

November 1, 2024

Mr. Michael Johnson, PE City of Madison Engineering Department 100 Hughes Road Madison, AL 35758

Re: Proposal for Professional Engineering Services Wall Triana Highway (Sullivan Street) and Browns Ferry Road Intersection Improvements

Dear Mr. Johnson:

Croy Engineering would like to thank you for the opportunity to provide this proposal for professional services on the above-referenced project. We propose to provide the following:

- 1. Surveying Services
- 2. Geotechnical Engineering Services
- 3. Design Phase Services
- 4. Permitting Services

A more detailed project-specific Scope of Services and our fees are attached and identified as Exhibit "A". If the proposal is acceptable, please provide written authorization to proceed and a standard agreement for professional services for our signature.

Again, we thank you for the opportunity to work with you on this project. If you have any questions or if you need any additional information, please contact us.

Sincerely, Croy Engineering

aston Matthews

Houston Matthews, P.E. Regional Manager

Attachments

- Exhibit "A" Scope of Services
- Exhibit "B" Standard Rate Table

Cc: File



# Exhibit "A"

# **Project Name**

# **Proposed Scope of Services**

Croy Engineering, LLC proposed scope of services is presented in the following elements:

- I. Project Description
- II. Scope of Services
- III. Assumptions
- IV. Additional Services
- V. Time of Performance
- VI. Owner's Responsibilities
- VII. Deliverables
- VIII. Compensation

# I. PROJECT DESCRIPTION

Croy previously designed an intersection improvement project at the intersection of Wall Triana Highway (Sullivan Street) and Browns Ferry Road. The project included a new turn lane and pedestrian safety improvements. The project location and previous project layout is shown below for reference. The Client desires to update the construction plans and construct the proposed project.







## II. SCOPE OF SERVICES Surveying Services

Croy will utilize a subconsultant (Halliburton Surveying and Mapping) to perform the described surveying services. The survey limits are as indicated below:



The subconsultant will perform a topographic survey with right-of-way ties based on current deed records per the Madison County Tax Assessor. Underground utility locations will be based on observed evidence, plans as submitted by authorities, or Client, and an AL811 locate request. Excavation of existing utilities is provided under separate task and will be coordinated with the performance of surveying services to collect exposed locations. Tract sketches for proposed ROW or easement acquisition will be provided, including legal descriptions, and are limited to five (5) tracts. Surveying services excludes title research.



## **Geotechnical Engineering Services**

Croy will utilize a subconsultant (GTEC) to perform the geotechnical engineering services described in the attached proposal.

#### **Design Phase Services**

#### Schematic Design Phase

Croy will incorporate previous design layout with collected survey field data and prepare a schematic plan set for the Client's review.

#### **Design Development Phase**

Based on the accepted Schematic Design drawings the Design Development (DD) Phase will represent roughly 60% project completion. A set of plans containing the following design and information will be included. Significant revisions to the Scope of the project during Design Development may result in additional services for the Final Design Phase.

- 1. Cover Sheet: Includes sheet index and identifies the name, location, and Client of the Site and/or project. Appropriate permitting information may be also required on the cover sheet.
- 2. Existing Conditions: Based on the survey, we will prepare an existing conditions plan. Some municipalities require a copy of the signed and sealed survey.
- 3. Site Plan: Develop a defined Site Plan based on the Client's furnished preliminary architectural designs. Additionally, a preliminary Site Plan will be created based upon the Client's requirements and our understanding of the proposed project.
- 4. Grading and Earthwork: We will prepare grading plan(s) based on the existing conditions plan, design development site plan, and geotechnical engineer's reports. We will begin preliminary earthwork calculations that will be computed based on the existing and proposed contours as shown in out AutoCAD design files. Earthwork volumes generated by this method will be used as a part of our design to balance the cut and fill when possible. Croy Engineering makes no warranty that all project sites will have a balanced earthwork volume. We will not make adjustments for topsoil, shrinkage, and rock.
- 5. Storm Drainage System Design: We will begin laying out the storm drainage system, including culverts, inlets, pipes, etc., based on preliminary grading.
- 6. Signal Plan: We will indicate the preliminary location of new traffic signal poles and equipment.
- 7. Construction Details: We will begin including pertinent typical civil construction details and local permitting agency details. Signal pole foundations will be included.
- 8. Meetings and Coordination: We will coordinate with the Owner design requirements, permitting, and schedule. Project coordination includes electronic transfer of information, including drawings and other pertinent or requested information, to design and construction team members.



