures and begin E-Verify verification of all existing employees within 180 days after the election.

e. The Employer may use a previously completed Form I-9 as the basis for creating an E-Verify case for an employee assigned to a contract as long as:

- i. That Form I-9 is complete (including the SSN) and complies with Article II.A.6,
- ii. The employee's work authorization has not expired, and
- iii. The Employer has reviewed the Form I-9 information either in person or in communications with the employee to ensure that the employee's Section 1, Form I-9 attestation has not changed (including, but not limited to, a lawful permanent resident alien having become a naturalized U.S. citizen).

f. The Employer shall complete a new Form I-9 consistent with Article II.A.6 or update the previous Form I-9 to provide the necessary information if:

- i. The Employer cannot determine that Form I-9 complies with Article II.A.6,
- ii. The employee's basis for work authorization as attested in Section 1 has expired or changed, or
- iii. The Form I-9 contains no SSN or is otherwise incomplete.

Note: If Section 1 of Form I-9 is otherwise valid and up-to-date and the form otherwise complies with

Company ID Number: 121529

Article II.C.5, but reflects documentation (such as a U.S. passport or Form I-551) that expired after completing Form I-9, the Employer shall not require the production of additional documentation, or use the photo screening tool described in Article II.A.5, subject to any additional or superseding instructions that may be provided on this subject in the E-Verify User Manual.

g. The Employer agrees not to require a second verification using E-Verify of any assigned employee who has previously been verified as a newly hired employee under this MOU or to authorize verification of any existing employee by any Employer that is not a Federal contractor based on this Article.

3. The Employer understands that if it is a Federal contractor, its compliance with this MOU is a performance requirement under the terms of the Federal contract or subcontract, and the Employer consents to the release of information relating to compliance with its verification responsibilities under this MOU to contracting officers or other officials authorized to review the Employer's compliance with Federal contracting requirements.

C. RESPONSIBILITIES OF SSA

1. SSA agrees to allow DHS to compare data provided by the Employer against SSA's database. SSA sends DHS confirmation that the data sent either matches or does not match the information in SSA's database.

2. SSA agrees to safeguard the information the Employer provides through E-Verify procedures. SSA also agrees to limit access to such information, as is appropriate by law, to individuals responsible for the verification of Social Security numbers or responsible for evaluation of E-Verify or such other persons or entities who may be authorized by SSA as governed by the Privacy Act (5 U.S.C. § 552a), the Social Security Act (42 U.S.C. 1306(a)), and SSA regulations (20 CFR Part 401).

3. SSA agrees to provide case results from its database within three Federal Government work days of the initial inquiry. E-Verify provides the information to the Employer.

4. SSA agrees to update SSA records as necessary if the employee who contests the SSA tentative nonconfirmation visits an SSA field office and provides the required evidence. If the employee visits an SSA field office within the eight Federal Government work days from the date of referral to SSA, SSA agrees to update SSA records, if appropriate, within the eight-day period unless SSA determines that more than eight days may be necessary. In such cases, SSA will provide additional instructions to the employee. If the employee does not visit SSA in the time allowed, E-Verify may provide a final nonconfirmation to the employer.

Note: If an Employer experiences technical problems, or has a policy question, the employer should contact E-Verify at 1-888-464-4218.

D. RESPONSIBILITIES OF DHS

1. DHS agrees to provide the Employer with selected data from DHS databases to enable the Employer to conduct, to the extent authorized by this MOU:

a. Automated verification checks on alien employees by electronic means, and

Company ID Number: 121529

- b. Photo verification checks (when available) on employees.
2. DHS agrees to assist the Employer with operational problems associated with the Employer's participation in E-Verify. DHS agrees to provide the Employer names, titles, addresses, and telephone numbers of DHS representatives to be contacted during the E-Verify process.
3. DHS agrees to provide to the Employer with access to E-Verify training materials as well as an E-Verify User Manual that contain instructions on E-Verify policies, procedures, and requirements for both SSA and DHS, including restrictions on the use of E-Verify.
4. DHS agrees to train Employers on all important changes made to E-Verify through the use of mandatory refresher tutorials and updates to the E-Verify User Manual. Even without changes to E-Verify, DHS reserves the right to require employers to take mandatory refresher tutorials.
5. DHS agrees to provide to the Employer a notice, which indicates the Employer's participation in E-Verify. DHS also agrees to provide to the Employer anti-discrimination notices issued by the Office of Special Counsel for Immigration-Related Unfair Employment Practices (OSC), Civil Rights Division, U.S. Department of Justice.
6. DHS agrees to issue each of the Employer's E-Verify users a unique user identification number and password that permits them to log in to E-Verify.
7. DHS agrees to safeguard the information the Employer provides, and to limit access to such information to individuals responsible for the verification process, for evaluation of E-Verify, or to such other persons or entities as may be authorized by applicable law. Information will be used only to verify the accuracy of Social Security numbers and employment eligibility, to enforce the INA and Federal criminal laws, and to administer Federal contracting requirements.
8. DHS agrees to provide a means of automated verification that provides (in conjunction with SSA verification procedures) confirmation or tentative nonconfirmation of employees' employment eligibility within three Federal Government work days of the initial inquiry.
9. DHS agrees to provide a means of secondary verification (including updating DHS records) for employees who contest DHS tentative nonconfirmations and photo mismatch tentative nonconfirmations. This provides final confirmation or nonconfirmation of the employees' employment eligibility within 10 Federal Government work days of the date of referral to DHS, unless DHS determines that more than 10 days may be necessary. In such cases, DHS will provide additional verification instructions.

ARTICLE III

REFERRAL OF INDIVIDUALS TO SSA AND DHS

A. REFERRAL TO SSA

1. If the Employer receives a tentative nonconfirmation issued by SSA, the Employer must print the notice as directed by E-Verify. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify

Company ID Number: 121529

case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.

2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.
3. After a tentative nonconfirmation, the Employer will refer employees to SSA field offices only as directed by E-Verify. The Employer must record the case verification number, review the employee information submitted to E-Verify to identify any errors, and find out whether the employee contests the tentative nonconfirmation. The Employer will transmit the Social Security number, or any other corrected employee information that SSA requests, to SSA for verification again if this review indicates a need to do so.
4. The Employer will instruct the employee to visit an SSA office within eight Federal Government work days. SSA will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.
5. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.
6. The Employer agrees not to ask the employee to obtain a printout from the Social Security Administration number database (the Numident) or other written verification of the SSN from the SSA.

B. REFERRAL TO DHS

1. If the Employer receives a tentative nonconfirmation issued by DHS, the Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.
2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.
3. The Employer agrees to refer individuals to DHS only when the employee chooses to contest a tentative nonconfirmation.
4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will instruct the

Company ID Number: 121529

employee to contact DHS through its toll-free hotline (as found on the referral letter) within eight Federal Government work days.

5. If the Employer finds a photo mismatch, the Employer must provide the photo mismatch tentative nonconfirmation notice and follow the instructions outlined in paragraph 1 of this section for tentative nonconfirmations, generally.

6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo mismatch, the Employer will send a copy of the employee's Form I-551, Form I-766, U.S. Passport, or passport card to DHS for review by:

- a. Scanning and uploading the document, or
- b. Sending a photocopy of the document by express mail (furnished and paid for by the employer).

7. The Employer understands that if it cannot determine whether there is a photo match/mismatch, the Employer must forward the employee's documentation to DHS as described in the preceding paragraph. The Employer agrees to resolve the case as specified by the DHS representative who will determine the photo match or mismatch.

8. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.

9. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.

ARTICLE IV SERVICE PROVISIONS

A. NO SERVICE FEES

1. SSA and DHS will not charge the Employer for verification services performed under this MOU. The Employer is responsible for providing equipment needed to make inquiries. To access E-Verify, an Employer will need a personal computer with Internet access.

ARTICLE V MODIFICATION AND TERMINATION

A. MODIFICATION

1. This MOU is effective upon the signature of all parties and shall continue in effect for as long as the SSA and DHS operates the E-Verify program unless modified in writing by the mutual consent of all parties.

2. Any and all E-Verify system enhancements by DHS or SSA, including but not limited to E-Verify checking against additional data sources and instituting new verification policies or procedures, will be covered under this MOU and will not cause the need for a supplemental MOU that outlines these changes.

Company ID Number: 121529

B. TERMINATION

1. The Employer may terminate this MOU and its participation in E-Verify at any time upon 30 days prior written notice to the other parties.
2. Notwithstanding Article V, part A of this MOU, DHS may terminate this MOU, and thereby the Employer's participation in E-Verify, with or without notice at any time if deemed necessary because of the requirements of law or policy, or upon a determination by SSA or DHS that there has been a breach of system integrity or security by the Employer, or a failure on the part of the Employer to comply with established E-Verify procedures and/or legal requirements. The Employer understands that if it is a Federal contractor, termination of this MOU by any party for any reason may negatively affect the performance of its contractual responsibilities. Similarly, the Employer understands that if it is in a state where E-Verify is mandatory, termination of this by any party MOU may negatively affect the Employer's business.
3. An Employer that is a Federal contractor may terminate this MOU when the Federal contract that requires its participation in E-Verify is terminated or completed. In such cases, the Federal contractor must provide written notice to DHS. If an Employer that is a Federal contractor fails to provide such notice, then that Employer will remain an E-Verify participant, will remain bound by the terms of this MOU that apply to non-Federal contractor participants, and will be required to use the E-Verify procedures to verify the employment eligibility of all newly hired employees.
4. The Employer agrees that E-Verify is not liable for any losses, financial or otherwise, if the Employer is terminated from E-Verify.

ARTICLE VI PARTIES

- A. Some or all SSA and DHS responsibilities under this MOU may be performed by contractor(s), and SSA and DHS may adjust verification responsibilities between each other as necessary. By separate agreement with DHS, SSA has agreed to perform its responsibilities as described in this MOU.
- B. Nothing in this MOU is intended, or should be construed, to create any right or benefit, substantive or procedural, enforceable at law by any third party against the United States, its agencies, officers, or employees, or against the Employer, its agents, officers, or employees.
- C. The Employer may not assign, directly or indirectly, whether by operation of law, change of control or merger, all or any part of its rights or obligations under this MOU without the prior written consent of DHS, which consent shall not be unreasonably withheld or delayed. Any attempt to sublicense, assign, or transfer any of the rights, duties, or obligations herein is void.
- D. Each party shall be solely responsible for defending any claim or action against it arising out of or related to E-Verify or this MOU, whether civil or criminal, and for any liability wherefrom, including (but not limited to) any dispute between the Employer and any other person or entity regarding the applicability of Section 403(d) of IIRIRA to any action taken or allegedly taken by the Employer.
- E. The Employer understands that its participation in E-Verify is not confidential information and may be disclosed as authorized or required by law and DHS or SSA policy, including but not limited to,

Company ID Number: 121529

Congressional oversight, E-Verify publicity and media inquiries, determinations of compliance with Federal contractual requirements, and responses to inquiries under the Freedom of Information Act (FOIA).

F. The individuals whose signatures appear below represent that they are authorized to enter into this MOU on behalf of the Employer and DHS respectively. The Employer understands that any inaccurate statement, representation, data or other information provided to DHS may subject the Employer, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.

G. The foregoing constitutes the full agreement on this subject between DHS and the Employer.

To be accepted as an E-Verify participant, you should only sign the Employer's Section of the signature page. If you have any questions, contact E-Verify at 1-888-464-4218.

Company ID Number: 121529

Approved by:

Employer Environmental Systems Research Institute Inc.	
Name (Please Type or Print) Laura Dangermond	Title
Signature Electronically Signed	Date 05/20/2008
Department of Homeland Security – Verification Division	
Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 05/20/2008

Company ID Number: 121529

Information Required for the E-Verify Program	
Information relating to your Company:	
Company Name	Environmental Systems Research Institute Inc.
Company Facility Address	380 New York Street Redlands, CA 92373
Company Alternate Address	
County or Parish	SAN BERNARDINO
Employer Identification Number	952775732
North American Industry Classification Systems Code	541
Parent Company	
Number of Employees	2,500 to 4,999
Number of Sites Verified for	1

Company ID Number: 121529

Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State:

CALIFORNIA

1 site(s)

Company ID Number: 121529

Information relating to the Program Administrator(s) for your Company on policy questions or operational problems:

Name Jaime Malsberger
Phone Number (909) 793 - 2853 ext. 5008
Fax Number
Email Address jmalsberger@esri.com

Name Angela Clazie
Phone Number (909) 793 - 2853 ext. 3676
Fax Number
Email Address aclazie@esri.com

Company ID Number: 121529

Page intentionally left blank



AFFIDAVIT VERIFYING CONTRACTOR PARTICIPATION IN FEDERAL WORK AUTHORIZATION PROGRAM

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the **City of Alpharetta (GA)** has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b).

Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

121529

Federal Work Authorization (E-Verify) User Identification Number

5/20/2008

Date of Authorization

Environmental Systems Research Institute, Inc.

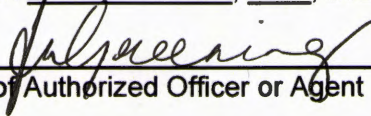
Name of Contractor

Small Government Enterprise Agreement Renewal

Name of Project

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on June, 8, 2023 in Redlands (city), California (state).


Signature of Authorized Officer or Agent

Tamisa Greening, Director, Contracts & Legal

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE 8 DAY OF June, 2023

See attached, per CA State Law.

NOTARY PUBLIC

My Commission Expires:

December 5, 2024

CALIFORNIA JURAT

GOVERNMENT CODE § 8202

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of San Bernardino

Subscribed and sworn to (or affirmed) before me on

this 8 day of June, 2023, by
Date Month Year

(1) Tamisa Greening

(and (2) _____),
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.



Place Notary Seal and/or Stamp Above

Signature *Fernando J. Frias*
Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Department	Account	Amount
City Council	10011100-523900	\$ 476.66
City Clerk	10013300-523900	\$ 272.38
City Administration	10013200-523900	\$ 544.76
Finance	10015100-523900	\$ 2,791.89
Information Technology	10017350-523900	\$ 1,770.47
Human Resources	10018400-523900	\$ 544.76
Court	10026500-523900	\$ 885.23
Public Safety	10031100-523900	\$ 32,481.30
Public Works	10041010-523900	\$ 6,945.69
Recreation & Parks	10061100-523900	\$ 6,673.31
Community Development	10074100-523900	\$ 4,358.08
Development Authority	10074200-523900-AED00	\$ -
Solid Waste Fund	54015450-523900	\$ 136.19
E-911	21531800-523900	\$ 4,494.27
Total		\$ 62,375.00



STAFF REPORT

Department: Information Technology

Submitted By: Adam Montgomery

Meeting Date: July 17, 2023

AGENDA ITEM:

Purchase Approval: Cisco Duo Software as a Service Subscription (SaaS) with Verinext

Consideration of approval of the issuance of a purchase order to Verinext, as the vendor to provide the annual Cisco Duo SaaS Subscription, in the amount of \$52,963.90.

STAFF RECOMMENDATION:

Approve Verinext as the vendor to provide the annual Cisco Duo SaaS Subscription in the amount of \$52,963.90.

BUDGET & PROCUREMENT:

BUDGETED ITEM: YES

FISCAL IMPACT: NO

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: YES

TOTAL PROJECT COST:

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
IT Prof Services/523900	\$52,963.90

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
IT Prof Services/523900	\$52,963.90

ITEM DESCRIPTION:

The Cisco DUO SaaS subscription allows the City to secure employee and user logins from a single-factor by requiring all accounts to use an additional factor as part of the authentication process.

This renewal is funded in the Fiscal Year 2024 budget, and three quotes were obtained. The lowest quote was provided by Verinext and is recommended for approval. Below is the breakdown of the quotes obtained. All quotes are attached in a single file.

Verinext: \$52,963.90

CDWG: \$53,391.10

SHI: \$56,337.00

ALTERNATIVES:

While two other vendors were considered, Verinext (the recommended vendor) provided the lowest cost.

ATTACHMENTS:

1. FY24 Cisco Duo Renewal



Atlanta Office
4850 River Green Pkwy
Duluth, GA 30096

Philadelphia Office
4 Sentry Pkwy, Suite 300
Blue Bell, PA 19422

Quote Date: 05/25/2023
Exp Date: 06/23/2023
Quote No: Q-16536/137628

Quote Prepared By:
Brian Hull
Manager of Strategic Accounts
brian.hull@verinext.com
678.362.8377

Quote Prepared For:
City of Alpharetta
Jason Davis
2 Park Plaza
Alpharetta, GA 30009
6783628377
jdavis@alpharetta.ga.us

City of Alpharetta - DUO SaaS Subscription (7/25/23)-Q-16536

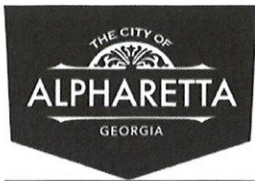
ITEM NO.	DESCRIPTION	QTY	PRICE	EXTENDED PRICE
Cisco Systems		1	\$ 52,963.90	\$ 52,963.90
DUO-SUB	Cisco Duo subscription	1		
DUO-ACCESS	STANDARD CISCO DUO ACCESS EDITION	890		
SVS-DUO-SUP-B	Cisco Duo Basic Support	1		

TOTAL: \$ 52,963.90

Notes:

Terms & Conditions

Taxes, shipping, handling, and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors. Unless an existing contract for a sale of goods or services (such as an MSA) is in place between the parties, this quote shall, at all times, be governed and controlled by the terms and conditions, respectively, for the sale of goods found here <https://verinext.com/terms-and-conditions-of-sale/> and for the sale of services found here <https://verinext.com/msa/>.



AFFIDAVIT VERIFYING CONTRACTOR PARTICIPATION IN FEDERAL WORK AUTHORIZATION PROGRAM

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the City of Alpharetta (GA) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b).

Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

522470

Federal Work Authorization (E-Verify) User Identification Number

March 2012

Date of Authorization

Anexinet Corp

Name of Contractor

DMD Sub

Name of Project

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on July 11, 2023 in Duluth (city), GA (state).

Murray Granger

Signature of Authorized Officer or Agent

Murray Granger

Printed Name and Title of Authorized Officer or Agent

Subscribed and Sworn Before Me On This The 11th Day of July, 2023.

Ellen M. Clay

Notary Public

My Commission Expires July 31, 2023



Department	Account	Amount
City Council	10011100-523900	\$ 494.00
City Clerk	10013300-523900	\$ 1,201.00
City Administration	10013200-523900	\$ 1,483.00
Finance	10015100-523900	\$ 2,048.00
Information Technology	10017350-523900	\$ 5,013.90
Human Resources	10018400-523900	\$ 282.00
Court	10026500-523900	\$ 636.00
Public Safety	10031100-523900	\$ 20,691.00
Public Works	10041010-523900	\$ 4,873.00
Recreation & Parks	10061100-523900	\$ 7,980.00
Community Development	10074100-523900	\$ 5,367.00
Development Authority	10074200-523900-AED00	\$ 494.00
Solid Waste Fund	54015450-523900	\$ 71.00
E-911	21531800-523900	\$ 2,330.00
Total		\$ 52,963.90



Thank you for choosing CDW. We have received your quote.

