DATE: 1/26/2024 **P24-9000- Broad St**
CLIENT: June Hamal
ADDRESS: 535 Telfair St
Augusta, GA 30901

RE: **PROPOSAL FOR SUBSURFACE UTILITY ENGINEERING (SUE) QL-B and QL-A SERVICES – BROAD STREET, AUGUSTA, GA**

June,

Atlas Technical Consultants ("Atlas") is pleased to submit this proposal for Subsurface Utility Engineering (SUE) services for project referred to as ***BROAD ST***. The following is a description of the scope of work that is required to complete this task:

SCOPE OF SERVICES:

SUE

1.0 **SUE Quality Level B (QL-B) –** Traceable underground utilities will be field designated within the outlined project limits. SUE services will be provided in accordance with ASCE 38-22 Standards. Some underground utilities may prove to be non-field traceable due to material type, depth and /or manner of installation. These material types include but are not limited to: HDPE and PVC without tracer wire, asbestos cement, transite, composite non-jacketed fiber optic and cast iron. Utilities are located in the field by utilizing Radio Frequency Technology in which the locator traces a radio signal and not the utility itself therefore, utilities not observed or cannot be located utilizing this technique may exist on the site and may be found upon excavation. Ground Penetrating Radar (GPR) technologies will also be utilized when applicable and appropriate based on-site conditions and utilities present.

Atlas will coordinate with the local utility companies to confirm the general location of their utilities based upon records research and GA811 notifications as well as site research of any existing site utility maps available and provided. Atlas is providing this service based upon available utility company records as well as visible utility site features. Utilities identified in records research and not field traceable shall be shown as Quality Level D (QL-D) data on survey. Sanitary sewer will be depicted as QL-C going from structure to structure. Client agrees that utility locations which are performed to SUE QL-B standards are approximate horizontal locations and are not vertically verified and that Long Engineering, LLC. will not be responsible for the accuracy or completeness of the underground utility locations deemed non-field traceable.

Approach:

It is our understanding that the City of Augusta is to provide streetscape type services including replacing C&G, sidewalk, refresh the landscaping in the median and proposed drainage improvements. Because of the proposed improvements, Atlas believes that QL-B SUE from beginning to end would not be a "best value" option. Our goal is to locate existing utilities that

could be impacted by the proposed design, yet do this in a manner that is most cost-effective to the project. After careful consideration, it is our recommendation to provide certain quality levels of SUE that can efficiently accomplish our goals. Therefore, we recommend QL-B and QL-A at select locations, where utility impacts are most critical.

QL-B (designating) approach - QLB data provides the horizontal location of utilities.

As discussed with the City of Augusta, it was determined that the most cost-effective approach would be to provide QL-B at specific locations where the proposed design is impacted by existing utilities.

- The client provided impacted locations using QL-D SUE (record info. that was previously done) and proposed design
- The client marked locations on pdf from a site walk, where they are requesting additional QL-B SUE
- These areas should be where conflicts exist with high-risk utilities

Atlas then took these areas, enlarged them to ensure coverage and outlined them as shown on the attached pdfs. Each location is numbered accordingly. There are a total of 20 areas as shown in the plans. See attached EXHIBITS.

Once the QL-B has been completed, the City of Augusta will meet and determine conflicts. Conflicts are basically wherever an existing utility crosses the path of a proposed design feature. The team will decide what conflicts need to be further evaluated and what additional information is needed. A conflict analysis not only determines conflicts but also determines THs (test holes). There will most likely be conflicts throughout so the team will need to closely evaluate where they want THs. Conflict evaluations cannot be done on QL-D data. A conflict analysis should only be conducted on known utilities, where QL-B has been performed.

Per meeting with the City of Augusta, it is recommended QL-A on all utilities within 3 feet of proposed features.

QL-A (Locating/THs) – Provide test holes (THs) at specific locations where conflicts are critical. Atlas will primarily utilize vacuum excavation with air, but reserves the right to utilize hydrovac (water) methods based upon specific test hole needs and site conditions present.

Since the number of THs will be limited, they should only be performed on the more costly, most critical utilities. THs will not only validate the QLB data but will also provide the exact depth, size, type and condition of the utility in question. With this information, project designers can now make intelligent decisions by adjusting their design as necessary to avoid costly conflicts.

Sequence of events…

- Mobilize a 2-man crew (2 SUE techs)
- The SUE crew will begin designating
- Week 3- SUE crew will mobilize with surveyor- SUE crew will finish remaining areas while surveyor surveys all previous designations. Crews will demobilize.
- The data will be processed and put into Microstation
- The utility file will be reviewed
- The UTLE file with QLB data will be submitted to the City of Augusta
- City to review and confirm test hole locations

- Once test hole locations are confirmed, Atlas will mobilize a 3-man crew and vacuum excavation truck (2-man SUE crew and surveyor to aid with efficiency)
- The SUE lead will remark the target utility at the conflict so the crew can begin excavation
- Once all THs are staked the SUE lead will assist the SUE crew
- Once the utility is exposed, the utility will be identified and the size and type recorded. The utility will be surveyed and a before, during and after picture will be taken. The material removed from the TH will be replaced in the hole, compacted accordingly and the area left as originally found.
- The data will be processed and put into CADD
- The utility file will be reviewed along with the test hole data sheets
- The UTLE file with TH data will be submitted

Project Assumptions:

SUE QL-B

- SUE QL-B limits are in twenty (20) areas along the Broad St corridor from 15th St to Highway 78. See attached exhibit. Assume 19,850 linear feet of utilities, along with 55 sanitary manhole inverts.
- Includes full records research and GA-811 notification with utility owners provided
- Designation of underground utilities including sanitary sewer force mains
- Includes gravity sewer system connectivity and inverts
- Includes survey of utilities. Survey control is to be provided.
- Includes CAD
- Includes approved GSA rate for mobilization and demobilization
- Assume 10hr days
- Assume 3 weeks field work

SUE QL-A

- Per TH
- Assume 3 holes/day
- Includes a 3-man crew
- Includes 10 hr. days
- Includes survey and CADD.
- Includes per diem
- Traffic control not included for TH in the road
- Includes Management and QA/QC

DELIVERABLES:

- UTLE.dgn file of all SUE QL-A and B (no plans)- InRoads

- SUE QL-A test hole table and data forms that include TH pictures for completed test holes

SCHEDULE:

- Field work can be scheduled within 1 weeks of Notice to Proceed
- QL-B – 3 weeks of field work, 2 weeks for CAD and QA/QC
- Deliverables will be provided within 5 weeks of beginning field work (weather permitting).

FEE STRUCTURE:

The lump sum-based fee for our services will be billed as follows:

Description	Fee	
SUE QL-B	LS	$49,670
SUE QL-A (# of THs TBD)	TH (ea)	$1,550
Note: QL-A allowance=$77,500		

INVOICES:

Invoices for the work will be submitted on the first day of each month and are due payable in full within 30 days.

SERVICES NOT INCLUDED:

- Does not include UIA

LIMITATIONS/EXCLUSIONS:
This proposal is considered valid if signed before March 29th, 2024 and remains in effect for one year. Please sign and return a copy of this proposal for our records.

The Terms and Conditions for our services are attached.

Atlas City of Augusta

By:_____ By:_____

Title:_____ Title:_____

Date:_____ Date:_____