9. Temporary Traffic Control Plan: Croy will prepare a temporary traffic control plan relative to the anticipated impact of construction activity to pedestrian and vehicular traffic.

## Final Construction Documents Phase

The Final Construction Documents Phase represents 100% project completion and preparation for submittal to Client.

- 1. Site Demolition Plan: We will prepare a basic site demolition plan. This plan is provided to indicate the general intent of the required demolition. Additional demolition and coordination may be required by the Client and/or Contractor.
- 2. Site Plan(s): Includes the proposed layout of the project with the appropriate dimensions and coordinates for proper construction of the project. The site plan will depict the layout of the proposed building(s), parking, roads, and other site features. Appropriate dimensions and coordinates will be indicated on the plan for the proper layout and construction of project.
- 3. ROW Plan: We will include a general layout of existing and required right-of-limits or utility easements.
- 4. Grading Plan(s): Includes existing and proposed grade elevations, finish floor elevations, and spot elevations where appropriate for construction, which shall be based on geotechnical reports if the Client has provided such subsurface investigations. Earthwork calculations will be computed based on the existing and proposed contours as shown in out AutoCAD design files. Earthwork volumes generated by this method will be used as a part of our design to approximate a balanced cut and fill site design when possible. Croy Engineering makes no warranty that all project sites will have a balanced earthwork volume. We will not make adjustments for topsoil, shrinkage, and rock.
- 5. Storm Drainage System Design: The storm drainage system, including culverts, inlets, pipes, or other structures will be designed for the storm frequency required by the local permitting and other pertinent design parameters in accordance with applicable codes and ordinances. The storm drainage design, computations, and other computer program output may be included on the plans as a Pipe Chart.
- 6. Storm Drainage Profiles: We will provide design profiles for the proposed storm drain pipes. The profiles will include hydraulic grade lines per the storm drainage design as required by the local agency, as well as utility crossings. A pipe chart will be shown on the profile sheet indicating storm flows and hydraulic grade line elevations.
- 7. Traffic Signal Plan: We will provide a final traffic signal plan for new traffic signals and other related infrastructure.
- 8. Construction Details: Final typical civil construction details and local permitting agency details. Signal pole foundations will be included.
- 9. Opinion of Probable Construction Cost: We will prepare a summary of quantities and opinion of probable construction cost for construction items applicable to the project.



- 10. Erosion and Sediment Control BMP Design: We will provide the Erosion, Sedimentation and Pollution Control Design and Plans in accordance with State of Alabama requirements for Best Management Practices (BMP) and the NPDES General Permit. NPDES permitting is excluded.
- 11. Erosion Control Details: Details of BMPs for all phases of construction.
- 12. Meetings and Coordination: We will coordinate with the Owner design requirements, permitting, and schedule. Project coordination includes electronic transfer of information, including drawings and other pertinent or requested information, to design and construction team members.
- 13. Temporary Traffic Control Plan: Croy will prepare a temporary traffic control plan relative to the anticipated impact of construction activity to pedestrian and vehicular traffic.
- 14. Typical Sections: Croy will prepare typical details of typical roadway cross sections, as applicable.

## **Permitting Services**

Croy will prepare a NPDES Construction Stormwater Notice of Intent for submittal and approval by the Alabama Department of Environmental Management. The Client will sign as Responsible Official and pay all application or permit fees applicable. Croy will be available to assist in a permit transfer, as needed by the Client.