Hardware Software Services IT Solutions Brands Research Hub

Review and Complete Purchase

JASON DAVIS,

Thank you for considering CDW•G for your technology needs. The details of your quote are below. **If you are an eProcurement or single sign on customer, please log into your system to access the CDW site.** You can search for your quote to retrieve and transfer back into your system for processing.

For all other customers, click below to convert your quote to an order.

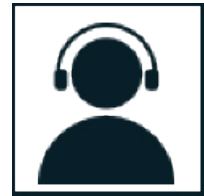
Convert Quote to Order

QUOTE #	QUOTE DATE	QUOTE REFERENCE	CUSTOMER #	GRAND TOTAL
NLGB492	6/27/2023	NLGB492	1024933	\$53,391.10

QUOTE DETAILS				
ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE
Cisco Duo Advantage - subscription license - 1 user	890	7440147	\$59.99	\$53,391.10
Mfg. Part#: DUO-ADVANTAGE				
Electronic distribution - NO MEDIA				
Contract: MARKET				

SUBTOTAL		\$53,391.10
SHIPPING		\$0.00
SALES TAX		\$0.00
GRAND TOTAL		\$53,391.10

PURCHASER BILLING INFO	DELIVER TO
Billing Address: CITY OF ALPHARETTA PURCHASING OFFICE 2 PARK PLZ ALPHARETTA, GA 30009-3680 Phone: (678) 297-6030 Payment Terms: Net 30 Days-Govt State/Local	Shipping Address: CITY OF ALPHARETTA PURCHASING OFFICE 2 PARK PLZ ALPHARETTA, GA 30009-3680 Phone: (678) 297-6030 Shipping Method: ELECTRONIC DISTRIBUTION
Please remit payments to:	
CDW Government 75 Remittance Drive Suite 1515 Chicago, IL 60675-1515	



Sales Contact Info

Zach Deliberto | (877) 649-8688 | zachdel@cdwg.com

Need Help?



My Account



Support



Call 800.800.4239

[About Us](#) | [Privacy Policy](#) | [Terms and Conditions](#)

This order is subject to CDW's Terms and Conditions of Sales and Service Projects at

<http://www.cdwg.com/content/terms-conditions/product-sales.aspx>

For more information, contact a CDW account manager

© 2023 CDW•G LLC, 200 N. Milwaukee Avenue, Vernon Hills, IL 60061 | 800.808.4239



Pricing Proposal
Quotation #: 23605308
Created On: 6/19/2023
Valid Until: 6/30/2023

GA-City of Alpharetta

Jason Davis

GA
United States
Phone: 678-297-6000
Fax:
Email: jdavis@alpharetta.ga.us

Inside Sales Account Manager

Nirav Patel

290 Davidson Avenue
Somerset, NJ 08873
United States
Phone: 888-744-4084
Fax: 888-896-8860
Email: Nirav_Patel@shi.com

All Prices are in US Dollar (USD)

Product	Qty	Your Price	Total
1 STANDARD CISCO DUO ADVANTAGE(formerly DUO ACCESS)w/standard support Cisco Systems - Part#: DUO-ADVANTAGE Contract Name: Networking Equipmentand IT Infrastructure Products Contract #: 99999-SPD-T20120501-0006	890	\$63.30	\$56,337.00
Total			\$56,337.00

Additional Comments

This quote contains a Cisco Security Product. Please see Cisco's EULA (Web Address Below). Terms and Conditions are subject to change at Cisco's discretion. By Submitting a PO against this quote, you hereby agree that your use of the software/products will be subject to the EULA term set forth at

This quote contains a Cisco Security Product. Please see Cisco's [EULA Terms and Conditions](#). Terms and Conditions are subject to change at Cisco's discretion. Submitting a PO constitutes an agreement to the EULA.

Please note, if Emergency Connectivity Funds (ECF) will be used to pay for all or part of this quote, please let us know as we will need to ensure compliance with the funding program.

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

All orders for Cisco equipment and related software and services submitted, beginning on December 29, 2021, are non-cancelable and cannot be modified starting 45 days prior to the scheduled ship dates. Non-cancelable orders are not eligible for RMA for credit.

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts, please contact an SHI Inside Sales Representative at (888) 744-4084. SHI International Corp. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.



STAFF REPORT

Department: Information Technology
Submitted By: Adam Montgomery
Meeting Date: July 17, 2023

AGENDA ITEM:

Purchase Approval: Microsoft Azure Cloud Infrastructure as a Service (IaaS) Subscription with SHI International Inc.

Consideration of approval of the issuance of a purchase order to SHI International, Inc., as the vendor to provide the annual Microsoft Azure Cloud IaaS Subscription, using state contract number 99999-SPD-SPD0000060-003 in an amount not to exceed \$320,000.00.

STAFF RECOMMENDATION:

Approve the purchase order to renew our Microsoft Azure Cloud Services to SHI International, Inc. using state contract number 99999-SPD-SPD0000060-003 in an amount not to exceed \$320,000.00.

BUDGET & PROCUREMENT:

BUDGETED ITEM: YES

FISCAL IMPACT: NO

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: YES

TOTAL PROJECT COST:

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
IT Prof Services/523900	\$320,000.00

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
IT Prof Services/523900	\$320,000.00

ITEM DESCRIPTION:

Historically, the City has used Microsoft Azure Cloud Services and contracted with SHI International Inc, using a statewide contract. The Microsoft Azure cloud provides Infrastructure as a Service (IaaS) by providing servers and storage for our information systems in robust cloud data centers nationwide. This contract also provides the City with a Cloud Service Provider resource to help manage and secure the cloud infrastructure. This is critical to our hybrid data center infrastructure design and business continuity plans.

ALTERNATIVES:

SHI International, Inc. was awarded a statewide contract through the Georgia Department of Administrative Services for providing governmental agencies with Microsoft Azure Cloud Services.

ATTACHMENTS:

1. FY24 Microsoft Azure Cloud - SHI



Pricing Proposal
Quotation #: 23686080
Created On: Jul-11-2023
Valid Until: Jul-31-2023

GA-City of Alpharetta

Adam Pool

Phone: (678) 297-6025
Fax:
Email: APool@alpharetta.ga.us

Inside Account Manager

Lexi Stewart

290 Davidson Ave
Somerset, NJ 08873
Phone: 732-564-8331
Fax:
Email: Lexi_Stewart@SHI.com

All Prices are in US Dollar (USD)

Product	Qty	Your Price	Total
1 Azure SaaS Support Dataprise, Inc. - Part#: NPN-AIRNE-AZURE-A Contract Name: NASPO Cloud Solutions Contract #: AR2488 Subcontract #: 99999-SPD-T20190814-0002	1	\$320,000.00	\$320,000.00
Total			\$320,000.00

Additional Comments

Please note, if Emergency Connectivity Funds (ECF) will be used to pay for all or part of this quote, please let us know as we will need to ensure compliance with the funding program.

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts, please contact an SHI Inside Sales Representative at (888) 744-4084. SHI International Corp. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.



CONTRACT AMENDMENT # 11 EXTENSION # 6

This amendment by and between the Contractor and State Entity defined below shall be effective as of the date this Amendment is fully executed.

STATE OF GEORGIA CONTRACT	
State Entity's Name:	Department of Administrative Services
Contractor's Full Legal Name:	SHI International Corp.
Contract No.:	99999-SPD-SPD0000060-0003
Solicitation Title/Event Name:	Software
Contract Award Date:	08/13/2012
Current Contract Term:	05/01/2021-04/30/2022

BACKGROUND AND PURPOSE. The Contract is in effect through the Current Term provided above. The parties hereto now desire to amend the contract to (1) extend for an additional term of twelve months.

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties do hereby agree as follows:

1. **CONTRACT EXTENSION.** The parties hereby agree that the contract will be extended for an additional period of time as follows:

NEW CONTRACT TERM	
Beginning Date of New Contract Term:	05/01/2022
End Date of New Contract Term:	04/30/2023

The parties agree the contract will expire at midnight on the date defined as the "End Date of the New Contract Term" unless the parties agree to extend the contract for an additional period of time.

2. SUCCESSORS AND ASSIGNS. This Amendment shall be binding upon and inure to the benefit of the successors and permitted assigns of the Parties hereto.

ENTIRE AGREEMENT. Except as expressly modified by this Amendment, the contract shall be and remain in full force and effect in accordance with its terms and shall constitute the legal, valid, binding and enforceable obligations to the parties. This Amendment and the contract (including any written amendments thereto), collectively, are the complete agreement of the parties and supersede any prior agreements or representations, whether oral or written, with respect thereto. Should the State of Georgia (DOAS) enter into a new contract for these products and/or services, during the term of this Extension, the new contract shall supercede this Extension

IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed by their authorized representatives.

CONTRACTOR

Contractor's Full Legal Name: (PLEASE TYPE OR PRINT)	SHI International Corp.
Authorized Signature:	<i>Elisabeth Arnold</i>
Printed Name and Title of Person Signing:	Elisabeth Arnold - Senior Lead Contracts Specialist
Date:	1/21/2022
Company Address:	290 Davidson Ave., Somerset, NJ 08873

STATE ENTITY

Authorized Signature:	<i>Jim Barnaby</i>
Printed Name and Title of Person Signing:	Jim Barnaby Deputy Commissioner State Purchasing Division
Date:	3/1/2022
Company Address:	200 Piedmont Avenue, S.E., Suite 1302, West Tower Atlanta, Georgia 30334-9010

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint
Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

1. SCOPE

The State of Utah, acting by and through the National Association of State Procurement Officials (NASPO) ValuePoint, competitively procured and awarded a Request for Proposal resulting in Master Agreement number AR2488. The Master Agreement was created as a cooperative purchasing agreement for Cloud Solutions.

This addendum establishes Contractor as a non-exclusive, non-mandatory source of supply for (1) all State of Georgia governmental entities subject to the State Purchasing Act, including but not limited to certain state offices, agencies, departments, boards, bureaus, commissions, institutions and colleges and universities and (2) all other State of Georgia governmental entities such as state authorities, local government, municipalities, cities, townships, counties and other political subdivisions of the State of Georgia. All entities authorized to make purchases pursuant to this Addendum shall be referred to collectively as "Purchasing Entities".

This addendum allows for purchase of the following Cloud Solutions:

Software as a Service (SaaS)

Infrastructure as a Service (IaaS)

Platform as a Service (PaaS)

Value Added Services

Additional Value-Added Services

Maintenance Services

Professional Services

- Deployment Services
- Consulting/Advisory Services
- Architectural Design Services
- Statement of Work Services

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Partner Services

Training Deployment Services

The above-listed Cloud Services may be obtained from the Service Providers specifically provided for in Appendix A to this Participating Addendum. No Purchasing Entity may purchase Cloud Solutions from a Service Provider who is not listed in Appendix A. No terms and conditions of Service Providers (including but not limited to sub-contractors, resellers, and partners) will be considered binding on the Participating State, a Participating Entity, a Purchasing Entity, or the Contractor other than the terms and conditions attached as an Exhibit to Appendix A. Any documents containing terms and conditions that are in conflict with the terms and conditions or that contain terms and conditions beyond the scope of this Participating Addendum and the documents attached to Appendix A are not binding on the parties. The Participating State may amend Appendix A to add or remove Service Providers as necessary. Amendment of Appendix A must be made in writing as an amendment to this Participating Addendum, signed by the parties and approved as required by the laws of the State of Georgia.

Contractor shall be responsible for successful performance and compliance with all requirements in accordance with the terms and conditions under this Participating Addendum, even if the work is performed by a subcontractor.

The Contractor's Master Agreement products or services listed on the Contractor's page of the NASPO ValuePoint website are included in this Addendum only if they are listed in Appendix A and they are not offered on a Mandatory Statewide Contract. In the event they are offered on a Mandatory Statewide Contract, products or services may be procured under this Addendum if a waiver is granted by the Participating State/Entity.

Any obligations placed upon Contractor under the Master Agreement and this Participating Addendum shall also apply to any service provider (including but not limited to resellers, subcontractors, partners, or agents) that provides any product or service under the Master Agreement and this Participating Addendum. Contractor shall also ensure compliance by all service providers (including but not limited to resellers, subcontractors, partners, or agents) of all obligations and requirements set forth under the Master Agreement and this Participating Addendum.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint
Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

2. TERM

The term of this Participating Addendum and State Contract Number: 99999-SPD-T20190814-0002 shall be effective upon the date of final execution below (the "Effective Date") by the State of Georgia through September 15, 2026, unless otherwise terminated in accordance with the termination provisions of this Participating Addendum or the Master Agreement. JS
NC

3. NON-EXCLUSIVE CONTRACT

The contract shall be non-exclusive and shall not in any way preclude the State of Georgia from entering into similar contracts and/or arrangements with other vendors or from acquiring similar, equal or like goods and/or services from other entities or sources.

4. PRIMARY CONTACTS

The primary contact individuals for this Participating Addendum are as follows (or their named successors):

Contractor

Name:	Joe Raney
Address:	290 Davidson Ave., Somerset, NJ 08873
Telephone:	678-557-4714
Fax:	732-868-6055
Email:	Joe_Raney@SHI.com

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Participating State:	
Name:	Beverly Alexander
Address:	200 Piedmont Avenue, SE Suite 1308, West Tower Atlanta, GA 30334
Telephone:	404-656-5345
Email:	Beverly.alexander@doas.ga.gov

5. PARTICIPATION

This Participating Addendum (and the corresponding NASPO ValuePoint Master Agreement) may be used by all state agencies, institutions of higher education, political subdivisions and other entities authorized to use statewide contracts in the State of Georgia. Pursuant to O.C.G.A. § 50-5-57, DOAS hereby certifies the Contractor as a source of supply to Purchasing Entities for the goods and services available to Purchasing Entities pursuant to this Addendum. Orders shall be placed individually and from time to time by Purchasing Entities. The execution of this Addendum only establishes the Contractor as an authorized source of supply by DOAS and creates no financial obligation on the part of DOAS. Purchasing Entities are solely and individually financially responsible for their respective purchases. The Addendum does not guarantee any minimum level of purchases. Issues of interpretation and eligibility for participation are solely within the authority of the State Chief Procurement Official.

Executive branch state agencies that are required to use the Georgia Enterprise Technology Services (GETS) for their IT infrastructure must receive prior approval from the Georgia Technology Authority (GTA) before making purchases under this contract. Instructions for the agencies to obtain approval and a list of the relevant agencies are provided in the User Guide for this contract.

With respect to any "Educational Discount Price", offered by Contractor pursuant to this Addendum, the parties agree that the following Purchasing Entities shall be eligible to receive any Educational Discount Price: Board of Regents of the University System of Georgia and all of its colleges and universities, the

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Technical College System of Georgia and all of its technical schools, the State Board of Education, the Georgia Department of Education, the Georgia Academy for the Blind, the Georgia School for the Deaf, the Atlanta Area School for the Deaf, public K-12 schools, public boards of education, "local school systems" and "local units of administration as those terms are defined by O.C.G.A § 20-2-242, and any other Purchasing Entity identified by the parties as an educational entity.

Contractor acknowledges that Purchasing Entities are a political subdivision of the State of Georgia. The laws of the State of Georgia shall govern this Participating Addendum. Nothing under this Participating Addendum or the Master Agreement shall be deemed or construed as a waiver of the State's right of sovereign immunity. The Participating State/Entity and Purchasing Entities are agreeing to the terms of the Master Agreement only to the extent the terms are not in conflict with Georgia law.

Purchasing Entities, as a political subdivision of the State of Georgia, may not sign their own Participating Addendum, unless approved by the Chief Procurement Officer of the state where the Purchasing Entities are located.

6. NO THIRD PARTY BENEFICIARIES

Nothing in this Participating Addendum or any purchase orders issued pursuant to this Addendum shall be construed to create a third party beneficiary to this Addendum.

7. ORDER OF PRECEDENCE

- (i) The Participating Addendum ("PA"), including any Amendments and Exhibits attached, A Participating Entity's Participating Addendum shall not diminish, change, or impact the rights of the Lead State with regard to the Lead State's contractual relationship with the Contractor under the Terms of Utah NASPO ValuePoint Master Agreement;
- (ii) NASPO ValuePoint Master Agreement Terms & Conditions, with the exception of Attachment E, which is hereby deleted;
- (iii) The Solicitation;
- (iv) Contractor's response to the Solicitation, as revised and accepted by the Lead State; and
- (v) A Service Level Agreement or Purchasing Order issued against the Participating Addendum.

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

These documents shall be read to be consistent and complementary. Any conflict among these documents shall be resolved by giving priority to these documents in the order listed above. Contractor terms and conditions that apply to this Participating Addendum are only those that are expressly accepted by the Participating State and must be in writing and attached to the Participating Addendum as an Exhibit or Attachment. The Participating Addendum language prevails unless a mutually agreed exception has been negotiated. Such exception must be made in writing as an amendment to this Participating Addendum, signed by the parties and approved as required by the laws of the State of Georgia.

No other terms and conditions shall apply, including terms and conditions listed in the Contractor's response to the Solicitation, or terms listed or referenced on the Contractor's website, in the Contractor quotation/sales order or in similar documents subsequently provided by the Contractor to a Purchasing Entity. No purchase order, invoice, or other documents associated with any sales, orders, or supply of any good or service under this Participating Addendum shall contain any terms or conditions other than as set forth in the Participating Addendum. Any such extraneous terms and conditions shall be void, invalid, and unenforceable against the State of Georgia or the Participating Entity. Any refusal by Contractor/Subcontractor to supply any goods or services under this Participating Addendum conditioned upon the State of Georgia or the Participating Entity submitting to any extraneous terms and conditions shall be a material breach of the Participating Addendum and constitute an act of bad faith by the Contractor/Subcontractor. Contractor shall insure that contracts or agreements with subcontractors, agents, partners, and/or resellers, and the performance of services in relation to this Participating Addendum by the same, do not conflict with this Participating Addendum.

8. CHANGES IN CONTRACTOR REPRESENTATION

DOAS requires the assignment of a primary account representative (for each category). The Contractor shall identify by name and location the primary account representative for each awarded category who will be responsible for the performance of the contract. The Contractor must also provide a next in line account representative, that will serve as a back-up for the State. The State requires the Contractor to notify DOAS of any changes in key account representatives, in writing within 10 calendar days of the change.

9. AMENDMENTS

Any further Amendments to the Master Agreement after the Effective Date of this Participating Addendum, that have been approved by the Lead State, will not be applicable to this Participating Addendum and will

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

not be valid unless made in writing as an amendment to this Participating Addendum, signed by the parties and approved as required by the laws of the State of Georgia. No oral understanding or agreement not incorporated in this Participating Addendum is binding on any of the parties.

10. SUB-CONTRACTORS, PARTNERS, RESELLERS

The Contractor and Service Provider shall identify its strategic business partners related to services provided under this contract, including but not limited to, all sub-Contractors or other entities or individuals who may be a party to a joint venture or similar agreement with the Service Provider, who will be involved in any Cloud solution and/or operations.