#### **III. ASSUMPTIONS**

The following is a list of assumptions related to the noted proposal:

- Client will appoint a single point of contact for coordination purposes.
- Permit fees to be paid by the owner.
- No off-site utility design or relocation design required.
- Permitting services not required or requested.
- Bid phase servs not required or requested.
- Construction phase services not required or requested.

## **IV. ADDITIONAL SERVICES**

Services that are not included but may be provided by Croy as an additional service include:

- Site lighting design
- Offsite infrastructure improvement designs and permitting
- Public meeting attendance
- Preparation of renderings for public presentation
- Preparation of traffic studies related to the site or adjacent roadways
- Preparation of Contract Documents suitable for the client to obtain contractor's bid prices for construction of the initial site preparation.
- Bidding and award services
- Construction administration services
- Field construction stake-out surveying
- As-built surveying or other additional services provided as requested at an hourly rate.



- Materials testing services
- Environmental services
- Value engineering design services
- Assistance with bid protests and rebidding
- NPDES permit inspections

## **V. TIME OF PERFORMANCE**

Subject to your authorization, we are available to begin services within 4 weeks. Client initiated revisions to the project layout or program after our services commence may require an adjustment in fee and schedule.

#### VI. OWNER'S RESPONSIBILITIES

The Client is responsible for:

- Review documents and respond to questions in a timely manner.
- Provide project requirements and system data as required. Changes after Croy commences services may require a change in fee and additional time to complete.

#### VII. DELIVERABLES

We will provide the following:

- ROW and Topographic Survey
- Geotechnical Engineering Report
- Construction Plans
- Opinion of Probable Construction Cost
- ROW or Easement Acquisition Track Sketches and Legal Descriptions

#### **VIII. COMPENSATION**

Our fee schedule for the project is shown below.

Description	<b>Fee Type</b>	Fee
Surveying Services	Lump Sum	\$20,520
Geotechnical Engineering Services	Lump Sum	\$23,905
Design Phase Services	Lump Sum	\$42,530
Permitting Services	Time and Materials	\$1,595
	TOTAL FEE	\$88,550



# Exhibit "B"

# Croy Engineering Standard Rate Table

Billing Title	<b>Billing Rate</b>	Billing Title	<b>Billing Rate</b>
1 Man SUE	\$180.00	Field Representative 5	\$130.00
1 Man Survey Crew	\$150.00	Field Representative 6	\$145.00
2 Man SUE	\$250.00	Principal	\$300.00
2 Man Survey Crew	\$225.00	Project Coordinator 1	\$100.00
3 Man Survey Crew	\$250.00	Project Coordinator 2	\$120.00
Administration 1	\$50.00	Project Manager	\$140.00
Administration 2	\$65.00	ROW Agent 1	\$90.00
Administration 3	\$85.00	ROW Agent 2	\$110.00
Administration 4	\$110.00	ROW Agent 3	\$135.00
CADD 1	\$50.00	ROW Agent 4	\$145.00
CADD 2	\$55.00	Senior Principal	\$350.00
CADD 3	\$65.00	Senior Professional 1	\$160.00
CADD 4	\$75.00	Senior Professional 2	\$185.00
Designer 1	\$100.00	Senior Professional 3	\$200.00
Designer 2	\$110.00	Senior Professional 4	\$230.00
Designer 3	\$120.00	Senior Professional 5	\$250.00
Engineer/Surveyor 1	\$115.00	Senior Professional 6	\$275.00
Engineer/Surveyor 2	\$135.00	Senior Professional 7	\$285.00
Engineer/Surveyor 3	\$140.00	Senior Project Manager 1	\$175.00
Engineer/Surveyor 4	\$150.00	Senior Project Manager 2	\$195.00
Engineer/Surveyor 5	\$165.00	Senior Project Manager 3	\$235.00
Engineer/Surveyor 6	\$225.00	Survey Crew Member 1	\$120.00
Engineering/Surveying Manager	\$260.00	Survey Crew Member 2	\$125.00
Field Representative 1	\$90.00	Technician 1	\$80.00
Field Representative 2	\$100.00	Technician 2	\$85.00
Field Representative 3	\$110.00	Technician 3	\$90.00
Field Representative 4	\$120.00	Technician 4	\$95.00



October 21, 2024

Croy Engineering, LLC 603 Madison Street Huntsville, Alabama 35801

ATTN: Mr. Houston Matthews, P.E.

SUBJECT: Proposal for Geotechnical Engineering Study Browns Ferry Rd. and Sullivan St. Madison, Alabama GTEC Proposal No. P-00457

Ladies and Gentlemen,

GTEC, LLC is pleased to provide this proposal for a Geotechnical Engineering Study for the above referenced project in Madison, Alabama. Project information was provided by Mr. Houston Matthews with Croy Engineering, LLC (Croy) via email on October 9, 2024. This proposal describes the site and presents a planned scope of services, fee, and anticipated schedule.

## **PROJECT INFORMATION**

GTEC, LLC understands the City of Madison is planning improvements for the Sullivan Street and Browns Ferry Road intersection located in Madison, Alabama. We understand project plans include adding two double mast arms at the intersection and a dedicated right turn lane from Sullivan Street onto Browns Ferry Road. We understand the new lane will have an approximate length of 400 feet. We understand a modular block gravity retaining wall will be constructed on the southeast corner of the Sullivan Street and Browns Ferry Road intersection with an approximate length of 330 feet. Based on the existing site grades we estimate the retaining wall to range in height from approximately 4 to 8 feet tall. Our study does not include improvements to Wall Triana Highway on the north side of the intersection or Browns Ferry Road. The intersection currently contains overhead traffic lights and overhead utilities are located along the north side of Browns Ferry Road and the west side of Sullivan Street. We understand that Alabama Department of Transportation (ALDOT) funding will not be used for this project, and, therefore, our reports will not be reviewed by ALDOT.

Croy provided GTEC with a *Subsurface Exploration and Geotechnical Engineering Study* by OMI, Inc. and dated October 30, 2018. The subsurface data from that study will be used to supplement this study.



# SCOPE OF SERVICES

The purpose of our study is to explore the subsurface conditions and groundwater levels in order to provide recommendations for construction planning. To accomplish this objective, we have developed the following scope of services.

#### Traffic Control

GTEC will provide traffic control during field operations to close one lane of traffic on Sullivan Street and Browns Ferry Road and use flaggers to direct traffic.

#### Subsurface Utility Engineering (SUE) Study

GTEC will assist in providing a SUE study for relevant underground utilities in the project area. This study will be coordinated with Croy design efforts to determine where underground utilities should be located. We will contact Alabama One Call prior to the performance of our field services. Vacuum excavation will be performed where the underground utilities are marked by Alabama One Call personnel to attempt to expose the top of the buried utilities so that the locations may be surveyed by Croy.

#### Asphalt Coring

GTEC proposes to collect one (1) asphalt core from the existing street and measure the underlying base thickness to record the total thickness of the existing pavement section.

GTEC will visually observe and record the pavement areas for pavement distress such as cracks, potholes, and oxidation. Photographic documentation of the distresses will also be performed during the visual survey.

#### **Geotechnical Drilling**

Test locations will be marked using a hand-held GPS unit. If a topographic survey is provided, boring elevations can be estimated by interpolating between contour lines. If more accurate location and elevation are needed, we recommend our boring locations be surveyed.

At the proposed signal pole locations, GTEC proposes to explore the subsurface conditions with two (2) soil test borings during this study. Each boring will be advanced to a depth of 20 feet or refusal, whichever occurs first. Standard penetration tests (SPT) in accordance with ASTM D1586 will be conducted in conjunction with the soil test borings. The SPT tests will be performed at 2-½ foot intervals in the upper 10 feet and at 5-foot intervals thereafter to boring termination or auger or SPT refusal. Relatively undisturbed thin-walled tube samples will be collected at select intervals in accordance with ASTM D1587. Pocket penetrometer readings may be taken on each sample and recorded on the Boring Log. Upon completion, subsurface water will be measured and recorded in each borehole, and the borehole will be backfilled with soil auger cuttings.