Contractor must ensure that any sub-Contractor (including service providers) fulfillment partner, dealer, or reseller who makes sales under this Participating Addendum complies with the terms of the Master Agreement and this Participating Addendum. No terms or conditions of the Service Provider (including but not limited to sub-contractors, resellers, and partners), not included in this Participating Addendum, shall be considered binding on the Participating State unless specifically agreed to in writing. Any contractual agreement resulting from this Participating Addendum shall specify that the Contractor is solely responsible for ensuring fulfillment of all requirements of the Master Agreement, this Participating Addendum, and any Service Level Agreements or other customer agreements.

11. RESELLER APPROVAL

Contractors wishing to add a Reseller to the Statewide contract must follow the State approval process. Reseller Partners must be approved in advance by the State as a condition of eligibility under this Contract. The State reserves the right to rescind any such participation. The State also reserves the right to request the Contractor to name additional Resellers, in the best interest of the State, at the State's sole discretion. The Contractor must complete and submit the following forms as part of the State Reseller approval process:

- (i) Sales and Use Tax Form – Populated with Reseller information
- (ii) Debarment Letter – Contractor statement indicating Reseller is not debarred (Federal or State level)
- (iii) E-Verify Form

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

-
- (iv) DOAS Reseller Request/Approval Spreadsheet – Contractor to complete DOAS approval spreadsheet with Reseller contact information and PO instructions. Contractor shall specify whether orders must be placed directly with Contractor or may be placed directly with the designated Reseller. Contractor must provide the State, in advance, all necessary ordering information, billing address and Federal Identification number.

Approved Resellers must be eligible to quote lower than or equal Contract pricing under this Contract. Contractors are encouraged to identify multiple approved Resellers to participate in competitive transactions.

Contractor shall be responsible for Reseller performance and compliance with all Contract terms and conditions. Products purchased through Reseller must be reported by the Contractor in the required Quarterly Sales Reports to the State.

Immediate notice to DOAS is required by the Contractor, in the event, a change in Reseller's status occurs during the Contract term.

12. PURCHASING PROCESS

(I) Statement of Need

A Purchasing Entity or Participating Entity purchasing Cloud Solutions from this Participating Addendum shall create a Statement of Need, each time they desire to purchase Cloud Solutions. The Entity shall issue a detailed Statement of Need to the Contractor(s) who offers the applicable Cloud Solution(s). The State Entity reserves the right to require a specific format, information, and pre-approvals on the Statement of Need Form. At a minimum, the format of the Statement of Need is left to the discretion of the Purchasing Entity or Participating Entity, but forms submitted by entities of the State of Georgia must contain the following:

- a. Current State
- b. Desired Scope
- c. Business Requirements

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

-
- d. Technical Requirements
 - e. Functional Requirements

Upon request, Contractor will assist Purchasing Entities in obtaining cloud service provider contact information and any applicable license agreements, maintenance agreement, or any other documents pertinent to the products and/or services in this Participating Addendum wherever such information and documents have not been made available within the Master Contract. Contractor shall ensure that such agreements and documents contain static terms and that weblinks are not included in the terms of such agreements and documents.

Although certain cloud service provider license agreements, maintenance agreements, and other documents have been included in the Master Agreement, DOAS intends to further negotiate those agreements. Accordingly, DOAS must approve any applicable license agreements, maintenance agreement, or any other documents pertinent to the products and/or services in this Participating Addendum prior to order by a Purchasing Entity that is an entity of the State of Georgia. Contractor is responsible for ensuring that this step takes place and that only agreements approved by DOAS are utilized in conjunction with sales to such Purchasing Entities.

(ii) Proposal

Contractor shall provide the Purchasing Entity with a Proposal addressing the requested Cloud Services. At a minimum, the Proposal will include the following:

- a. Price
- b. Scope – Statement of Work
- c. Conditions, SLAs, Obligations
- d. Additional Terms and Conditions
- e. Timeframe
- f. Exit Process and Cost

(iii) Orders

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Any order placed by an Purchasing Entity for a product and/or service available from this Master Agreement shall be deemed to be a sale under (and governed by the prices and other terms and conditions) of the Master Agreement unless the parties to the order agree in writing that another contract or agreement applies to such order.

The State instructs Purchasing Entities within the jurisdiction of this Addendum to include the Participating State Contract Number: 99999-SPD-T20190814-0002 and the Master Agreement Number: AR2488 on all purchase orders issued to Contractor. LE
MC

Orders will be placed by a Purchasing Entity directly with Contractor or approved sub-Contractor, fulfillment partner, dealer or reseller. The Purchasing Entity may modify Master Agreement or Participating Addendum terms and conditions relating to Purchasing Entity's specific order through an Order Agreement, which must be signed by both the Purchasing Entity and Contractor. An Order Agreement shall be between the signing Purchasing Entity and the Contractor, and shall not be interpreted to diminish, change, or impact any other Order Agreement entered with a separate Purchasing Entity. An Order Agreement shall not diminish, change, or impact the rights of the Lead State with regard to the Lead State's contractual relationship with the Contractor under the Terms of Utah NASPO ValuePoint Master Agreement and shall not diminish, change, or impact the rights of DOAS with regard to DOAS's contractual relationship with the Contractor under the Terms of Utah NASPO ValuePoint Master Agreement and Participating Addendum.

The State of Georgia constitution prohibits State entities from pledging the State's credit. Accordingly, entities of the State of Georgia may only be obligated for the amount indicated in a purchase order executed by the state entity. Contractor shall ensure that all sales to entities of the State of Georgia and any supplemental agreements comply with the provisions of the January 6, 2017 memo "Contracting with the Georgia Department of Administrative Services located at http://doas.ga.gov/assets/State%20Purchasing/Stage%203%20Documents/Contracting_With_DOAS.pdf as well as any subsequent revisions to such memo.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Contractor shall ensure that all sub-Contractors providing services under this agreement executes the appropriate e-verify affidavit located at
http://www.audits.ga.gov/NALGAD/section_3_affidavits.html

Orders for State Agencies, Departments, Boards, Bureaus, Commissions, Universities, and Schools (collectively "State Entities") shall include the Statement of Need and Statement of Work (accepted Contractor Proposal). It is the responsibility of the Contractor to ensure orders from State Entities include required documents.

For orders greater than \$100,000 in the first year or orders involving FISMA (Federal Information Security Management Act) Moderate or High data, Supplier will provide, for informational purposes only, a copy of the order to a designated DOAS/GTA contact person. The purpose is to assure that organizations are complying with applicable policies, statutes, and guidelines.

The State is not liable for any costs incurred by Contractors prior to entering into a formal contract or any order that does not meet the minimum requirements.

(iv) Payment: Payment terms shall be as specified in the Proposal and Invoice.

- a. Invoices. Invoices for payments must be submitted by the Contractor to the Purchasing Entity requesting the services with sufficient detail to support payment. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the Purchasing Entity, and no action by the Purchasing Entity, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.
- b. Inspection and Approval. Final inspection and approval of all work required under the contract shall be performed by the designated Purchasing Entity officials. Payments

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

shall not be made until contractual deliverable(s) are received and accepted by the Purchasing Entity.

- c. **Payment.** Purchasing Entity will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the Participating Entity. Payment will be made by the responsible Purchasing Entity. In no event, shall the Purchasing Entity be responsible or liable to pay for any services provided by the Contractor prior to the Effective Date of the contract, and the Contractor hereby waives any claim or cause of action for any such services.
- d. **Travel Expenses.** Expenses for travel shall not be reimbursed unless specifically permitted under the duties of the Contractor. All travel must be approved in advance by the Purchasing Entity. Expenditures made by the Contractor for travel will be reimbursed at the current rate paid by the State, available here: <https://sao.georgia.gov/state-travel-policy>.
- e. **Responsibility for Taxes:** The State of Georgia and its agencies shall not be responsible for, or indemnify a Contractor for, any federal, state, or local taxes which may be imposed or levied upon the subject matter of this Participating Addendum.
- f. **Federal Funds.** Payments under this Contract may be made from federal funds obtained by the State. The Contractor is responsible for compliance with all federal requirements imposed on these funds and accepts full financial responsibility for any requirements imposed by the Contractor's failure to comply with federal requirements. Participating entities may include additional contract terms and conditions with their PO's that incorporate language required by federal grant conditions.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

13. PROFESSIONAL/TECHNICAL (P/T) SERVICES

Professional/Technical Services must be within the scope of services available through the Master Contract. Purchasing Entities may require retainage as specified in their individual Order Agreements or Purchase Orders.

14. OWNERSHIP IN INTELLECTUAL PROPERTY

The parties each recognize that each has no right, title, or interest, proprietary or otherwise, in or to the name or any logo, or intellectual property owned or licensed by the other. Each agree that, without prior written consent of the other or as described in this Contract, it shall not use the name, any logo, or intellectual property owned or licensed by the other.

15. TERMINATION OF INDIVIDUAL ORDERS OR PURCHASE ORDERS

The individual orders, Order Agreements, or purchase orders may be terminated as follows:

(I) Termination for Cause

- a. If, for any reasons, or through any cause, the Contractor or Subcontractor fails to fulfill in timely and proper manner his obligations, or if the Contractor or Subcontractor violates any of the covenants, agreements, or stipulations of this Participating Addendum, the Purchasing Entity shall have the right to terminate any outstanding order by giving written notice to the Contractor and Subcontractor of such termination and specifying the effective date thereof. In that event, all finished or unfinished documents, data, studies, surveys, drawings, models, photographs, supplies and other materials shall, at the option of the Participating Entity, become property of the Purchasing Entity and the Contractor/Subcontractor shall be entitled to receive compensation for any satisfactory

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

work completed on such documents and other materials that are usable to the Purchasing Entity.

(ii) Termination for Convenience

- a. A Purchasing Entity may terminate an order at any time by giving written notice of such termination to the Contractor and the Subcontractor and specifying the effective date thereof, at least thirty (30) days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, models, photographs, supplies and other materials shall, at the option of the Purchasing Entity, become property of the Purchasing Entity and the Contractor/Subcontractor shall be entitled to receive compensation for any satisfactory work completed on such documents and other materials that are usable to the Purchasing Entity.

(iii) Immediate Termination

- a. A Purchasing Entity may immediately terminate an order pursuant to the terms of Paragraph 16 of this Participating Addendum.

16. TERMINATION OF PARTICIPATING ADDENDUM

The following provisions relating to termination shall be added to Paragraph 7 of the Master Agreement entitled "Termination":

Termination for Non-appropriation: Pursuant to O.C.G.A. Section 50-5-64, any purchase made pursuant to this Participating Addendum will terminate immediately and absolutely if DOAS or the Purchasing Entity determines that adequate funds are not appropriated or granted or funds are de-appropriated such that DOAS or the Purchasing Entity cannot fulfill its obligations under the Statewide Contract, which determination is at DOAS and/or Purchasing Entity's sole discretion and shall be conclusive. A termination made pursuant to these terms is not a termination for convenience and will not be treated as such.

Immediate Termination DOAS may terminate the Participating Addendum for any one or more of the following reasons effective immediately without advance notice:

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

-
- a. In the event the Contractor is required to be certified or licensed as a condition precedent to providing goods and services, the revocation or loss of such license or certification may result in immediate termination of the Statewide Contract effective as of the date on which the license or certification is no longer in effect;
 - b. DOAS determines that the actions, or failure to act, of the Contractor, its agents, employees or sub-Contractors have caused, or reasonably could cause, life, health or safety to be jeopardized;
 - c. The Contractor fails to comply with confidentiality laws or provisions.

In any termination event, in addition to data transition, Contractor shall allow the Purchasing Entity to transition accounts, licenses, and technical configurations, to a new provider at no additional cost other than those detailed in the original customer agreement. This includes, but is not limited to third party cloud hosting accounts. Specific data removal and transition information is available and provided by the unique technology partners. This data removal and transition information shall adhere to the contract terms of the Master Agreement and this Participating Addendum.

Survival: The following provisions shall survive termination or expiration of the Participating Addendum: Section 17 (Indemnification), Section 19 (Security and Data Protection), Section 23 (Arbitration, Indemnification, Damages, Warranties), and Section 24 (Security and Data Protection).

Performance and Payment Time Frames that Exceed Contract Duration: All maintenance or other agreements for services entered into during the duration of a service level agreement and whose performance and payment time frames extend beyond the duration of this Participating Addendum and/or the Master Agreement shall remain in effect for performance and payment purposes (limited to the time frame and services established per each written agreement). To the extent that any agreements extend beyond the duration of this Participating Addendum and/or the Master Agreement, the terms and conditions in this Participating Addendum and the Master Agreement, as well as the terms and conditions of any written service level agreements or purchasing orders, will remain in effect through the time frame in the written agreement, or until the written agreement is terminated. No new leases, maintenance, or other agreements for services may be executed after the Master Agreement has expired or after this

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Participating Addendum has expired or been terminated. For the purposes of this section, renewals of maintenance, subscriptions, SaaS subscriptions and agreements, and other service agreements shall not be considered "new."

17. INDEMNIFICATION

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

- (i) The Master Agreement's Indemnification (Section 13, subpart a) provision controls. The Master Agreement's Limitation of Liability clause (Section 13, subpart c) is deleted and replaced with the following:

The limit of liability shall be as follows:

- a. Contractor's liability for any claim, loss or liability arising out of, or connected with the products or services provided, and whether based upon default, or other liability such as breach of contract, warranty, negligence, misrepresentation or otherwise, shall in no case exceed direct damages in: (i) an amount equal to two (2) times the charges specified in the Purchase Order for the products or services, or parts thereof forming the basis of the Purchasing Entity's claim, (said amount not to exceed a total of twelve (12) months charges payable under the applicable Purchase Order) or (ii) five million dollars (\$5,000,000) per purchase by a Purchasing Entity, whichever is greater, except to the extent resulting from Contractor's recklessness, bad faith, or intentional misconduct.
- b. The Purchasing Entity may retain such monies from any amount due Contractor as may be necessary to satisfy any claim for damages, costs and the like asserted against the Purchasing Entity unless Contractor at the time of the presentation of claim shall demonstrate to the Purchasing Entity's satisfaction that sufficient monies are set aside by the Contractor in the form of a bond or through insurance coverage to cover associated damages and other costs.
- c. Notwithstanding the above, neither the Contractor nor the Purchasing Entity shall be liable for any consequential, indirect or special damages of any kind which may result directly or indirectly from such performance, including, without limitation, damages resulting from loss of use or loss of profit by the Purchasing Entity, the Contractor, or by others. For purposes of clarity, damages relating to data breach are considered to be direct damages.
- d. The limitations of liability will not apply to claims for bodily injury or death as set forth in Section 13 and Section 30 under the Master Agreement, when made applicable under a specific Purchase Order. The limitations of liability shall not apply to damages due to data breach either by Contractor, including those related to any solution or services provided by Contractor.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State of Georgia or its agencies have agreed to indemnify Contractor or any third parties. Any term or conditions otherwise is null and void.

- (ii) **Coordination of Defense.** In connection with indemnification of a Purchasing Entity or DOAS, when a Georgia state entity is a named defendant in any lawsuit, the defense of the Georgia state entity shall be coordinated by the Attorney General of Georgia. The Attorney General of Georgia may, but has no obligation to, authorize Contractor to control the defense and any related settlement negotiations; provided, however, that, in such event, Contractor shall not agree to any settlement of claims against the State of Georgia without first obtaining a concurrence from the Attorney General of Georgia. If the Attorney General of Georgia does not authorize sole control of the defense and settlement negotiations for Contractor, Contractor shall be granted authorization to participate in any proceeding related to this section; provided however notwithstanding anything to the contrary herein, Contractor shall continue to be obligated to indemnify the participating entity and, to the extent applicable, any and all purchasing entities, in accordance with and to the extent Contractor provides such indemnity under this Master Agreement.

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

18. Section 31 of the Master Agreement is amended to include the following provision:

Service Provider Disclaimers of Warranties Invalid. Any term or condition that excludes, disclaims, or limits a Contract Vendor warranty is null and void.

Warranty of Security: Unless otherwise agreed in writing, the Contractor and all Service Providers, including but not limited to sub-contractors, resellers, and partners, will not perform any of the services outside of the United States, and the Contractor will not allow any State of Georgia data to be sent by any medium, transmitted, or accessed outside of the United States.

The Contractor and all Service Providers must notify the Purchasing Entity and the State of Georgia (through the Participating State Contact to this Participating Addendum) as soon as possible or no later than twenty-four (24) hours following discovery of the breach of any unauthorized access of data occurs.

Indemnification (Breach of Warranty of Security): The Contractor agrees to defend, indemnify, and hold harmless the State of Georgia, the Participating Entities, and any officers, directors, or employees of such for any claims, suits, or proceedings related to a breach of the Warranty of Security. The Contractor will include credit monitoring services at its own cost for those individuals affected or potentially affected by a breach of this warranty for a two-year period following the breach.

19. SECURITY AND DATA PROTECTION. The Contractor is responsible for the security and protection of the Purchasing Entity's data. The terms, conditions, and provisions of this Security and Data Protection section apply in addition to any terms, conditions and provisions of the Master Agreement related to security and data protection. This Security and Data Protection section survives the completion, termination, expiration, or cancellation of this Purchasing Addendum.

(i) The following terms are added to the Master Agreement at Exhibit 1, Software as a Service:

a. Application Security Audits and Remediation. Contractor will audit, at the application level the security of the systems and processes used to provide any and all Cloud Computing or Hosting Services to the State. This security audit: (1) will be performed at least once every calendar year beginning with the initial year of the Contract; (2) will be performed according to Statement on Standards for Attestation Engagements ("SSAE") 18 Service Organization Control ("SOC") 1 or 2, International Organization for Standardization ("ISO")

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

27001, or FedRamp; (3) will be performed by third party security professionals at Contractor's election and expense; (4) will result in the generation of an audit report ("Contractor Audit Report"), which will, to the extent permitted by applicable law, be deemed confidential information and as not public data under the Georgia Data Practices Act; and (5) may be performed for other purposes in addition to satisfying this section.

Upon the State's reasonable, advance written request, Contractor will provide the State a copy of the current Contract Vendor Audit Report. If the Contractor Audit Report is of or involves a third party's IT environment, the State may be required to execute a non-disclosure agreement with the third party.

Contractor will make best efforts to remediate any control deficiencies identified in the Contractor Vendor Audit Report in a commercially reasonable timeframe.

If the State becomes aware of any other Contractor controls that do not substantially meet the State's requirements, the State may request remediation from Contractor. Contractor will make best efforts to remediate any control deficiencies identified by the State or known by the Contractor, in a commercially reasonable timeframe.

b. Secure Coding. Contractor warrants that all Cloud Services are free from any and all defects in materials, workmanship, and design. Contractor warrants that all Cloud Services are free from any and all viruses, malware, and other harmful or malicious code. Contractor must scan all source code for vulnerabilities, including before and after any source code changes are made and again before being placed into production, and must promptly remediate any and all vulnerabilities. Contractor must follow best practices for application code review and the most current version of the Open Web Application Security Project (OWASP) 10.

(ii) Insurance and Liability. Contractor shall maintain the insurance described in the Standard Insurance Requirements section, below.

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Notwithstanding any limitation of liabilities in the Participating Addendum, the Contractor shall be liable for damages to the extent such damages are within the insurance limit. For purposes of clarification, the foregoing sentence shall in no way limit the Contractor's liability.