Additionally, GTEC proposes to explore the subsurface conditions with two (2) hand auger borings during this study in the proposed pavement areas. Each boring will be excavated to a depth of 2 feet or refusal, whichever occurs first, for collection of soil samples. Continuous

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Dynamic Cone penetrometer (DCP) testing will be performed in accordance with ASTM D6951 (Dynamic Cone Penetrometer in Shallow Pavement Applications) to a depth of 5 feet below the ground surface at each hand auger boring. Upon completion, subsurface water will be measured and recorded in each test pit, and the test pit will be backfilled with soil cuttings.

A member of our staff will supervise the drilling activities and visually classify the soil samples in general accordance with ASTM D2488, the Standard Practice for Description and Identification (Visual-Manual Procedure). Based on the anticipated conditions, we plan to perform the following laboratory tests on select samples:

- Natural Moisture Content (Soil), ASTM D2216
- Atterberg Limits, ASTM D4318
- Unconfined Compressive Strength of Soil, ASTM D2166

#### Engineering Evaluation and Report

After our analyses are complete, we will issue a written report describing the exploration and outlining our recommendations. The report will include the following:

- Our understanding of the planned project,
- A summary of existing site conditions, site geology, and topography,
- Records of observed distresses for existing pavement,
- Records of field tests outlining the materials encountered at the test locations,
- Results of laboratory tests performed to provide information regarding the engineering characteristics of the subsurface materials,
- Pavement thickness and milling recommendations,
- Recommendations for signal pole foundations, including axial capacity and L-Pile parameters,
- Recommendations for retaining wall foundations, including bearing capacity,
- Recommendations for retaining wall design, including lateral earth pressures and skin friction for retaining walls, and
- Groundwater concerns, if encountered.

## Retaining Wall Design

If modular block gravity retaining walls are used for project walls, GTEC proposes to provide design cross sections and construction details in PDF format. Croy will provide the retaining wall location, grading, and profiles with proposed grades at the top and bottom of the wall. Once design cross sections are reviewed, drawings will be placed on Croy title block to incorporate into the construction plan set.

# **CLIENT RESPONSIBILITIES**

To assist with fulfilling our proposed scope of services, GTEC requests the following:



- <u>Plans and Specifications</u>: GTEC has been provided project drawings including *Sullivan Street and Browns Ferry Road Intersection Dedicated Right Turn Lane Site Plan* Drawing Number C4 issued on 01/30/2019. GTEC requests the client send current and updated drawings as the project progresses. Documents should include as much information as possible including, but not limited to, dimensions, site layout, survey data, structural loadings, and grading plans.
- <u>Retaining Wall Profiles:</u> Croy will provide retaining wall profiles as described above for our retaining wall design.
- <u>Utilities</u>: GTEC requests the client send current site utility drawings as updated during current surveying efforts.

# FEE AND SCHEDULE

At this time, we propose our services described for a lump sum fee of \$21,325.00. Services not included in the scope can be added at our prevailing unit rates. We will schedule field activities upon receipt of this contract authorized by signature below and provide the planned dates of services. Final reports will be issued within four to six weeks of authorization. This proposal is valid if accepted within 60 days of issuance.

## AUTHORIZATION

Should this proposal meet your objectives, we understand Croy Engineering, LLC will issue a Professional Services Agreement for Subconsultant to GTEC, LLC. The proposed lump sum fee is contingent upon the following invoicing terms.