- (iii) Subcontractors. Contractor agrees that no State data shall be transmitted, exchanged or otherwise provided to other parties except as specifically agreed to in writing by the Chief Information Security Officer or delegate. Contractor must ensure that any contractors, subcontractors, agents and others to whom it provides State data, agree in writing to be bound by the same restrictions and conditions under the Participating Addendum that apply to Contractor with respect to such data.
- (iv) Compliance with Data Privacy and Security Laws and Standards. In addition to the requirements of the Master Contract, Contractor shall comply with all applicable State and Federal data privacy and data security laws, rules, and regulations, including the following.

Any work performed by Contractor shall comply with relevant requirements of the Participating State's Enterprise Architecture and Georgia Information Technology Standards, if such entity is under the purview of the Georgia Technology Authority. These standards may be found at <https://gta.georgia.gov/psg/>.

Contractor shall comply with the Health Insurance Portability Accountability Act ("HIPPA"), the HITECH Act, and other similar privacy laws. Contractor also shall comply with the HIPPA Privacy Rule, HIPPA Security Rule, and other similar rules, regulations, and laws, including future amendments thereto.

Contractor shall comply with all applicable requirements, restrictions, and conditions set forth in the Criminal Justice Information Services ("CJIS") – Security Policy, Version 5.3 dated 8/4/2014, including, but not limited to, conducting FBI fingerprint background checks on all of Contractor agents, employees, and subcontractors that have or will have access to Criminal Justice information ("CJI").

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Contractor acknowledges that for the purposes of this Participating Addendum when storing, processing, transmitting or otherwise accessing State data subject to the Family Educational Rights and Privacy Act ("FERPA"), it is designated as a "school official" with "legitimate educational interest" in the State data and associated metadata, as those terms have been defined under FERPA and its implementing regulations, and Contractor agrees to abide by the limitations and requirements imposed by 34 CFR 99.33(a) on school officials. Contractor shall use Ordering Entity data only for the purpose of fulfilling duties under the Contract and will not monitor or share such data with or disclose it to any third party except as provided for in this Participating Addendum, as required by law, or as authorized in writing by the Ordering Entity. By way of illustration and not of limitation, Contractor will not use such data for Contractor's own benefit and, in particular, will not engage in "data mining" of such data or communications, whether through automated or human means, except as necessary to fulfill its duties under this Participating Addendum, or as required by law, or authorized in writing by the Purchasing Entity.

All of Contractor's systems and components that process, store, or transmit Cardholder Data shall comply with the most recent version of the Payment Card Industry Data Security Standard ("PCI DSS") promulgated by the PCI Security Standards Council. The Contractor shall, upon request, provide the State with Contractor's current Attestation of Compliance signed by a PCI QSA ("Qualified Security Assessor").

- (v) Business Continuity and Backups. Contractor shall ensure that the State's designated recovery timelines are met. Contractor shall have written business continuity and disaster recovery plans that define roles, responsibilities and procedures necessary to ensure that Cloud Services provided under this Participating Addendum shall be maintained in the event of a disruption to the Contractor's operations, regardless of the cause of the disruption. Such plans must, at a minimum, define the Contractor's actions to address the impacts of the following key areas likely to cause a disruption to Contractor's operations: loss of key personnel, loss of facility, and loss of information technology. Contractor must conduct testing and review of its business continuity and disaster recovery plan at least annually. Upon State request, Contractor must also participate, at mutually agreed upon times, in State business continuity and disaster recovery testing, training, and exercise activities.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

20. PUBLIC RECORDS

The laws of the State of Georgia, including the Georgia Open Records Act, as provided in O.C.G.A. Section 50-18-70 et seq., require procurement records and other records to be made public unless otherwise provided by law. Contractor agrees that this Contract, any related purchase orders, related invoices, related pricing lists, and the Proposal will be public documents, and may be available for distribution. Contractor gives DOAS, the Purchasing Entities, and the State of Georgia express permission to make copies of this Contract, any related purchase orders, related invoices, related pricing lists, and Proposal. The permission to make copies as noted will take precedence over any statements of confidentiality, proprietary information, copyright information, or similar notation. DOAS, the Purchasing Entities, and/or the State Georgia will not inform Contractor of any request for a copy of this Contract, including any related purchase orders, related invoices, related pricing lists, or the Proposal.

21. STANDARD INSURANCE REQUIREMENTS

The Contractor shall procure and maintain, until all of its obligations have been discharged (including any warranty periods under the statewide contract have been satisfied), insurance which shall protect the Contractor and the State of Georgia (as an additional insured) from any claims for bodily injury, property damage, or personal injury covered by the indemnification obligations set forth in the statewide contract attached to this solicitation throughout the duration of the statewide contract. The Contractor shall procure and maintain the insurance policies described below at the Contractor's own expense and shall furnish DOAS an insurance certificate listing the State of Georgia as certificate holder and as an additional insured. The insurance certificate must document that the Commercial General Liability Insurance coverage purchased by the Contractor includes contractual liability coverage applicable to the statewide contract. In addition, the insurance certificate must provide the following information: the name and address of the insured; name, address, telephone number and signature of the authorized agent; name of the insurance company (authorized to operate in Georgia); a description of coverage in detailed standard terminology (including policy period, policy number, limits of liability, exclusions and endorsements); and an acknowledgment of notice of cancellation to DOAS.

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

The Contractor is required to maintain the following insurance coverage's during the term of the statewide contract:

- 1) Workers Compensation Insurance (Occurrence) in the amounts of the statutory limits established by the General Assembly of the State of Georgia (A self-insurer must submit a certificate from the Georgia Board of Workers Compensation stating that the Contractor qualifies to pay its own workers compensation claims.) In addition, the Contractor shall require all Sub-Contractors occupying the premises or performing work under the statewide contract to obtain an insurance certificate showing proof of Workers Compensation Coverage with the following minimum coverage:

Bodily injury by accident - per employee	\$100,000;
Bodily injury by disease - per employee	\$100,000;
Bodily injury by disease – policy limit	\$500,000.
- 2) Commercial General Liability Policy with the following minimum coverage:

Policy shall include bodily, property damage and broad form contractual liability coverage.	
Each Occurrence Limit	\$1,000,000
Personal & Advertising Injury Limit	\$1,000,000
General Aggregate Limit	\$2,000,000
Products/Completed Ops. Aggregate Limit	\$2,000,000
- 3) Automobile Liability

Bodily Injury and Property Damage for any owned, hired or non-owned vehicles used in the performance of the statewide contract	
Combined Single Limit	\$1,000,000
- 4) Errors and Omissions Limit \$2,000,000
- 5) Commercial Umbrella Limit \$2,000,000.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

**NASPO ValuePoint
Cloud Solutions 2016-2026**

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

The foregoing policies shall contain a provision that coverage afforded under the policies will not be canceled, or not renewed or allowed to lapse for any reason until at least thirty (30) days prior written notice has been given to DOAS. Certificates of Insurance (ACORD form or equivalent approved by the State) showing such coverage to be in force shall be filed with DOAS prior to commencement of any work under the statewide contract and remain in effect for the duration of the statewide contract. The foregoing policies shall be obtained from insurance companies authorized to do business in Georgia and shall be with companies acceptable to DOAS, which must have a minimum A.M. Best rating of A-. All such coverage shall remain in full force and effect during the term and any renewal or extension thereof.

Within ten (10) business days of an executed Participating Addendum, the Contractor must procure the required insurance and provide DOAS with two (2) Certificates of Insurance. Certificates must reference the Contract Number: 99999-SPD-T20190814-0002. The Contractor's submitted pricing must include the cost of the required insurance. No contract performance shall occur unless and until the required insurance certificates are provided.

22. INDIVIDUAL CUSTOMER

Each State entity and political subdivision, as a Purchasing Entity, that purchases products/services shall be treated as individual customers. Except to the extent modified by a Participating Addendum, each agency and political subdivision shall be responsible to follow the terms and conditions of the Master Agreement; and they shall have the same rights and responsibilities for their purchases as the Lead State has in the Master Agreement. Each agency and political subdivision shall be responsible for their own charges, fees, and liabilities. Each agency and political subdivision shall have the same rights to any

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

indemnify or to recover any costs allowed in the contract for their purchases. The Contractor shall apply the charges to each Purchasing Entity or Purchasing Entity individually.

23. ARBITRATION, INDEMNIFICATION, DAMAGES, WARRANTIES

Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State of Georgia or its agencies have agreed to binding arbitration. Any term or condition that requires the parties to mediate or arbitrate is null and void. Voluntary dispute resolution procedures are valid to the extent allowed by law. Further, the State of Georgia does not agree to pay attorney fees, costs, or late payment charges. Nothing herein, whether express or implied, shall be deemed to create an obligation on the part of the State to indemnify, defend, hold harmless or release the Contractor, Contractor's sub-Contractors, or Contractor's agents. This shall extend to all agreements related to the subject matter of this Participating Addendum, and to all terms subsequently added, without regard to order of preference.

24. STATE OF GEORGIA ePAYABLE/PURCHASING CARD PROGRAM

DOAS administers a program which provides a purchasing card (hereinafter, "State of Georgia PCard") to be used by authorized government employees of certain governmental entities electing to participate in the program to purchase necessary supplies. The Contractor agrees to accept payment via ePayables and shall impose no fee on either DOAS or any Purchasing Entity for the use of ePayables pursuant to this Statewide Contract. Payment via ePayables is the preferred method of compensation processing. DOAS has entered into a Contract with its PCard provider, Bank of America, to provide the e-Payables solution which will allow DOAS and Purchasing Entities to facilitate electronic payment by DOAS and Purchasing Entities to the Contractor.

All purchases made by Purchasing Entities' representatives utilizing State of Georgia ePayables shall be exempt from sales tax. It is the responsibility of the Purchasing Entity representative to provide the Purchasing Entity's tax identification number as needed at the point of sale.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

The Contractor shall keep the State of Georgia ePayables numbers confidential and shall not disclose the State of Georgia ePayables numbers except as expressly authorized by DOAS. The Contractor represents that State of Georgia ePayables numbers will be processed, transmitted and stored in compliance with the Payment Card Industry Data Security Standard. The Contractor shall provide immediate written notice to the current DOAS contract administrator in the event of (1) any unauthorized disclosure of State of Georgia ePayables Numbers or (2) Contractor's failure to maintain compliance with the Payment Card Industry Data Security Standard in the Contractor's contract performance. The Contractor agrees to cooperate with DOAS, Purchasing Entities, and DOAS contractual partner(s) for ePayables in resolving any issues or disputes.

25. ADMINISTRATIVE FEE AND SALES REPORTING SUBMISSION

Pursuant to O.C.G.A. Section 50-5-51(10), DOAS has the authority to collect monies, rebates, or commissions payable to the State that are generated by supply contracts established pursuant to O.C.G.A. Section 50-5-57. These administrative fees are used by DOAS to fund various initiatives, including the administration of existing and new statewide contracts, training, and technology. DOAS requires each Contractor to pay to DOAS an administrative fee on all sales pursuant to the resulting statewide contract. The administrative fee amount for this statewide contract is 2.00 percent (%) for a duration of 1 (one) year. After the initial duration of 1 year, parties will assess the 2% administrative fee amount and determine if a modified administrative fee is justified. All Contractors must agree that the Fee will not be identified separately from the product and/or service pricing offered to Purchasing Entities wherever that pricing may appear (website, catalog, invoices, etc.). This Fee will be collected by the awarded Contractor and remitted to DOAS in accordance with the following paragraphs.

- (i) Quarterly Sales Report. The Quarterly Sales Report must be received by DOAS twenty (20) days after the end of the Fiscal Quarter through submission within the Contractor Portal of Team Georgia Marketplace, and the Fees must be received as a response to an invoice generated by DOAS between the time of receipt of the invoice and forty-five (45) days after the end of the fiscal quarter as defined by the table below:

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

<i>DOAS' Fiscal Quarters</i>	<i>Months</i>	<i>Contractor's Quarterly Sales Report Due Date</i>	<i>Contractor's Payment Due Date (In Response to DOAS generated Invoice)</i>
<i>Quarter 1</i>	<i>July 1st – September 30th</i>	<i><u>October 20th</u></i>	<i><u>November 15th</u></i>
<i>Quarter 2</i>	<i>October 1st – December 31st</i>	<i><u>January 20th</u></i>	<i><u>February 15th</u></i>
<i>Quarter 3</i>	<i>January 1st – March 31st</i>	<i><u>April 20th</u></i>	<i><u>May 15th</u></i>
<i>Quarter 4</i>	<i>April 1st – June 30th</i>	<i><u>July 20th</u></i>	<i><u>August 15th</u></i>
			30 DAYS FOLLOWING TERMINATION OF SWC

At the end of each state fiscal quarter as defined above, Contractor shall prepare the Quarterly Sales Report and submit the file through the Contractor Portal of Team Georgia Marketplace, including the Contractor's most up-to-date Invoice Contact Name (Billing Contact), Contractor Billing Address, and Contractor Billing E-Mail. In the event that no sales have occurred, the Contractor must complete and submit the Quarterly Sales Report, indicating that no sales have occurred, and submit the file through Contractor Portal of Team Georgia Marketplace. No later than the date identified above as the "Contractor's Payment Due Date" for each fiscal quarter, the Contractor shall remit a payment of fees to DOAS in response to a DOAS generated invoice, through Electronic Funds Transfer (EFT).

By submission of these reports and corresponding Contractor payments, Contractor is certifying their correctness. DOAS, at its sole discretion, may also accept payment of Fees from the Contractor via electronic funds transfer (EFT).

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

-
- (ii) Auditing and Contract Close Out. All sales reports and Fee payments shall be subject to audit by the State. Contractor shall maintain books, records and documents which sufficiently and properly document and calculate all charges billed to the State and all Fees throughout the term of the statewide contract for a period of at least five (5) years following the date of final payment or completion of any required audit, whichever is later. Contractor shall permit the Auditor of the State of Georgia or any authorized representative of the State, and where federal funds are involved, the Comptroller General of the United States, or any other authorized representative of the United States government, to access and examine, audit, excerpt and transcribe any directly pertinent books, documents, papers, electronic or optically stored and created records or other records of the Contractor relating to orders, invoices or payments or any other documentation or materials pertaining to the statewide contract, wherever such records may be located during normal business hours upon written notice. In the event of a need to apply an audit review, the State will work with SHI regarding applicable time frames. Audit shall be limited to records in connection with DOAS only. Contractor shall not impose a charge for audit or examination of the Contractor's books and records. If an audit discloses material incorrect billings or improprieties, the State reserves the right to charge the Contractor for the cost of the audit and appropriate reimbursement. DOAS shall deliver a copy of its Audit findings to Contractor and Contractor shall have reasonable opportunity to review and dispute such findings. Evidence of criminal conduct will be turned over to the proper authorities.

In no event, shall Contractor retain any amount of money in excess of the compensation to which Contractor is entitled and all non-disputed Fees owed DOAS shall be paid within thirty (30) calendar days of termination of the statewide contract for any reason.

- (iii) Modifying or Canceling the Fee. DOAS reserves the right to modify and/or cancel the Fee at any time. Contractor shall immediately amend the statewide contract pricing to reflect any modification or cancellation of the Fee by DOAS. In addition, DOAS reserves the right to revise

PARTICIPATING ADDENDUM

Between

SHI International Corporation

(hereinafter "Contractor")

And

Georgia Department of Administrative Services

(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

collection and reporting requirements in conjunction with implementation of an on-line procurement system.

- (iv) Late Payment Fee. In the event DOAS does not receive the Contractor's payment of the Fees on or before the Contractor's Payment Due Date, the parties agree the Contractor must pay DOAS interest on the overdue Fees at a rate of eighteen percent (18%) per annum. Interest will be calculated as follows:

$$(\text{Administrative Fee Amount Due}) \times (18\%) = X$$

$$X / 365 \text{ (366 for leap years)} = Y$$

$$Y \times (\text{Number of Days Payment is Late}) = \text{Interest Owed}$$

For the purposes of this provision, payment of the Fees shall be considered received by DOAS on (1) the date of DOAS' receipt of the EFT confirmation or (2) the date DOAS receives the envelope containing a check for the correct amount of the administrative fee. In the event the Contractor does not submit full payment of the Fees owed, interest shall only be applicable to the portion of the Fees which is outstanding. In the event the Contractor makes an error and overpays, the Contractor is responsible for alerting DOAS in writing of the Contractor's discovery of the overpayment. DOAS will confirm whether an overpayment has occurred and refund or credit the overpayment amount to the Contractor no later than thirty (30) days' following DOAS' receipt of written notice of the overpayment. DOAS will have no responsibility for interest or any other fees with respect to Contractor's overpayment of Fees.

26. QUARTERLY BUSINESS REVIEW MEETINGS

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

**NASPO ValuePoint
Cloud Solutions 2016-2026**

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

The Contractor must participate in Quarterly Business Review ("QBR") meetings at DOAS' request. During the QBR meetings, the Contractor will present a written and oral status to DOAS regarding all work orders/purchase orders (including date and value). The QBR meeting will also focus on the status of service level agreements and key performance indicators agreed to by Contractor and DOAS. The QBR meeting may involve, but not be limited to, the following: review of the Contractor's performance and submitted reports, identification of areas of improvement to be addressed, review of the previous quarter's sales statistics, strategies to grow sales volume, development/monitoring of a Contractor service "scorecard."

27. COMPLIANCE WITH THE LAW

The Contractor, its employees, agents, and sub-Contractors shall comply with all applicable federal, state, and local laws, rules, ordinances, regulations and orders now or hereafter in effect when performing under the Contract, including without limitation, all laws applicable to the prevention of discrimination in employment and the use of targeted small businesses as sub-Contractors or Contractors. The Contractor, its employees, agents and sub-Contractors shall also comply with all federal, state and local laws regarding business permits and licenses that may be required to carry out the work performed under the Contract. Contractor and Contractor's personnel shall also comply with all State and State Entity policies and standards in effect during the performance of the Contract, including but not limited to the State Entity's policies and standards relating to personnel conduct, security, safety, confidentiality, and ethics. Contractor certifies that Contractor is not currently engaged in, and agrees for the duration of this Contract, including any renewals or extensions thereof, not to engage in, a boycott of Israel, as defined in O.C.G.A. § 50-5-85. Further, the provisions of O.C.G.A. Section 45-10-20 et seq. have not and must not be violated under the terms of this Contract. Further, Contractor represents that Contractor complies with and will continue to comply with O.C.G.A. § 21-5-76. The laws of the State of Georgia shall govern this Participating Addendum.

28. CERTIFICATION REGARDING SALES AND USE TAX

By executing the Contract the Contractor certifies it is either (a) registered with the State Department of Revenue, collects, and remits State sales and use taxes as required by Georgia law, including Chapter 8 of Title 48 of the O.C.G.A.; or (b) not a "retailer" as defined in O.C.G.A. Section 48-8-2. The Contractor also acknowledges that the State may declare the Contract void if the above certification is false. The

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

**NASPO ValuePoint
Cloud Solutions 2016-2026**

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

Contractor also understands that fraudulent certification may result in the DOAS or its representative filing for damages for breach of contract.