#### INVOICING

GTEC shall prepare invoices in accordance with its standard invoicing practices. GTEC shall submit its invoices to Croy on a monthly basis by the 15<sup>th</sup> of the month. Invoices are due and payable within 90 days of receipt. Payment will be credited first to any interest owed to GTEC and then to principal. If Croy fails to make any payment due GTEC for services and expenses within 90 days after receipt of GTEC's invoice, then:

- 1. amounts due GTEC will be increased at the rate of 1.5% per month (or the maximum rate of interest permitted by law, if less) from said ninetieth day; and
- 2. GTEC may, after giving seven days written notice to Croy, suspend services under this Agreement until Croy has paid in full all amounts due for services, expenses, and other related charges. Croy waives any and all claims against GTEC for any such suspension.

If Croy disputes an invoice, either as to amount or entitlement, then Croy shall promptly advise GTEC in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion subject to these terms.



# **CLOSING REMARKS**

We appreciate this opportunity to be of service and look forward to working with you on this project. If you have any questions regarding this proposal or would like to discuss the proposed scope and budget, please do not hesitate to contact GTEC.

Respectfully, GTEC

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Lori E. McCafferty, E.I. Staff Engineer

Rochel J. Finch

Rachel T. Finch P.E. Senior Engineer

gohsm.com

Charles Troy Halliburton Professional Land Surveyor 256-503-4639 Phone thalliburton@gohsm.com



Halliburton Surveying & Mapping, Inc.

Mailing Address: P.O. Box 18652 Huntsville, AL 35804 Physical Address: 412 Governors Dr SW Huntsville, AL 35801

October 28, 2024

- Attention: Mr. Houston Matthews, PE Croy Engineering, LLC. 603 Madison Street Huntsville, AL 35801
- Reference: Right-of-Way Survey at Wall Triana and Browns Ferry Road Intersection Madison, Alabama

Mr. Matthews:

As requested, please find the enclosed proposal for professional services associated with land surveying the rightsof-way of Browns Ferry Road and Wall Triana Highway intersection.

Feel free to contact me should you have any questions and/or comments. Thanks again for the opportunity.

Best regards,

Halliburton Surveying & Mapping, Inc.

C. Troy Halliburton, P.L.S.

CEO

# ATTACHMENT A

## **SCOPE OF SERVICE:**

## TASK 1

- 1. Topographic Survey shall depict and include the following information:
  - a. Survey limits as per Attachment C hereof and shown in magenta color
  - b. Rights-of-way line ties as evidenced in current deeds of record and monumented on the ground
  - c. Create a 40-foot (+/-) topo survey grid.
  - d. Location of all observed improvements, including but not limited to, paving, sidewalks, curb and gutter, paving, paint striping, fences, ditches and rip rap.
  - e. 1-foot contour intervals with spot elevations. Spot elevations at all major features and changes in grade, ditch lines, etc. shall be depicted.
  - f. Location of all observed utilities as evidence from onsite evidence, an 811 utility locate ticket and utility maps as submitted by utility authorities.
  - g. Surveyor will contact 811 to request underground utility locates, however, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, similar utility locate requests from surveyors may be ignored or result in an incomplete response, in which case the surveyor shall note on the plat or map how this affected the surveyor's assessment of the location of the utilities. Where additional or more detailed information is required, the client is advised that excavation and/or private utility locate request may be necessary.
- 2. Survey shall be made in accordance with the Standards of Practice for Surveying in the State of Alabama.
- Survey information shall be placed on the Alabama East Zone State Plane Coordinate System (NAD 83).

# **GENERAL ASSUMPTIONS AND REQUIREMENTS:**

- Client has secured right-of-entry to subject properties and adjoining property to perform the work as requested within the scope of this project and that Surveyor may enter the subject properties as well as the adjoining properties without further notice if this agreement is executed.
- Title Commitment and all supporting documents to be submitted to surveyor (including all recorded deeds/plats/easements, etc.).
- Deliverable shall include an AutoCAD file, signed digital file and hard-copies sent to one location, if requested.