29. DRUG-FREE WORKPLACE

The Contractor hereby certifies as follows:

- (i) Contractor will not engage in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of this Contract; and
- (ii) If Contractor has more than one employee, including, Contractor shall provide for such employee(s) a drug-free workplace, in accordance with the Georgia Drug-free Workplace Act as provided in O.C.G.A. Section 50-24-1 et seq., throughout the duration of this Contract; and
- (iii) Contractor will secure from any sub-Contractor hired to work on any job assigned under this Contract the following written certification: "As part of the subcontracting agreement with (Contractor's Name), (Sub-Contractor's Name) certifies to the Contractor that a drug-free workplace will be provided for the sub-Contractor's employees during the performance of this Contract pursuant to paragraph 7 of subsection (b) of Code Section 50-24-3."

Contractor may be suspended, terminated, or debarred if it is determined that:

- (i) Contractor has made false certification here in above; or

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

-
- (ii) Contractor has violated such certification by failure to carry out the requirements of O.C.G.A. Section 50-24-3(b).

30. ASSIGNMENT

Neither Party may, nor will it have the power to, assign or novate this Participating Addendum with the consent of the other.

31. AMENDMENT

No amendment or variation of the terms of this Participating Addendum shall be valid unless made in writing, signed by the parties and approved as required. No oral understanding or agreement not incorporated in the Participating Addendum is binding on any of the parties.

32. AGREEMENT

This Participating Addendum together with its exhibits and/or amendments and the Master Agreement together with its exhibits and/or amendments, set forth the entire agreement between the parties with respect to the subject matter of all previous communications, representations or agreements, whether oral or written, with respect to the subject matter hereof. Terms and conditions inconsistent with, contrary or in addition to the terms and conditions of this Participating Addendum together with its exhibits and/or amendments and the Master Agreement, together with its exhibits and/or amendment shall not be added to or incorporated into this Participating Addendum together with its exhibits and/or amendments or the Master Agreement and its exhibits and/or amendments, by any subsequent purchase order or otherwise (except as required by Purchasing Entities in order to utilize specific funds for a procurement), and any such attempts to add or incorporate such terms and conditions are hereby rejected. The terms and conditions of this Participating Addendum and the Master agreement and its exhibits and/or amendments shall prevail and govern in the case of any such inconsistent or additional terms.

By signing below, Contractor agrees to offer the same services as on the Utah NASPO ValuePoint Master Agreement Number AR2488, at prices equal to or lower than the prices on the contract.

PARTICIPATING ADDENDUM

Between

SHI International Corporation
(hereinafter "Contractor")

And

Georgia Department of Administrative Services
(hereinafter "DOAS" or "Participating State/Entity")

Pursuant to

NASPO ValuePoint

Cloud Solutions 2016-2026

Administered by the Utah (hereinafter "Lead State") Master Agreement No: AR2488

IN WITNESS WHEREOF, the parties have executed this Addendum as of the date of execution by both parties below.

Contractor: SHI International Corp.	Participating Entity: Georgia Department of Administrative Services
Signature: 	Signature: 
Name: Natalie Castagno	Name: Lisa Eason
Title: Director of Contracts & RFPs	Title: Deputy Commissioner, State Purchasing Division
Date: 10/2/19	Date: 10-3-19

Department	Account	Amount
City Council	10011100-523900	\$ 2,445.41
City Clerk	10013300-523900	\$ 1,397.38
City Administration	10013200-523900	\$ 2,794.76
Finance	10015100-523900	\$ 14,323.14
Information Technology	10017350-523900	\$ 9,082.97
Human Resources	10018400-523900	\$ 2,794.76
Court	10026500-523900	\$ 4,541.48
Public Safety	10031100-523900	\$ 166,637.55
Public Works	10041010-523900	\$ 35,633.19
Recreation & Parks	10061100-523900	\$ 34,235.81
Community Development	10074100-523900	\$ 22,358.08
Development Authority	10074200-523900-AED00	\$ -
Solid Waste Fund	54015450-523900	\$ 698.69
E-911	21531800-523900	\$ 23,056.77
Total		\$ 320,000.00



STAFF REPORT

Department: Administration
Submitted By: Lauren Shapiro
Meeting Date: July 17, 2023

AGENDA ITEM:

Ratification of Emergency Procurement Declaration: City Hall HVAC System

Consideration of approval of the ratification of an emergency procurement declaration in order to repair the City Hall HVAC system.

STAFF RECOMMENDATION:

Approve the ratification of an emergency procurement declaration in order to repair the City Hall HVAC system.

BUDGET & PROCUREMENT:

BUDGETED ITEM: NO

FISCAL IMPACT: YES

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST:

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
General Fund Contingency (10090000-579000)	-\$123,368
Public Works Facility Maintenance (10041050-541300-EPW04)	\$123,368

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-	-\$
-	-\$

ITEM DESCRIPTION:

The City Code allows for the City Administration to make an emergency procurement declaration that will allow for exceptions to the typical competitive requirements of municipal purchasing. If and when this action is ratified, city staff will seek your approval of a purchase order for the repairs to the HVAC system.

As of July 5, 2023, the City Hall HVAC system is capable of operating at half of its intended capacity with no additional redundancy. There are two coils that allow the system to operate. One has catastrophically failed and the other has moderately failed. Should the coil that has moderately failed continue to deteriorate, City Hall will be completely without air conditioning as we move deeper into the summer months and the daily temperatures rise. There is the significant potential of creating a loss of essential governmental services should the City Hall HVAC system fail.

There was a need to fund and order replacement/repair HVAC parts as of July 5, 2023, that would require bypassing the typical formal bid process, and thereby saving a minimum of 45 days in the process to repair the HVAC system. The lead time to fabricate new coils, have them delivered and installed is 8-9 weeks.

The cost of performing this repair is quoted not to exceed \$123,368. This item will be funded through the General Fund contingency line-item with the required appropriations transferred to the Public Works Departmental budget to process all necessary purchases.

ALTERNATIVES:

ATTACHMENTS:



STAFF REPORT

Department: Administration
Submitted By: Lauren Shapiro
Meeting Date: July 17, 2023

AGENDA ITEM:

Ratification of Purchase Approval for City Hall HVAC Repairs

Consideration of ratification of the issuance of a purchase order to Comfort by Design, Inc., as the vendor to provide maintenance and repairs to the City Hall HVAC system, in the amount of \$131,006.67.

STAFF RECOMMENDATION:

Approve ratification of the issuance of a purchase order to Comfort by Design, Inc., as the vendor to provide maintenance and repairs to the City Hall HVAC system, in the amount of \$131,006.67.

BUDGET & PROCUREMENT:

BUDGETED ITEM: NO

FISCAL IMPACT: YES

INCLUDED IN CURRENT FY CPTL BUDGET: NO

INCLUDED IN CURRENT FY OPRT. BUDGET: NO

TOTAL PROJECT COST: APPROPRIATIONS FOR THIS EMERGENCY REPAIR ARE PROVIDED THROUGH THE GENERAL FUND CONTINGENCY ACCOUNT. THE ORIGINAL BALANCE IN THE CONTINGENCY ACCOUNT TOTALED \$880,000 AND WILL TOTAL \$748,993 UPON APPROVAL OF THIS PURCHASE REQUEST.

APPROPRIATIONS:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
General Fund Contingency (10090000-579000)	-\$131,006.67
Public Works Facility Maintenance (10041050-541300-EPW04)	\$131,006.67

EXTERNAL FUNDING SOURCES:

<u>ACCOUNT TITLE/NUMBER</u>	<u>DOLLAR AMOUNT</u>
-	-\$
-	-\$

ITEM DESCRIPTION:

As described in the previous agenda item, the City Hall HVAC system is capable of operating at half of its intended capacity with no additional redundancy. There are two coils that allow the system to operate. One has catastrophically failed and the other has moderately failed. Should the coil that has moderately failed continue to deteriorate, City Hall will be completely without air conditioning as we move deeper into the summer months and the daily temperatures rise.

There is a need to fund and order replacement/repair HVAC parts now, as the lead time to fabricate new coils, and have them delivered and installed is 8-9 weeks. Comfort by Design, Inc. (AComfort) is currently under contract with the city to perform HVAC Services and Preventative Maintenance for City Facilities, under RFP 23-114.

The total quote from AComfort totals \$131,006.67, which includes \$123,368.00 from Heat Transfer Systems for the replacement HVAC coils. This item will be funded through the General Fund contingency line-item with the required

appropriations transferred to the Public Works Departmental budget to process all necessary purchases.

ALTERNATIVES:

ATTACHMENTS:

1. PO 24000046 Comfort By Design



Bill To

PUBLIC WORKS
1790 HEMBREE ROAD
ALPHARETTA, GA 30009

Purchase Order

Fiscal Year 2024 Page: 1 of 1

THIS NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES AND SHIPPING PAPERS.

Purchase Order # **24000046**

Unless otherwise specified herein, prices are F.O.B. destination (inside delivery as applicable), with freight prepaid and included.

Vendor

COMFORT BY DESIGN INC
410 O'DELL RD
GRIFFIN, GA 30224

Ship To

PUBLIC WORKS
1790 HEMBREE ROAD
ALPHARETTA, GA 30009

VENDOR PHONE NUMBER		VENDOR FAX NUMBER		REQUISITION NUMBER	DELIVERY REFERENCE
678-688-7378		678-688-7387		240072	
DATE ORDERED	VENDOR NUMBER	DATE REQUIRED	FREIGHT METHOD/TERMS		DEPARTMENT/LOCATION
07/06/2023	636				PUBLIC WORKS
NOTES					

HEATING, VENTILATING AND AIR CONDITIONING (HVAC)

ITEM #	DESCRIPTION / PART #	QTY	UOM	UNIT PRICE	EXTENDED PRICE
1	CITY HALL COOLING TOWER TUBE BUNDLE REPAIR. PER QUOTE 07/05/23. Commodity Code: 91450000000 HEATING, VENTILATING AND AIR CONDITIONING (HVAC)	131,006.7	DOL	\$1.00	\$131,006.67

 Director of Finance	Total Ext. Price	\$131,006.67
	Total Sales Tax	\$0.00
	Total Freight	\$0.00
	Total Discount	\$0.00
	Total Credit	\$0.00
	Purchase Order Total	\$131,006.67

CITY OF ALPHARETTA, GA

- IMPORTANT INFORMATION FOR VENDORS -

1. Purchase order # shall appear on all invoices, shipping notices, and packages.
2. Name and address of the ordering department shall appear on all invoices and shipping notices.
3. Include detailed packing list with each shipment.
4. Send separate invoice for each shipment.
5. No cash-on-delivery (C.O.D.) shipments accepted.

- TERMS AND CONDITIONS -

1. DEFINITIONS: The term "Purchaser" means City of Alpharetta and the term "Seller" means the person, firm or corporation from whom the merchandise has been ordered.
2. GENERAL INFORMATION: The Seller, without the written consent of the Procurement Officer (or his/her designee), shall not make any changes, alterations, or variations in the terms of the purchase order ("order"). No terms stated by Seller in accepting or acknowledging this order shall be binding upon Purchaser unless accepted in writing by Purchaser. Seller may not assign this order without Purchaser's prior written consent.
3. TIME IS OF THE ESSENCE: If it appears Seller will not meet required delivery schedule, Seller must promptly notify Purchaser in writing and, if requested by Purchaser, ship via air or expedited routing to avoid or minimize delay to the maximum extent possible, the added cost to be borne by Seller.
4. ERRORS: In case of error in calculating or typing, the quoted unit price will be used as basis for correction.
5. FREIGHT: Unless otherwise specified herein, prices are F.O.B. destination (inside delivery as applicable), with freight prepaid and included.
6. INSPECTIONS: All merchandise is subject to the Purchaser's inspection within a reasonable time after arrival at the ultimate destination. If the merchandise fails to comply with the specifications imposed by Purchaser or is otherwise of an unsatisfactory condition, the Purchaser may return said merchandise to Seller at Seller's expense. Payment for material on this order shall not constitute acceptance.
7. DISCOUNT PERIOD: It shall be understood that the cash discount period to purchaser will date from receipt by Purchaser of acceptable goods and invoice and not from date of invoice.
8. SUBSTITUTIONS: No substitutions or changes in this order (includes unit prices) will be accepted unless approved in writing by the Procurement Officer (or his/her designee).
9. EXCISE AND SALES TAXES: The prices herein should not include any Federal excise taxes or sales taxes imposed by any State or Municipal Government. Such taxes, if included, must be deducted by the vendor when submitting claim for payment. (Sales Tax Exemption 301-682441/ Federal Tax Identification 58-6011454).
10. WARRANTIES: Seller warrants that all materials, equipment and services provided under this order are subject to all warranties arising by operation of law and additionally conform to the specifications imposed by Purchaser; all parts and materials are of a good marketable quality, of latest model and current date, exclude surplus remanufactured and used products unless so specified by Purchaser and are fit for the known purpose for which they are sold.
11. PATENTS, TRADEMARKS AND COPYRIGHTS: The Seller warrants that the equipment and/or materials furnished on this order do not infringe any patent, registered trademark or copyright, and agrees to hold City of Alpharetta as Purchaser, harmless, in the event of any infringement or claim thereof.
12. TITLE: Seller warrants that the merchandise is free and clear of all liens and encumbrances and that Seller has a good and marketable title to same.
13. COMPLIANCE WITH LAWS AND REGULATIONS: The Seller by acceptance of this order warrants full compliance with all applicable local, state or federal laws and regulations and agrees to indemnify and defend Purchaser against any loss, cost, liability or damage by reason of Seller's violation of this paragraph.
14. INDEMNIFICATION: All services to be rendered or performed under this agreement will be rendered or performed entirely at the Seller's own risk and the Seller expressly agrees to indemnify and hold harmless Purchaser and all its officers, agents, employees or otherwise from any and all liability, loss or damage that they may suffer as the result of claims, demands, actions, damages or injuries of every kind or nature whatsoever by or to any and all persons or property -- including reasonable attorneys' fees -- or judgments against them which result from, arise out of, or are in any way connected with the services to be rendered or performed by the Seller under the terms of this order.
15. CANCELLATION: Purchaser reserves the right to cancel this order, or any part thereof, at any time, without penalty, and shall be the sole judge of its decision to cancel this order. Such cancellation may be based upon the failure of Seller to comply with the terms and conditions of this transaction, failure to perform the work with promptness and diligence, failure to make shipment within the time specified, or for any other reason.
16. COMPLIANCE: Purchaser may at any time insist upon strict compliance with these terms and conditions, not withstanding any previous custom, practice, or course of dealing to the contrary.
17. MSDS: Material Safety Data Sheet to be included with shipment of any material requiring this documentation per OSHA regulations.
18. If the above conditions are not acceptable, please advise the Purchaser on receipt of the order and prior to making delivery.
19. Sellers that have not received payment in accordance with the terms and conditions of this order should contact Purchaser in writing at City of Alpharetta Finance Department, 2 Park Plaza, Alpharetta GA, 30009. Notice shall include purchase order #, City department receiving delivery, and copy of the invoice.



ESTIMATE OF SERVICE REPAIR AND/OR REPLACEMENT PARTS

DATE: July 5, 2023

RECOMMEND BY YOUR SERVICEMAN: _____ **Robert Wagener/Chris Mitchell** _____

REPAIRS WILL BE MADE AS FOLLOWS: (PARTS WARRANTY: Manufactory LABOR WARRANTY: 1 year

Job: City Hall cooling tower tube bundle.

During our recent service it was found that the cooling tower closed loop water side tube bundle is leaking water, below is price to replace parts as listed.

Cooling tower Company quote: \$123,368.00---Heat Transfer Suppling vast majority of work to tower as noted in their quote.
Price based on Friday/Saturday repair see their provided quote. **This price may be reduced by \$6000.00 if the City of Alpharetta provides street permits traffic control.**

ACOMFORT INCLUSIONS: Not provided by tower company.

- Pipe insulation replacement \$1080.00---not supplied by tower repair company.
- Mis materials \$200.00---(trash bags, tape, electrical/pipe connectors as needed)
- Labor ST-\$97.00 per hr. per Tech.
 - \$291.00 --- 3hrs job survey one tech
 - \$1552.00---16 hrs. two techs Friday disconnect electrical, piping, drain tower coil, shut down equipment and prep for replacement
 - \$1164.00---12hrs. one tech on site as needed for insulator and recheck system.

Labor OT-\$140.00 per hr per tech.

- \$2800.00---20 hrs. two techs reconnect electrical/ piping-(see exclusions below), fill tower coil, start-up system less exclusions.
- Fuel-----9.50% \$551.67----multiple trips required.

ACOMFORT EXCULSIONS FROM QUOTE:

- All listed repairs supplied by Heat transfer as part of their quote.
- If the existing coil piping does not have Victaulic coupling on them for disassembly allow **additional \$6000.00 to AComfort quoted price for cutting pipe and rewelding on a Saturday.**
- Closed loop water treatment, closed loop cleaning and glycol.

Alpharetta must supply on site personal for access to building as needed.

QUOTE BASED ON SHUTTING DOWN TOWER AND SYSTEM ON A FRIDAY AND HAVE BACK UP AND OPERATING ON A SATURDAY. INSULATION REPLACEENT WILL DONE DURING NORMAL OPERATING HOURS AFTER REPAIRS ARE COMPLETED. SEE EXCLUSIONS ABOVE

TOTAL \$131,006.67---(may be reduced by \$6000.00 as noted above) Quote effective for 30 days from posted date.



CUSTOMER: City of Alpharetta ATTENTION: Joe Shirley

ADDRESS: _____ CITY: Alpharetta STATE: Ga. ZIP: _____

TELEPHONE NUMBER: 404-787-1571 EMAIL: jshirley@alpharetta.ga.us

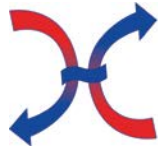
THIS PROPOSAL IS FURNISHED TO YOU FOR YOUR EVALUATION OF OUR CONCEPTS AND PRICING. THERE IS NO COST TO YOU OR FINANCIAL OBLIGATION ASSOCIATED WITH THE PROPOSAL. WE DO WISH TO POINT OUT, HOWEVER, THAT THE CONCEPTS AND INFORMATION CONTAINED HEREIN ARE PROPRIERTY TO OUR FIRM AND ARE OFFERED SOLELY FOR YOUR OWN USE AND EVALUATION. WE INTEND TO MAINTAIN CONFIDENTIAL ANY INFORMATION OR DATA YOU HAVE SUPPLIED TO US. WE THEREFORE ASK THAT THIS PROPOSAL, IN WHOLE AND IN PART, BE KEPT IN CONFIDENCE AND NOT BE DISCLOSED TO ANY OUTSIDE PARTY FOR ANY OTHER PURPOSE. THE SCOPE OF THE ABOVE WORK IS LIMITED TO THAT WHICH IS EXPRESSLY STATED AND SHALL NOT COVER ANY WORK IMPLIED OR OTHERWISE INTERPRETED. DUE TO THE INCOMPLETE OPERATION OF THE SYSTEM IT CANNOT BE CHECKED FURTHER. WHEN THE UNIT IS OPERATIONAL AND FURTHER TESTING IS POSSIBLE, YOU WILL BE ADVISED IF FURTHER REPAIRS ARE NECESSARY. WORK TO BE PERFORMED DURING NORMAL WORKING HOURS IF NOT OTHERWISE STATED.