# **BASE SCOPE EXCLUSIONS:**

The following items are not included in the Scope of Services:

- Signing any client or 3<sup>rd</sup> party contract agreements.
- Postage/Mailing Fees (if required)
- Subdivision or Resubdivision Mapping and Platting of any kind

- Construction Layout/Staking & As-Built Surveys
- Safety orientations, orientations and/or any other similar items that hinders free access to/from site during normal business hours as needed to perform the work in accordance.
- FEMA Elevation Certificates, LOMR, LOMR-F, etc.
- Rezoning, variance, vacation requests, or other matters not specifically mentioned herein above.
- If a potential overlap, gap or gore is discovered upon the performance of the survey, the surveyor reserves the right to stop work until the issue(s) gets resolved. Any requested work performed to resolve these potential issues is considered additional services.
- Location of any underground utilities in excess of the scope of services defined hereof.
- Formal boundary survey(s)
- Any Title and/or public records research or review in excess of the current deeds of record as referenced in the Madison County Alabama Tax Assessors Office.
- Updating or revising the survey due to revised plans or similar matters.
- Any activities not associated within the Scope of Services as defined herein above.

## **BASE SCOPE SCHEDULE:**

- 1. Surveyor is expected to being work within approximately one (1) to two (2) weeks upon receipt of this executed agreement and/or written authorization of Notice to Proceed (NTP). For planning purposes, Surveyor has prepared the following milestone estimated schedule.
  - a. Boundary and Topographic Survey
    - i. Estimated Draft 5-6 weeks from receipt of notice to proceed
    - ii. Estimated Final 1 week after issuing Draft
- 2. Schedule is subject to possible delays not controllable by the Surveyor, such as, but not limited to, delays by inclement weather, arrangement of proper onsite access, COVID-19 or other pandemics, and receipt of the Title Commitment and supporting documentation, etc.

## TASK 2

1. Legal Description and Exhibit of right-of-way acquisition tracts associated with the project

## **ATTACHMENT B**

## **FEE SCHEDULE**

Client shall compensate Surveyor for services rendered in accordance with the following:

- TASK 1 FIXED FEE \$11,900.00
- TASK 2 FIXED FEE \$1,300.00/TRACT

Any additional Services requested and not listed in scope of services shall be subject to an Hourly Fee Schedule and reimbursable expenses. The rates are defined as follows:

Principal Land Surveyor \$200 / hour	
Senior Project Manager \$170 / hour	
Project Manager \$150 / hour	
Project Land Surveyor \$135 / hour	
Assistant Project Manager \$130 / hour	
Land Surveyor-in-Training (LSIT) \$115 / hour	
Survey CAD Technician\$105 / hour	
Drone & Laser Scanning Software Processer \$150 / hour	
Intern/Co-op \$80 / hour	
Administrative or Courier \$75 / hour	
*1-Man Field Survey Crew \$155 / hour	
*2-Man Field Survey Crew \$190 / hour	
*3-Man Field Survey Crew \$225 / hour	
Private Utility Locating \$1,100 / half day (	minimum)
Survey-grade aerial LiDAR sensor \$3,700 / half day (	minimum)
**Terrestrial Laser Scanning \$1,500/ half day (i	ninimum)
***1 arc second accuracy total station \$27 / hour	
****Multi-Constellation GPS Base & Rover \$28 / hour	
Printing Black & White (11" x 17") \$0.90 / sheet	
Printing Black & White (24" x 36") \$3.90 / sheet	
*Standard field crews are equipped with a truck, total station, auto	o-level and network GPS
technologies.	
**Terrestrial Laser Scanning hardware collects up to 2,000,000 p	oints per second.
***Utilization of a 1" accuracy total station is an additional fee to	any labor category
****Utilization of a multi-constellation GPS base/rover is an addi	tional fee to any labor category
Note: Additional project reimbursable expenditures will be cost of	item + 10%.
Note: Any services provided after December 31, 2025 are subject	to a 3.5% yearly escalation.