UPON YOUR APPROVAL PLEASE SIGN AND RETURN COPY TO (FAX: 678-688-7387)

CUSTOMER APPROVAL:

Signature: _____ Print Name: _____

TITLE _____ DATE: _____



HEAT TRANSFER SYSTEMS OF GEORGIA, LLC

7/5/23

Robert Wagener
A Comfort

Subject: Alpharetta City Hall - Cooling Tower – Rev 1

Model: Evapco ATWB 9-3H18

SN: 13-658525

Replace Coil/Casing Section: HTS will provide and replace the Coil/casing section of the above cooling towers.

Includes:

- Complete coil/casing section – coil, casing panels,
- Upper ladder brackets
- Crane, street permits and traffic control
- Disposal of old material

By A Comfort

- Isolate and drain tower.
- Disconnect coil connection Qty 4
- All electrical (ex: disconnect/reconnect fan motor)

\$106,158

Adder if week is performed on a Saturday

\$ 3,030

***** Deduct \$6000 If City of Alpharetta can handle street permits and traffic control *****

Adder #1

Air Inlet Louvers: The louvers are EXTREMELY scaled, greatly reducing tower capacity. Estimate 40 lbs of scale in each louver, cleaning will have limited effect on that much scale. Recommend that the louver media be replaced. The stainless-steel frames are in good condition and can be reused. Remove old media from site.

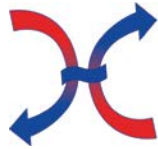
Quoted for Saturday work

\$ 5,900

Adder # 2

Coaxial Valve: HTS will replace the coaxial (blowdown) valve on separator

\$2,080



HEAT TRANSFER SYSTEMS OF GEORGIA, LLC

Adder # 3

Provide and replace: Turnkey installation of the following items on the above towers.

- Shaft/bearing kit – shaft, bearings (2), fan and sheave bushings, hardware, shims, grease/fittings, rain flingers, protective paint.
- **Quoted for Saturday work**

\$6,200

Coil Casing Section



Notes & Exceptions:

- ❖ All work to be performed during normal hours
- ❖ Tower to be isolated and drained by other prior to work
- ❖ Lead Time: 8-9 weeks
- ❖ Full Freight Allowed
- ❖ All prices are valid for 60 days
- ❖ HTS includes a full one (1) year Material & Labor Warranty
- ❖ Terms: 50% at material delivery to crane yard, 50% at completion; Net 30

Thank you,

Nick Ray

Nick Ray 970-531-4090

11350 Old Roswell Rd, Suite 1300, Alpharetta, Georgia 30009
Phone: 770-475-7740 Fax: 770-475-6167

From: [Lagerbloom, Chris](#)
To: [City Council and Mayor](#); [Harris, Tom](#)
Cc: [Mitchell, Shawn](#); [Sewczwicz, Peter](#); [Molly Esswein](#); [Shapiro, Lauren](#)
Subject: Emergency Procurement Declaration - City Hall HVAC System
Date: Wednesday, July 5, 2023 4:50:13 PM

Mayor and City Council, Mr. Harris,

This email serves to document a required step in our code of ordinances related to making an emergency procurement declaration that allow for exceptions to the typical competitive requirements of purchasing.

After speaking with Mayor Gilvin, he and I are in agreement and by this email I am making an emergency procurement declaration related to the City Hall HVAC system.

There is the significant potential of creating a loss of essential governmental services should the City Hall HVAC system fail. As of today, the system is capable of operating at half of its intended capacity with no additional redundancy. There are two coils that allow the system to operate. One has catastrophically failed and the other has moderately failed. Should the coil that has moderately failed continue to deteriorate, City Hall will be completely without air conditioning as we move deeper into the summer months and the daily temperatures rise.

This highlights the need to fund and order replacement/repair HVAC parts now, bypassing the typical formal bid process, thereby saving a minimum of 45 days in the process. The lead time to fabricate new coils, have them delivered and installed is 8-9 weeks.

The cost of performing this repair is quoted not to exceed \$123,368. This item will be funded through the General Fund contingency line-item with the required appropriations transferred to the Public Works Departmental budget to process all necessary purchases. As per policy, the City will seek comparable quotes from other vendors to ensure our on-call HVAC contractor is providing competitive pricing.

I will bring this item to your July 17th meeting as our ordinance requires the matter to be spread upon the minutes of the meeting, and will seek your approval retroactively at the same time.

Thank you,

Chris

Chris Lagerbloom
City Administrator
Alpharetta, Georgia

CITY OF ALPHARETTA
STANDARD CONTRACT FOR SERVICES

This Contract for Services for the City of Alpharetta is made and entered into and is effective 6/16/2023, by and between **CITY OF ALPHARETTA, GEORGIA**, a municipal corporation of the State of Georgia 30009 (the "City") and **COMFORT BY DESIGN, INC.**, DBA AComfort, a Georgia corporation with its principal office located at 410 O'Dell Road, Griffin, Georgia 30224 (the "Contractor").

1. Contract Documents. The Contract Documents consist of this Contract, the City's Request for Proposal No. 23-114 dated March 9, 2023, including any addenda thereto (the "RFP"), and the City of Alpharetta RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities Cost Proposal dated April 6, 2023, as revised April 21, 2023 (the "Proposal"), all of which collectively are incorporated herein by reference (collectively, the "Contract Documents"). In the event of any conflict in the Contract Documents, the provisions and requirements set forth in this Contract shall govern; provided however, to the extent any of Contractor's obligations or duties set forth in the Proposal exceed the requirements provided within the RFP or this Contract, or the City finds any of the terms set forth in the Proposal more desirable, the terms set forth in the Proposal shall control. Subject to the foregoing, in the event of a conflict between the language in the RFP and the Proposal, the language in the former shall govern.

2. Scope of Services. The Contractor's duties and scope of services are specifically set forth in the RFP and Proposal (the "Work") and, in general, include the following:

HVAC SERVICES AND PREVENTATIVE MAINTENANCE FOR CITY FACILITIES, consisting of the provision of HVAC preventative maintenance, repair, and installation services for heating and cooling systems within City facilities. The Work shall be performed in accordance with the project specific requirements and specifications (including all explanatory matter thereof) set forth in the RFP and, to the extent accepted by the City, the Proposal, and such other standards, guidelines and specifications as may be applicable to the subject portion of Work, as reasonably determined by the City. Contractor shall furnish all labor, materials, equipment, superintendence, and other incidentals to fully perform the Work. The award and execution of this Contract by the City does not guarantee the subsequent assignment of any portion of the Work for which a task order is required.

3. Contract Prices. In accordance with the costs established in Contractor's Cost Proposal, which is attached hereto and incorporated herein as **Exhibit "A,"** and as finally awarded by the City, the City shall pay Contractor an annual fixed fee in the amount of **FORTY-SEVEN THOUSAND, SEVENTY and 00/100 DOLLARS (\$47,070.00)** for Contractor's full performance of the portion of the Work comprising regular service and preventative maintenance. For service calls and any portions of the Work requested by task order, such as the supply and installation of replacement equipment, the City shall pay Contractor in accordance with the unit prices/rates set forth in **Exhibit "A";** provided, however, a separate fixed fee shall be established, on a project by project basis, for the supply and installation of replacement equipment or the performance of any other portion of the Work requested by task order. For any such project, Contractor will submit a proposal for its performance of the task order, including its proposed fee, which must be approved in

writing by the City prior to Contractor's commencement of the subject portion of the Work.

The City will process approved payment requests under this Contract to the Contractor. Payment to sub-contractors and suppliers is the responsibility of the Contractor. The City will not entertain any other payment arrangements.

Invoices shall be submitted to:

City of Alpharetta
Department of Public Works
1790 Hembree Road
Alpharetta, Georgia 30009
Attn: Joey Shirley

Upon receipt of Contractor's invoice for an order placed by City's Designated Representatives and following inspection of the delivered goods and confirmation of Contractor's completion of the subject portion of the Work, the City will render payment. All such invoices will be paid within forty-five (45) days by the City unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed and the validity of the claim. The Contractor will provide complete cooperation during any such investigation. Payment to sub-contractors and suppliers is the responsibility of the Contractor. The City will not entertain any other payment arrangements. No price adjustments shall be made during the term or any extension of this Contract except upon mutual consent of the parties. Notwithstanding any other provision of this Contract, and without prejudice to any of City's other rights and remedies, City shall have the right at any time or times to deduct and withhold from any payment for services that may become due under this Contract, such amount or amounts as may reasonably appear necessary to compensate the City for any portion of the Work that is defective, damaged, flawed, unsuitable, non-conforming or incomplete. Acceptance of final payment under this Contract shall constitute a waiver of all claims against the City by the Contractor except for those claims previously made in writing against the City by the Contractor, pending at the time of final payment, and identified in writing by the Contractor as unsettled at the time of its request for final payment.

4. Commencement of Work; Time for Performance.

- (a) Commencement of Work. The City shall not become obligated to pay for the Work prior to execution of this Contract and the Contractor shall not proceed to perform the Work until on or after July 1, 2023. Notwithstanding anything herein to the contrary, the City shall not be obligated to pay for, and the Contractor shall not proceed to perform, any portion of the Work requested by task order until the City has approved Contractor's proposal for performance of the subject task order.
- (b) Time for Performance. Contractor's time for performance of each portion of the Work shall conform to the time requirements or project schedule set forth in the RFP or Proposal or as otherwise mutually agreed to by the parties prior to the commencement of the Work. For any portions of the Work that are requested by task order, Contractor's time for performance of each portion of the Work shall conform to the time requirements set forth in the subject task order.

- (c) Time is of the Essence. All limitations of time set forth in this Contract are of the essence.

5. Duration of Contract.

- (a) Contract Term. The term of this Contract shall be for a five (5) year period commencing July 1, 2023, and terminating June 30, 2028, as further set forth herein and in accordance with O.C.G.A. § 36-60-13.
- (b) Contract Extension. Unless extended in writing by agreement of the Parties, the Contract will be effective for a period of no longer than (5) years, starting July 1, 2023, and ending at 11:59 p.m. (Eastern Time) June 30, 2028 (the "End Date"). In accordance with O.C.G.A. § 36-60-13, the initial term of the Contract shall be for a period of one year running from July 1, 2023, through 11:59 p.m. (Eastern Time) on June 30, 2024, and will automatically renew for additional one (1) year terms, each beginning on July 1 following the existing term year and ending at 11:59 (Eastern Time) June 30 of the following year, unless the City delivers written notice of non-renewal to Consultant at least thirty (30) days prior to the expiration of the relevant term year, such renewals not to exceed the End Date, unless otherwise agreed to, in writing, by the Parties. If written notice of non-renewal is given for any then-existing term, this Contract will terminate upon expiration of that term.
- (c) The foregoing notwithstanding, this Contract shall terminate absolutely and without further obligation of the City at the close of the fiscal year in which it was executed and at the close of each succeeding fiscal year if the City Council fails to appropriate funding for the Contract for any such succeeding fiscal year, which such non-appropriation will be treated equivalently to a written notice of non-renewal, without regard to any notice requirements to the contrary. Also notwithstanding the foregoing, this Contract will terminate immediately and absolutely if the City determines that adequate funds are not appropriated or granted or funds are de-appropriated such that the City cannot fulfill its obligations under the Contract, which determination is at the City's sole discretion and shall be conclusive, also without regard to any notice requirements to the contrary.
- (d) Any Contract term will not exceed the End Date. The End Date of the Contract may be extended by written agreement of the Parties. Consultant shall have no right to extend the End Date or any term of the Contract except as may be agreed to, in writing, by the City.
- (e) The Contract unit price of goods for the above-stated contract term will remain as offered by the Consultant, incorporated herein as Exhibit "A," and accepted/awarded by the City. Any contract extension beyond the above-stated contract term will be based on the same terms and conditions as the original term, except as provided below. Title to any supplies, materials, equipment, or other personal property shall remain in the Contractor until fully paid for by the City.
- (f) For any such renewal term commencing after the first two (2) years of this Contract, hourly rates may be increased by the lesser of five percent (5%) or the Consumer Price Index factor (US City Average - All Items; most recent month). Consultant must provide the City with the subsequent rates for any renewal term, if different from the then existing rates, at least ninety (90) days prior to the expiration of the

then existing term. Subsequent rates are guaranteed for a minimum of twelve (12) months.

6. Termination. This Contract may be terminated prior to the term ending by either party in the event of substantial failure or default of the other party to fulfill its obligations under this Contract. Prior to such termination, the non-defaulting party shall give notice to the defaulting party of the failure or default. Such party shall have fifteen (15) days from the date of the notice to cure the default or failure if such default or failure is capable of being cured. Upon failure to cure the default or failure within fifteen (15) days, or if such failure or default is not capable of being cured, the non-defaulting party may terminate the Contract effective immediately upon the provision of written notice as provided in Section 15 (*Notices*). The Contract may also be terminated prior to expiration of the term by the City for City's convenience upon the provision of not less than fourteen (14) days written notice to the Contractor. In the event of such termination, the Contractor shall be compensated for services performed prior to termination. Such amount shall be paid by the City upon the Contractor's delivering or otherwise making available to the City, all data, drawings, specifications, reports, estimates, summaries and other information and materials as may have been accumulated by the Contractor in performing the services included in this Contract, whether completed or in progress.
7. Representations and Warranties. Contractor represents and warrants that:
 - (a) Contractor has full power and authority to perform its obligations hereunder and to deliver the products and services set forth in the Contract Documents to the City without the consent of any other person or entity;
 - (b) All goods/products delivered hereunder shall be new and delivered free and clear of any lien, encumbrance, security interest or other claim, of whatever nature;
 - (c) Contractor shall comply with all applicable statutes, rules, regulations and requirements of any governmental agency or authority, whether now or hereafter enacted, in performing its obligations hereunder, and the products and services shall comply with all such statutes, rules, regulations and requirements in effect at the time of delivery to and acceptance by the City;
 - (d) Contractor shall perform its obligations hereunder in a good, professional and workman-like manner, and in strict accordance with City's specifications and the terms of this Contract;
 - (e) All services performed by the Contractor under this Contract shall be conducted in a manner consistent with the level of care and skill ordinarily exercised by other members of Contractor's profession or trade currently practicing in the same locality under similar conditions; and
 - (f) Contractor, in the performance of its duties under this Contract, including but not limited to, its dealings with property owners, developers, contractors, consultants, architects and any local, state or federal governmental agency or political subdivision, shall owe its primary duty of loyalty to the City.
8. Licenses, Registrations, Certifications and Permits. The Contractor shall be responsible for obtaining and maintaining in a valid status, all licenses, registrations, certifications and permits necessary to perform the Work as required by law. Contractor represents to the

City that the Contractor and its employees are properly licensed and/or registered within the State of Georgia for the performance of the services required herein, provided such licensure and/or registration is required by applicable law. Contractor shall provide copies of any such licenses, certifications or permits to the City upon request.

9. Insurance.

- (a) Insurance Generally. Contractor shall obtain and shall continuously maintain during the term of this Contract insurance of the kind and in the minimum amounts as specified in the RFP, as follows:
- i. Statutory Worker's Compensation and Employers Liability Insurance in the minimum amount of Five Hundred Thousand Dollars (\$500,000) or as required by applicable law, whichever is greater, for all employees and other persons as may be required by Georgia law, or the law of the state where Contractor is located, whichever is applicable. If Contractor is self-insured, Contractor shall additionally provide the City with a certificate from the Georgia (or applicable state) Board of Workers' Compensation stating that the Contractor qualifies to pay its own workers' compensation claims.
 - ii. Comprehensive General Liability insurance with minimum combined single limits of One Million Dollars (\$1,000,000) per occurrence and in the aggregate. The policy shall be applicable to all premises and all operations of the Contractor. The policy shall provide comprehensive coverage, including coverage for bodily injury, broad form property damage, personal injury (including coverage for contractual and employee acts), blanket contractual, independent contractors, and products/completed operations. Completed operations coverage shall be maintained for a minimum period of two (2) years following completion of the Work. Further, coverage shall be written on an "all risk" (open perils) form. The policy shall contain a severability of interests provision. Coverage shall be provided on an "occurrence" basis as opposed to a "claims made" basis. Such insurance shall be endorsed to name the City, and its elected officials, officers, employees and agents, as additional insured parties.
 - iii. Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury of not less than One Million Dollars (\$1,000,000) per occurrence and property damage of not less than One Hundred Thousand Dollars (\$100,000) per occurrence with respect to each of the Contractor's owned, hired and non-owned vehicles assigned to or used in performance of the Work. The policy shall contain a severability of interests provision. Such insurance coverage must extend to all of Contractor's subcontractors. Such coverage must include all automotive equipment used in the performance of the Contract, both on and off any work site, and such coverage shall include non-ownership and hired cars (vehicles and equipment) coverage. Such insurance shall be endorsed to name the City, and its elected officials, officers, employees and agents, as additional insured parties.
 - iv. Umbrella/Excess Liability insurance with minimum combined single limits of One Million Dollars (\$1,000,000) per occurrence and in the aggregate in excess of the underlying primary Commercial General Liability insurance policy

described above. Such policy shall be no more restrictive and provide the same or greater coverage as said underlying policy (written on no less than a follow form basis). Such insurance shall be endorsed to name the City, and its elected officials, officers, employees and agents as additional insured parties.

(b) Requirements of Insurance.

- i. Insurance shall be procured and maintained with insurers with an A- or better rating as determined by Best's Key Rating Guide. All insurance shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Contractor.
- ii. No policy of insurance shall contain any exclusion for bodily injury or property damage arising from completed operations.
- iii. Every policy of insurance shall provide that the City will receive notice no less than thirty (30) calendar days prior to any cancellation, termination, or a material change in such policy.
- iv. Proof of required insurance shall be maintained in all equipment and motor vehicles insured in accordance with the provisions of this Contract.
- v. Contractor will ensure that any and all policies of insurance procured hereunder shall provide for a waiver of subrogation against the City, and Contractor waives any claim against the City arising in contract or tort which is covered by its insurance hereunder.

(c) Failure to Obtain or Maintain Insurance. The Contractor's failure to obtain and continuously maintain policies of insurance in accordance with this Section and its subsections shall not limit, prevent, preclude, excuse, or modify any liability, claims, demands, or other obligations of the Contractor arising from performance or non-performance of this Contract. Failure on the part of the Contractor to obtain and to continuously maintain policies providing the required coverage, conditions, restrictions, notices, and minimum limits shall constitute a material breach of this Contract upon which the City may immediately terminate this Contract without advance notice.

(d) Insurance Certificates. Contractor shall provide proof of such insurance to the City contemporaneously with the execution of this Contract. Prior to commencement of the Work, Contractor shall submit to the City certificates of insurance for all required insurance. Insurance limits, term of insurance, insured parties, and other information sufficient to demonstrate conformance with this Section and its subsections shall be indicated on each certificate of insurance. Acceptance of a certificate or proof of insurance does not constitute approval or agreement by the City that the insurance requirements have been satisfied.

(e) Other Insurance. Contractor shall maintain such other types and/or amounts of insurance as reasonably required by the City from time to time.

10. Indemnification. Contractor shall, to the fullest extent permitted by law, indemnify and hold harmless the City, including its elected officials, officers, employees, and agents, from and against any and all claims, demands, losses, liabilities, suits, actions, costs, expenses (including expenses of litigation and attorneys' fees) and damages ("Claims") of

any type or nature, including, but not limited to, Claims for injury to person or property, arising out of or related to Contractor's, or its officers', agents', employees' or subcontractors', performance or non-performance of this Contract; provided, however, that this indemnification obligation shall not apply to any Claims arising from the sole negligence of the City. Nothing in this Section or this Contract shall be deemed to constitute a waiver of the City's sovereign immunity, create rights in any third party, or create any third-party beneficiaries.

11. No Subcontractors. No subcontractor or consultant shall be retained by Contractor to perform services under this Contract without the prior written consent of the City, except for those subcontractors previously identified in the Proposal. Essential staff members assigned to the performance of the Work shall not be reassigned without the consent of the City, which consent shall not be unreasonably withheld. Administration of any approved subcontractor shall be the Contractor's responsibility. All subcontracts shall require each subcontractor to be bound by all pertinent portions of this Contract and to assume all applicable obligations and responsibilities which the Contractor by this Contract assumes toward the City. In particular, and not by way of limitation, all indemnification and insurance provisions shall be fully binding upon any subcontractor providing a portion of the services, for all intents and purposes as if said subcontractor were a party to this Contract.
12. Independent Contractor. The Contractor shall at all times be acting as an independent contractor and not be considered or deemed to be an agent, employee, joint venture or partner of the City. Contractor shall have no authority to contract for or bind City in any manner. Contractor shall have and maintain the responsibility for and control of the rendition of the Work, the discipline of its employees, and other matters incident to the performance of the Work (services, duties and responsibilities as described and contemplated herein). Notwithstanding the provisions of Section 11 (*No Subcontractors*) hereof or any other provision(s) of this Contract to the contrary, no employee, contractor or subcontractor of Contractor shall be considered an "employee" of the City during the performance of this Contract (the term "employee" shall have the same meaning as provided in IRS Publication No. 15 (2018)(Circular E).
13. Conflict of Interest. The Contractor represents that it has not, within two (2) years preceding the execution of this Contract, made or agreed to make any valuable gift, whether in the form of service, loan, thing, or promise, to any person (including any member of such person's immediate family) having the duty to recommend, the right to vote upon, or any other direct influence on the selection of the Contractor to provide products and services to the City. This provision shall not apply to legal campaign contributions, provided that such contributions have been disclosed in Contractor's response to the City's RFP.
14. Ownership of Work Product. In the event Contractor prepares, pursuant to the performance of this Contract, any drawings, plans, studies, reports, specifications, other documents (the "Work Product"), the City shall be deemed the owner of the original of all such Work Product, and all statutory and common law rights with respect to such Work Product shall accrue to the City, provided the City has paid for the services in full.

15. Notices. All contractual notices and communications under this Contract shall be deemed sufficient if given by electronic mail (email) or statutory overnight mail with return receipt requested, or hand delivered:

(a) If to the Contractor, at the following address:

Comfort by Design, Inc, DBA AComfort
PO Box 2011
Griffin, GA 30224
Attn: April Brackett, CEO
abrackett@acomfortbydesign.com

(b) If to the City, at the following address:

City of Alpharetta
Department of Public Works
1790 Hembree Road
Alpharetta, Georgia 30009
Attn: Pete Sewczwicz, Department Director
psewczwicz@alpharetta.ga.us

With a copy to:

Alpharetta City Attorney
Jarrard & Davis, LLP
222 Webb Street
Cumming, Georgia 30040

For the purposes of this Contract, the effective date of notice shall be the date that the notice is placed in certified or statutory overnight mail, or placed with a courier for hand delivery.

16. Public Records. Contractor understands that in accordance with O.C.G.A. § 50-18-70, *et seq.*, the public has a right of reasonable access to all public records of the City, subject to certain exceptions set forth therein or as otherwise provided by law, and agrees to allow access by the City to all documents subject to disclosure under applicable law. Contractor's willful failure or refusal to comply with the provisions of this Section shall result in the immediate termination of this Contract by the City. Further, Contractor agrees to retain all public records in accordance with the City's records retention and disposal policies, O.C.G.A. § 50-18-92, *et seq.*, and the Georgia Administrative Code. Notwithstanding the foregoing, nothing contained herein shall limit the Contractor's or the City's right to defend against disclosure of records alleged to be public.

17. Compliance with Illegal Immigration Reform and Enforcement Act:

E-Verify Program: The City is committed to compliance with Federal and State laws requiring the verification of newly hired employees to ensure they are lawfully entitled to work in the United States. As such, the City shall not enter into a contract for the "physical performance of services" (as defined in O.C.G.A. § 13-10-90) unless the Contractor registers and participates in a federal work authorization program (E-Verify). The E-Verify affidavit or the secure identifiable document submitted by the Contractor will become part of the Contract Documents.

(a) Requirement to Participate in a Federal Work Authorization Program (E-Verify):

- i. Pursuant to O.C.G.A. § 13-10-91, Contractor represents, warrants, acknowledges, and/or agrees that:

The Contractor has registered and participates in a federal work authorization program to verify the employment eligibility of all newly hired employees;

Subcontractors shall not enter into any contract with the Contractor for the physical performance of services within the State of Georgia unless such subcontractor registers and participates in a federal work authorization program to verify the employment eligibility of all newly hired employees; and

Sub-subcontractors shall not enter into any contract with a subcontractor or sub-subcontractor for the physical performance of services within the State of Georgia unless such sub-subcontractor registers and participates in a federal work authorization program to verify the employment eligibility of all newly hired employees.

- ii. As of the date of enactment of O.C.G.A. § 13-10-91, the applicable federal work authorization program is "E-Verify" (<https://e-verify.uscis.gov/enroll/StartPage.aspx?IS=YES>) operated by the United States Citizenship and Immigration Services Bureau of the United States Department of Homeland Security. Information and instructions regarding E-Verify program registration, corporate administrator registration, and designated agent registration can be found at that website address.

(b) Contractor, Subcontractor, and Sub-subcontractor Evidence of Compliance:

- i. Contractor, if providing the physical performance of services under this contract, shall comply with the requirements of O.C.G.A. § 13-10-91.
- ii. Pursuant to O.C.G.A. § 13-10-91, in the event the Contractor employs or contracts with a subcontractor in connection with the covered contract, the Contractor shall secure from such subcontractor attestation of the subcontractor's compliance with O.C.G.A. § 13-10-91 by the subcontractor's execution of the subcontractor affidavit, the form of which is included in Appendix A of the RFP, and will maintain a record of such attestation for inspection by the City at any time. Such subcontractor affidavit shall become a part of the Contractor/subcontractor agreement. Further, it shall be the duty of the Contractor to submit copies of all affidavits, drivers' licenses, and/or identification cards required pursuant to this Section, as applicable, to the City within five (5) business days of receipt.
- iii. Pursuant to O.C.G.A. § 13-10-91, in the event the Contractor employs or contracts with a subcontractor that employs or contracts with any sub-subcontractor, the subcontractor will secure from such sub-subcontractor attestation of the sub-subcontractor's compliance with O.C.G.A. § 13-10-91 by the sub-subcontractor's execution of the sub-subcontractor affidavit, the form of which is included in Appendix A of the RFP, and maintain records of such attestation for inspection by the City at any time. Such sub-subcontractor affidavit shall become a part of the subcontractor/sub-subcontractor agreement. Any subcontractor receiving an affidavit from a sub-subcontractor shall forward notice to the Contractor of

the receipt, within five (5) business days of receipt, of such affidavit. Further, it shall be the duty of any sub-subcontractor to forward notice of receipt of any affidavit from a sub-subcontractor to the subcontractor or sub-subcontractor with whom such receiving sub-subcontractor has privity of contract. Any subcontractor receiving notice of receipt of an affidavit from any sub-subcontractor that has contracted with a sub-subcontractor shall also forward, within five (5) business days of receipt, a copy of such notice to the Contractor.

- iv. In lieu of the affidavit required by this Section, if Contractor, or any subcontractor or sub-subcontractor, as applicable, has no employees and does not hire or intend to hire employees for purposes of satisfying or completing the terms and conditions of the Contract (or the subcontractor's or sub-subcontractor's portion of work utilized to perform part of the Contract with the City), such party shall instead provide a copy of his or her state issued driver's license or state issued identification card.
- (c) The Contractor shall comply with any and all other applicable requirements and provisions of O.C.G.A. § 13-10-91 and other applicable rules and regulations promulgated in relation thereto.
- (d) All portions of contracts pertaining to compliance with O.C.G.A. § 13-10-91 and these rules, and any affidavit related hereto, shall be open for public inspection in this State at reasonable times during normal business hours.

18. Miscellaneous.

- (a) Compliance with Laws; No Discrimination. The Contractor, including any approved subcontractors, shall, in performance of the Work, fully comply with all applicable federal, state, or local laws, rules, and regulations, including, but not limited to, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. In performance of the Work, the Contractor shall not discriminate against any person on the basis of race, color, religion, sex, national origin or ancestry, age or disability and shall further ensure that Contractor's agents and/or subcontractors comply with same. Further, Contractor, its agents and subcontractors shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any employee, applicant or person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot lawfully be used as a basis for the provision or denial of employment or service delivery.
- (b) Governing Law. This Contract is executed and shall be performed in the State of Georgia, and this Contract shall be construed and enforced in accordance with the laws of the State of Georgia. Subject to Subsection (j) below (*Arbitration*), venue for any action arising out of this Contract shall lie in the appropriate court of Fulton County, Georgia.

- (c) Captions. Titles or captions of sections contained in this Contract are inserted only as a matter of convenience and for reference, and in no way define, limit, extend or prescribe the scope of this Contract or the intent of any provision.
- (d) Counterparts; Electronic Signature. This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall together constitute one (1) and the same instrument. This Contract may be executed by electronic signature, and such signature shall have the same validity and effect as a signature affixed by hand and shall constitute an original for all purposes.
- (e) Severability. In the event that any provision hereof is held to be invalid or unenforceable, such provision shall be severed from this Contract and shall not affect the validity or enforceability of the remainder of this Contract.
- (f) Entire Agreement. This Contract supersedes all prior discussions and agreements between the parties with respect to the matters contained herein and constitutes the sole and entire agreement between the parties.
- (g) Persons Bound. This Contract shall be binding upon and shall inure to the benefit of the parties, their respective successors, successors in title, legal representatives, heirs and permitted assigns. This Contract may not be assigned by the Contractor without the prior written consent of the City.
- (h) Amendment. No term or provision of this Contract may be amended, waived, supplemented, modified, or terminated except by an instrument in writing signed by the party against whom the enforcement of the amendment, waiver, supplement, modification, or termination is sought.
- (i) Waiver. The City's failure or forbearance to enforce any term hereof shall not be deemed to be a waiver of such right or claim, or any right of claim hereunder. Moreover, the City's waiver of any term hereof shall not operate or be construed as a waiver of any subsequent breaches of the same or any other term.
- (j) Arbitration. Any dispute arising out of this Contract shall, at the option of the City of Alpharetta, be submitted to binding arbitration conducted in Atlanta, Georgia in accordance with the rules of the American Arbitration Association.
- (k) Annual Appropriation and Renewal. Notwithstanding any other provision of this Contract, in compliance with the requirements of O.C.G.A. § 36-60-13 governing the terms and conditions of multiyear contracts, this Contract shall be effective for a term commencing on July 1, 2023, and terminating at midnight on June 30, 2024, (the "initial term"), without further obligation on the part of either party other than outstanding obligations incurred prior to the expiration of such term. Thereafter, in accordance with O.C.G.A. § 36-60-13 and subject to the further conditions provided in this Paragraph, this Contract shall be automatically renewed for up to four (4) successive one (1) year terms (each one year term occurring after the initial term shall be referred to as a "renewal term") unless the City delivers written notice of non-renewal to Contractor at least thirty (30) days prior to the expiration of the initial term. At the expiration of each renewal term, this Contract shall be automatically renewed for an additional one (1) year term, unless the City furnishes Contractor written notice of its intent not to renew this Contract not less than thirty (30) days

prior to the expiration of such renewal term. If written notice of non-renewal is given, this Contract will terminate upon expiration of the then existing term. For any such renewal term commencing after the first two (2) years of this Contract, prices may be increased by the lesser of five percent (5%) or the Consumer Price Index factor (US City Average - All Items; most recent month). Contractor shall provide the City with the subsequent prices or rates for any renewal term, if different from the then existing prices or rates, at least ninety (90) days prior to the expiration of the then existing term. Subsequent prices or rates are guaranteed for a minimum of twelve (12) months. Nothing stated herein shall obligate the City to extend this Contract beyond the initial term or any renewal term. Further, this Contract shall terminate absolutely and without further obligation of the City at the close of the fiscal year in which it was executed and at the close of each succeeding fiscal year if the City Council fails to appropriate funding for the Contract for any such succeeding fiscal year. Notwithstanding any other provision or provisions of this Contract, pursuant to O.C.G.A. § 36-60-13, this Contract will terminate immediately and absolutely if the City determines that adequate funds are not appropriated or granted or funds are de-appropriated such that the City cannot fulfill its obligations under the Contract, which determination is at the City's sole discretion and shall be conclusive.

- (l) Additional Terms of Contractor. The City shall not be bound by any terms and conditions included in any Contractor invoice, packaging, catalog, brochure, technical data sheet, or other document which attempts to impose any condition in variance with or in addition to the terms and conditions contained herein.
- (m) Presumptions and Interpretations. The parties further agree that should any provision of this Contract require interpretation or construction, the court, administrative body or other entity interpreting or construing this Contract shall not apply a presumption that the provisions hereof shall be more strictly construed against one party by reason of the rule of construction that a document is to be construed more strictly against the party who itself or through its agents prepared same, it being agreed that all parties and/or their respective attorneys and agents have been fully afforded the opportunity to review all provisions of this Contract.
- (n) No Third-Party Beneficiaries. Nothing contained in this Contract is intended to or shall create a contractual relationship with, cause of action in favor of, or claim for relief for, any third party, including any agent, sub-consultant, or sub-contractor of the Contractor. Absolutely no third party beneficiaries are intended by this Contract. Any third-party receiving a benefit from this Contract is an incidental and unintended beneficiary only.
- (o) No Waiver of Governmental Immunity. Nothing in this Contract shall be construed to waive, limit, or otherwise modify any governmental or sovereign immunity that may be available by law to the City, its elected officials, officers, employees, contractors, or agents, or any other person acting on behalf of the City and, in particular, governmental or sovereign immunity afforded or available pursuant to Georgia Statutes.
- (p) Publicity Provision. Contractor shall not use any trademarks, service marks, or logos of the City without the City's express prior written consent. In particular,

Contractor shall not identify or make reference to the City in any advertising or other promotional modality regardless of its form without the express prior written consent of the City.

- (q) Survival. Any and all provisions of this Contract creating obligations extending beyond the term of this Contract, including, without limitation, Contractor's warranty of products and labor and the indemnification provisions contained herein, shall survive the expiration or termination of this Contract, regardless of the reason for such termination.

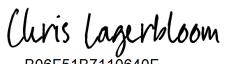
IN WITNESS WHEREOF, the parties hereto have each caused this Contract to be executed and delivered by a duly authorized officer, agent or official as of the date set forth below.

CITY OF ALPHARETTA, GEORGIA

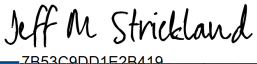
DocuSigned by:

By:  2DC6226B6FD44FB...
Jim Gilvin, Mayor
Date: 6/16/2023

Approved as to Substance:

DocuSigned by:

B06F51B7110640F...
Chris Lagerbloom, City Administrator

Approved as to form:
JARRARD & DAVIS, LLP

DocuSigned by:

7B53C9DD1E2B419...
Jeff Strickland, City Attorney

COMFORT BY DESIGN, INC., DBA AComfort

DocuSigned by:

FACB9F161B6C4E0...
April Brackett, CEO

Attest:
DocuSigned by:

By: FACB9F161B6C4E0...
April Brackett, Corporate Secretary
Date: 6/16/2023

Exhibit "A"

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Comfort By Design Inc. DBA AComfort

Instructions for Cost Proposal Completion:

1. This form **MUST** be used to submit cost proposal
2. Do not include a copy of this cost proposal in your technical proposal.
3. Complete all the fields. See end of form as well for bid authorization and contact info.
4. ~~Verify all amounts entered.~~ This form will be used for cost evaluation and for contract allowable costs.
5. Award will consider price, but price will not be the sole determining factor

Intended 5-year Contract Term		July 1, 2023 thru June 30, 2028	
1.	Cost per quarter for regular service/ maintenance for all equipment on current list provided within the Scope of Work (additional equipment will be discussed at time of addition).	\$11,767.50	Per quarter, guaranteed rate for first 24 months of contract term. (Cost years 3 -5 of contract term remains the same unless negotiated with the City.)
2.	Service call charge (if any) for repair, trouble shooting, installation. (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	typical 8am-5pm	
	Regular Hours - labor rate per hour	\$97.00 per tech	
(b)	After hours (night/ weekend)	after 5pm , weekends and hoildays	
	After Hours - labor rate per hour	\$140.00 per tech	
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc.		
	Labor charges are based on totals hour needed, per technician, to preform requested service call/repairs per site. All labor will be billed together, on requested site work invoice when such repairs are 100% completed, unless instructed by City of Alpharetta for different billing option.		
3.	New equipment installation charges (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	typical 8am-5pm	
	Regular Hours - labor rate per hour	\$97.00 per tech	
(b)	After hours (night/ weekend)	after 5pm, weekends and holidays	
	After Hours - labor rate per hour	\$140.00 per tech	
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc.		
	Charge is figured on total number of hours needed to completed installation and included in quote for installation. Charge will be invoiced when installation is 100% complete, unless arrangements have been made in advanced and approved with City of Alpharetta for project draws. If project draws are needed, AComfort will provide timeline of request draws and amounts.		
(d)	Enter below your markup on New Equipment . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice?		
	AComfort will take "our cost of equipment" and markup by 25% to cover overhead cost. Then, we take that figure and multiply by a 8% markup to cover profit margin. This equals a total markup of 35%. AComfort does have flexibility in overhead cost when completing large projects or multi system replacements. Overhead markup can be adjusted to help with cost when completing large projects or multi system replacements at the same time.		
(e)	Enter below your markup on Freon . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice?		

Contract: HVAC Services and Preventative Maintenance For City Facilities
Contract No.: 23-114

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Comfort By Design Inc. DBA AComfort

	AComfort will guarantee refrigerant pricing markup based on what the current cost is per lb of the selected type of refrigerant being used at a 50% markup. Markup helps to cover our EPA license training, DOE required record keeping, pickup, scales used to measure amounts being charged into system and old tanks recycle. AComfort will list refrigerant type being used, number of lbs used for site repair and its cost per lb, per invoice. Current cost for R410 per lbs \$15.84 x 1.50 (50% mark up)= \$23.76 per lb. This may go up/down as price changes but the markup will be fixed. Current cost for R22 per lbs \$59.40 x 1.50 (50% mark up) = \$89.10 per lb . This may go up/down as price changes but the markup will be fixed. Formula will be the same for other types of refrigerant that may be required for equipment.
4.	Explain below other service call charges that may apply. (note reason for charge, when it applies, and amount) (Ex: Trip charge, fuel rate charge etc.)
(a)	Option one, AComfort charges a fuel charge on each invoice. Fuel charge is calculated on many factors including but not limmited to, current cost of fuel per gallan and calculated based on total labor on invoice using the labor rate above. AComfort is charging 9.50% fuel rate on total labor charge listed on invoice. We do not charge fuel rate on parts/equipment, strickly on labor. AComfort can guarantee this rate unless fuel cost exceeds \$3.50 per gallon. If fuel cost exceeds \$3.50 per gallon, rate will be increased to cover cost of fuel. Fuel charge is calucated on normal operting hours labor rate, not on overtime rates for service calls. Projects are calucated similar based on the number of techanicans and number of service vans needed. If possiable, AComfort will have technicians ride togheter to lower cost of fuel charge.
(b)	Option two, AComfort can provide a flat rate trip charge of \$60.00 per vehicle, per invoice. For project work, flat rate trip charge will have to be calculated based on scope of project. Including but not limited to the number of vehicles needed and number of trips needed to complete project.
(c)	
(d)	

By completing and submitting this cost proposal in response to the City of Alpharetta's RFP 23-114, and in compliance with RFP 23-114 section **What We Want to Do** including scope of work and project requirements, you understand, offer, and agrees that if this Proposal is accepted by the City Council within one-hundred twenty (120) days of the date of RFP Response (Proposal) Due Date/Time, that you/ your company will furnish any or all of the services and/or deliverables upon which prices are quoted, at the price set opposite each, for regular maintenance or as based on specific task orders from the City.

Company Name:	Comfort By Design Inc. DBA AComfort
Address:	410 O'Dell Road Griffin GA. 30224
Print/Type Name(s) and Title(s) Authorized Signer(s):	Robert Wagener, General Manger
Contact Info - Phone Number:	678-340-2282
Contact Info - Email Address:	rwagener@acomfortbydesign.com



AFFIDAVIT VERIFYING CONTRACTOR PARTICIPATION IN FEDERAL WORK AUTHORIZATION PROGRAM (E-Verify)

The undersigned contractor ("Contractor") executes this Affidavit to comply with O.C.G.A. § 13-10-91 related to any contract to which Contractor is a party that is subject to O.C.G.A. § 13-10-91 and hereby verifies its compliance with O.C.G.A. § 13-10-91, attesting as follows:

- The Contractor has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program;
- The Contractor will continue to use the federal work authorization program throughout the contract period, including any renewal or extension thereof;
- The Contractor will notify the City of Alpharetta in the event the Contractor ceases to utilize the federal work authorization program during the contract period, including renewals or extensions thereof;
- The Contractor understands that ceasing to utilize the federal work authorization program constitutes a material breach of Contract;
- The Contractor will contract for the performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the Contractor with the information required by O.C.G.A. § 13-10-91(a), (b), and (c);
- The Contractor acknowledges and agrees that this Affidavit shall be incorporated into any contract(s) subject to the provisions of O.C.G.A. § 13-10-91 for the project listed below to which Contractor is a party after the date hereof without further action or consent by Contractor; and
- The Contractor acknowledges its responsibility to submit copies of any affidavits, drivers' licenses, and identification cards required pursuant to O.C.G.A. § 13-10-91 to the City of Alpharetta within five business days of receipt.

497404

Federal Work Authorization User Identification Number

1-31-2012

Date of Authorization

Comfort By Design Inc.
Name of Contractor DBA Acomfort

HVAC Services and Preventative Maintenance for
City Facilities
Name of Project

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed date 3/20/23 in Griffin (city), GA (state).

April Bradlett
Signature of Authorized Officer or Agent

April Bradlett, Owner
Printed Name and Title of Authorized Officer or Agent

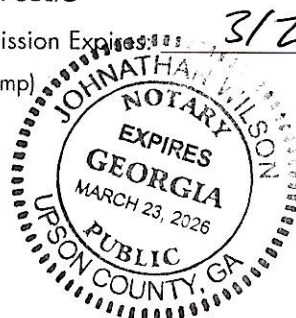
SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE 20th DAY OF March, 20 23.

[Signature]
NOTARY PUBLIC

My Commission Expires 3/23/26

(Notary Stamp)



City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Maxair Mechanical, LLC

Instructions for Cost Proposal Completion:

1. This form **MUST** be used to submit cost proposal
2. Do not include a copy of this cost proposal in your technical proposal.
3. Complete all the fields. See end of form as well for bid authorization and contact info.
4. Verify all amounts entered. This form will be used for cost evaluation and for contract allowable costs.
5. Award will consider price, but price will not be the sole determining factor

Intended 5-year Contract Term		July 1, 2023 thru June 30, 2028	
1.	Cost per quarter for regular service/maintenance for all equipment on current list provided within the Scope of Work (additional equipment will be discussed at time of addition).	\$	19,387.00
		Per quarter , guaranteed rate for first 24 months of contract term. (Cost years 3 -5 of contract term remains the same unless negotiated with the City.)	
2.	Service call charge (if any) for repair, trouble shooting, installation. (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	M-F 8am-5pm	
	Regular Hours - labor rate per hour	\$	106.00
(b)	After hours (night/weekend)	M-F 5pm-8am Sat. and Sun	
	After Hours - labor rate per hour	\$	143.10
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc. Service calls will be invoiced per call. If it takes more than one visit, due to waiting on parts for example, we will invoice when the call is fully completed and the unit is up and running.		
3.	New equipment installation charges (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	M-F 8am-5pm	
	Regular Hours - labor rate per hour	\$	106.00
(b)	After hours (night/weekend)	M-F 5pm-8am Sat. and Sun	
	After Hours - labor rate per hour	\$	143.10
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc. New equipment installations will invoice upon completion of the job, unless progress billing is discussed up front, per the quote. The quote and the invoice will show the exact amount of the quote and a breakdown showing the rates above.		
(d)	Enter below your markup on New Equipment . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice? 25% from Maxair's cost. Maxair receives discounts from all equipment manufacturers/suppliers and this mark up will be added to that price. The quote as well as the invoice will show: Equip= 100.00 + 25% = 125.00. Copies of the invoices will also be available.		
(e)	Enter below your markup on Freon . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice? 25% from Maxair's cost. Maxair receives discounts from all suppliers and this mark up will be added to that price. The quote as well as the invoice will show for example: Equip= 100.00 + 25% = 125.00. Copies of the invoices will also be available.		

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Maxair Mechanical, LLC

4.	Explain below other service call charges that may apply. (note reason for charge, when it applies, and amount) (Ex: Trip charge, fuel rate charge etc.)
(a)	Trip Charge- \$50.00. This is a one time charge for each individual service call. It covers multiple trips and multiple technicians for the same call. Only one trip charge per service call.
(b)	
(c)	
(d)	

By completing and submitting this cost proposal in response to the City of Alpharetta's RFP 23-114, and in compliance with RFP 23-114 section **What We Want to Do** including scope of work and project requirements, you understand, offer, and agrees that if this Proposal is accepted by the City Council within one-hundred twenty (120) days of the date of RFP Response (Proposal) Due Date/Time, that you/ your company will furnish any or all of the services and/or deliverables upon which prices are quoted, at the price set opposite each, for regular maintenance or as based on specific task orders from the City.

Company Name:	Maxair Mechanical, LLC
Address:	814 Livingston Court
Print/Type Name(s) and Title(s) Authorized Signer(s):	Mike Stephens/ Account Manager
Contact Info - Phone Number:	770-714-9620
Contact Info - Email Address:	mstephens@maxairmech.com

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Enter Bidder's / Company's name here

Instructions for Cost Proposal Completion:

1. This form **MUST** be used to submit cost proposal
2. Do not include a copy of this cost proposal in your technical proposal.
3. Complete all the fields. See end of form as well for bid authorization and contact info.
4. Verify all amounts entered. This form will be used for cost evaluation and for contract allowable costs.
5. Award will consider price, but price will not be the sole determining factor

Intended 5-year Contract Term		July 1, 2023 thru June 30, 2028	
1.	Cost per quarter for regular service/ maintenance for all equipment on current list provided within the Scope of Work (additional equipment will be discussed at time of addition).	\$24,938.40	Per quarter , guaranteed rate for first 24 months of contract term. (Cost years 3 -5 of contract term remains the same unless negotiated with the City.)
2.	Service call charge (if any) for repair, trouble shooting, installation. (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	8:00 AM - 4:30 PM	
	Regular Hours - labor rate per hour	\$	110.00
(b)	After hours (night/weekend)	Saturday - Friday 4:30 PM to 8:00 AM. Weekends are after	
	After Hours - labor rate per hour	\$	165.00
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc.		
	We will invoice one-time charge per-service call to include one trip charge until that repair is complete.		
3.	New equipment installation charges (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	8:00 AM - 4:30 PM	
	Regular Hours - labor rate per hour	\$	110.00
(b)	After hours (night/weekend)	Saturday - Friday 4:30 PM to 8:00 AM. Weekends are after	
	After Hours - labor rate per hour	\$	165.00
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc.		

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Enter Bidder's / Company's name here

	All new installations are approved by the customer at a set price before the job. No trip charges apply to jobs or new installations and will be invoiced after the work is complete unless progress billing is negotiated with the City.
(d)	Enter below your markup on New Equipment . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice?
	We mark up our vedor pricing 20%. The markup is reflected in the total amount invoiced per the agreed upon price with the City.
(e)	Enter below your markup on Freon . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice?
	United Maintenance will mark up Freon 30%. We charge per lb and invoice per lb.

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Enter Bidder's / Company's name here

4.	Explain below other service call charges that may apply. (note reason for charge, when it applies, and amount) (Ex: Trip charge, fuel rate charge etc.)
(a)	United Maintenance charges a \$95.00 one-time per service call service trip fee.
(b)	N/A
(c)	N/A
(d)	N/A

By completing and submitting this cost proposal in response to the City of Alpharetta's RFP 23-114, and in compliance with RFP 23-114 section **What We Want to Do** including scope of work and project requirements, you understand, offer, and agrees that if this Proposal is accepted by the City Council within one-hundred twenty (120) days of the date of RFP Response (Proposal) Due Date/Time, that you/ your company will furnish any or all of the services and/or deliverables upon which prices are quoted, at the price set opposite each, for regular maintenance or as based on specific task orders from the City.

Company Name:	United Maintenance, Inc.
Address:	3687 McElroy Road
Print/Type Name(s) and Title(s) Authorized Signer(s):	Steve Ragsdale, Account Manager
Contact Info - Phone Number:	cell 404-376-1831 / office 770-455-1656
Contact Info - Email Address:	sragsdale@unitedmaintenance.com

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Comfort By Design Inc. DBA AComfort

Instructions for Cost Proposal Completion:

1. This form **MUST** be used to submit cost proposal
2. Do not include a copy of this cost proposal in your technical proposal.
3. Complete all the fields. See end of form as well for bid authorization and contact info.
4. Verify all amounts entered. This form will be used for cost evaluation and for contract allowable costs.
5. Award will consider price, but price will not be the sole determining factor

Intended 5-year Contract Term		July 1, 2023 thru June 30, 2028	
1.	Cost per quarter for regular service/maintenance for all equipment on current list provided within the Scope of Work (additional equipment will be discussed at time of addition).	\$11,767.50	Per quarter , guaranteed rate for first 24 months of contract term. (Cost years 3 -5 of contract term remains the same unless negotiated with the City.)
2.	Service call charge (if any) for repair, trouble shooting, installation. (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	typical 8am-5pm	
	Regular Hours - labor rate per hour	\$97.00 per tech	
(b)	After hours (night/weekend)	after 5pm , weekends and hoildays	
	After Hours - labor rate per hour	\$140.00 per tech	
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc.		
	Labor charges are based on totals hour needed, per technician, to preform requested service call/repairs per site. All labor will be billed together, on requested site work invoice when such repairs are 100% completed, unless instructed by City of Alpharetta for different billing option.		
3.	New equipment installation charges (guaranteed rate for the first 24 months of an awarded contract)		
(a)	Regular Hours	typical 8am-5pm	
	Regular Hours - labor rate per hour	\$97.00 per tech	
(b)	After hours (night/weekend)	after 5pm, weekends and holidays	
	After Hours - labor rate per hour	\$140.00 per tech	
(c)	Explain below when and how the charges above will be invoiced (per trip, per job regardless of number of trips, etc.		
	Charge is figured on total number of hours needed to completed installation and included in quote for installation. Charge will be invoiced when installation is 100% complete, unless arrangements have been made in advanced and approved with City of Alpharetta for project draws. If project draws are needed, AComfort will provide timeline of request draws and amounts.		
(d)	Enter below your markup on New Equipment . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice?		
	AComfort will take "our cost of equipment" and markup by 25% to cover overhead cost. Then, we take that figure and multiply by a 8% markup to cover profit margin. This equals a total markup of 35%. AComfort does have flexibility in overhead cost when completing large projects or multi system replacements. Overhead markup can be adjusted to help with cost when completing large projects or multi system replacements at the same time.		
(e)	Enter below your markup on Freon . Explain how this is applied, whether to MSRP or some other pricing standard. How will this show on your invoice?		

City of Alpharetta
RFP 23-114, HVAC Services and Preventative Maintenance for City Facilities
Cost Proposal

Comfort By Design Inc. DBA AComfort

	AComfort will guarantee refrigerant pricing markup based on what the current cost is per lb of the selected type of refrigerant being used at a 50% markup. Markup helps to cover our EPA license training, DOE required record keeping, pickup, scales used to measure amounts being charged into system and old tanks recycle. AComfort will list refrigerant type being used, number of lbs used for site repair and its cost per lb, per invoice. Current cost for R410 per lbs \$15.84 x 1.50 (50%mark up)= \$23.76 per lb. This may go up/down as price changes but the markup will be fixed. Current cost for R22 per lbs \$59.40 x 1.50 (50%mark up) = \$89.10 per lb . This may go up/down as price changes but the markup will be fixed. Formula will be the same for other types of refrigerant that may be required for equipment.
4.	Explain below other service call charges that may apply. (note reason for charge, when it applies, and amount) (Ex: Trip charge, fuel rate charge etc.)
(a)	Option one, AComfort charges a fuel charge on each invoice. Fuel charge is calculated on many factors including but not limitted to, current cost of fuel per gallan and calculated based on total labor on invoice using the labor rate above. AComfort is charging 9.50% fuel rate on total labor charge listed on invoice. We do not charge fuel rate on parts/equipment, strickly on labor. AComfort can guarantee this rate unless fuel cost exceeds \$3.50 per gallon. If fuel cost exceeds \$3.50 per gallon, rate will be increased to cover cost of fuel. Fuel charge is calucated on normal operting hours labor rate, not on overtime rates for service calls. Projects are calucated similar based on the number of technicans and number of service vans needed. If possiable, AComfort will have technicians ride togheter to lower cost of fuel charge.
(b)	Option two, AComfort can provide a flat rate trip charge of \$60.00 per vehicle, per invoice. For project work, flat rate trip charge will have to be calculated based on scope of project. Including but not limited to the number of vehicles needed and number of trips needed to complete project.
(c)	
(d)	

By completing and submitting this cost proposal in response to the City of Alpharetta's RFP 23-114, and in compliance with RFP 23-114 section **What We Want to Do** including scope of work and project requirements, you understand, offer, and agrees that if this Proposal is accepted by the City Council within one-hundred twenty (120) days of the date of RFP Response (Proposal) Due Date/Time, that you/ your company will furnish any or all of the services and/or deliverables upon which prices are quoted, at the price set opposite each, for regular maintenance or as based on specific task orders from the City.

Company Name:	Comfort By Design Inc. DBA AComfort
Address:	410 O'Dell Road Griffin GA. 30224
Print/Type Name(s) and Title(s) Authorized Signer(s):	Robert Wagener, General Manger
Contact Info - Phone Number:	678-340-2282
Contact Info - Email Address:	rwagener@acomfortbydesign.com



Date: June 5, 2023

ALPHARETTA PRICING AS PER NEW CONTRACT FOR FIRST TWO YEARS July1 2023—June 30 2025

Parks & Recreation Department sites:

Contract Price for site listed as per contract.

\$22,035.52-per year/4 inspections=\$5508.88 per quarter billed the beginning of each quarter

Public Works Sites:

Contract Price for site listed as per contract.

\$23,849.56-per year/4 inspections=\$5962.39 per quarter billed at the beginning of each quarter

Annex Building (old Finical Building): This space is rented area of Public safety annex building.

\$1,184.92 per year/4 inspections=\$296.23 per quarter billed separate from existing public works contract

Sincerely
Robert Wagener
AComfort

ACORDTM**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

11/17/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER AssuredPartners of Ohio, LLC 3900 Kinross Lakes Pkwy #300 Richfield, OH 44286-9445 440 333-9000	CONTACT NAME: Cindy Lockhart PHONE (A/C, No, Ext): 440 333-9000 FAX (A/C, No): E-MAIL ADDRESS: Cindy.Lockhart@assuredpartners.com																					
INSURED Comfort By Design, Inc. dba AComfort 1435 Birdie Rd Griffin, GA 30223	<table border="1"> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr> <tr> <td colspan="2">INSURER A : Frankenmuth Mutual Insurance Company</td><td>13986</td></tr> <tr> <td colspan="2">INSURER B :</td><td></td></tr> <tr> <td colspan="2">INSURER C :</td><td></td></tr> <tr> <td colspan="2">INSURER D :</td><td></td></tr> <tr> <td colspan="2">INSURER E :</td><td></td></tr> <tr> <td colspan="2">INSURER F :</td><td></td></tr> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A : Frankenmuth Mutual Insurance Company		13986	INSURER B :			INSURER C :			INSURER D :			INSURER E :			INSURER F :		
INSURER(S) AFFORDING COVERAGE		NAIC #																				
INSURER A : Frankenmuth Mutual Insurance Company		13986																				
INSURER B :																						
INSURER C :																						
INSURER D :																						
INSURER E :																						
INSURER F :																						

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ PD Ded:500 GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC OTHER:	X	X	6661923	11/02/2022	11/02/2023	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$750,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY ☒ ANY AUTO OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY	X	X	6661922	11/02/2022	11/02/2023	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	☒ UMBRELLA LIAB ☒ OCCUR EXCESS LIAB ☐ CLAIMS-MADE DED ☒ RETENTION \$10000			6661923	11/02/2022	11/02/2023	EACH OCCURRENCE \$2,000,000 AGGREGATE \$2,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/MEMBER EXCLUDED? ☒ Y ☐ N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	6708078	11/02/2022	11/02/2023	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate Holder is Additional Insured when required by written contract or agreement with regards to General or Auto Liability. Umbrella is follow form.

City Of Alpharetta Finance is named as an additional insured on the above listed General Liability policy

CERTIFICATE HOLDER**CANCELLATION**

City Of Alpharetta Finance
 Department of Procurement
 2970 Webb Bridge Rd.
 Alpharetta, GA 30009-0000

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

William J. Smith