

March 10, 2023

Mr. Khapel Akbari, PE
Transportation Project Manager
Capital Engineering & Construction
Stafford County Public Works
2128 Jefferson Davis Highway, Suite 103
Stafford, VA 22554

RE: Request for Professional Services
County of Stafford, Virginia
Staffordboro Sidewalk Change Order #1

Dear Mr. Akbari:

We are pleased to submit this proposal to provide engineering services for the subject project. The scope of work has been prepared based on discussions with the County and follow-up emails. Our detailed scope of services and fee proposal, including man-hour estimates, cost & price summaries, and subconsultant fees are enclosed for your review.

Your prompt review and approval of this proposal is requested. If you have any questions or require additional information, please feel free to contact our project Manager, Ian Millikan, at 804-366-0169 or imillikan@wallacemontgomery.com.

Sincerely,

WALLACE, MONTGOMERY & ASSOCIATES, LLP

for
Antonio A. Mawry, P.E.
Partner



**ENGINEERING
SCOPE OF SERVICES &
FEE PROPOSAL**

for

**Staffordboro Sidewalk
(Juggins Connector Road to Pike Place)
VDOT Project No. EN20-089-771, UPC# 117937**

Change Order #1

March 10, 2023

Submitted To: Stafford County
Department of Capital Projects
Transportation Engineering Division

Submitted By: Wallace Montgomery, LLP
2920 West Broad Street, Suite 18
Richmond, Virginia 23230
804-366-0169



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CHANGE ORDER DESCRIPTION

The stormwater outfall for the Staffordboro Sidewalk project is located at the southeast corner of Staffordboro Boulevard and Pike Place. Stormwater from the outfall is conveyed through a drop inlet at this location into manmade channel located behind the basketball courts owned by the Woodstream Homeowners Association (HOA). A meeting was held with VDOT on February 17, 2023 to discuss the adequacy of the manmade channel for stormwater conveyance. VDOT directed the County to obtain additional topographic survey of the manmade channel which was not included in the original scope of work for this project. VDOT required this survey to confirm adequacy of the outfall. This change order will provide the additional topographical survey, associated coordination, and all design efforts required to provide the revised survey limits on the roadway plans.

The drainage design required to adequately convey stormwater to the ultimate outfall was included in the original scope and fee proposal for this project and is not included in this change order.

This project is funded with federal funds.

BUDGET AND MAJOR MILESTONE SCHEDULE

Unless otherwise stated, Wallace Montgomery, LLP is responsible for providing all information and performing all tasks listed herein for the lump sum price of seven thousand six hundred and twenty-eight dollars and eight cents (\$7,628.08) and in accordance with the following Major Milestone Schedule:

Complete Topographic Survey

Five Weeks After NTP

SURVEY

Survey services will be performed by Accumark in accordance with the VDOT Survey Manual.

Limits

The survey limits along the outfall drainage area are illustrated in the attached survey area map, Appendix A, and they can generally be identified as approximately 175 feet east of the intersection of Staffordboro Boulevard and Pike Place. Topographic survey will include enough area to define bottom width, side slopes, top of bank, and longitudinal slope of the existing manmade swale located behind the basketball courts owned by Woodstream HOA.

Recover Existing Control/ Project Datum

Control information will be obtained from the National Geodetic Survey database, and existing monuments will be recovered. The horizontal project datum will be in accordance to Virginia State Plane North, NAD 83 and vertical datum will be NAVD 88.

Cross Sections and Topographic Survey

Cross sections of the existing drainage outfall area will be surveyed at 25' intervals. Cross sections will include centerline of ditch, top of ditch and ground shots to the limits of the survey area.

DTM and Contours

Cross section data will be used to create a dtm and contour file showing 1' contours.

Storm Drainage Survey

Rim and invert elevations of existing drainage structures will be obtained and existing pipe type, size, length, and direction of flow will be noted. If existing drainage structures extend beyond the project limits, at least one drainage structure will be located and identified outside the project limits in each direction. This is required to interpolate the depth and direction of culverts between structures.

Utility Survey

All above ground utilities, including utility poles, pedestals, manholes, valves, hydrant top and invert elevations, will be located and identified to the greatest extent possible. Any visible utility structure numbers will be recorded and shown on the survey.

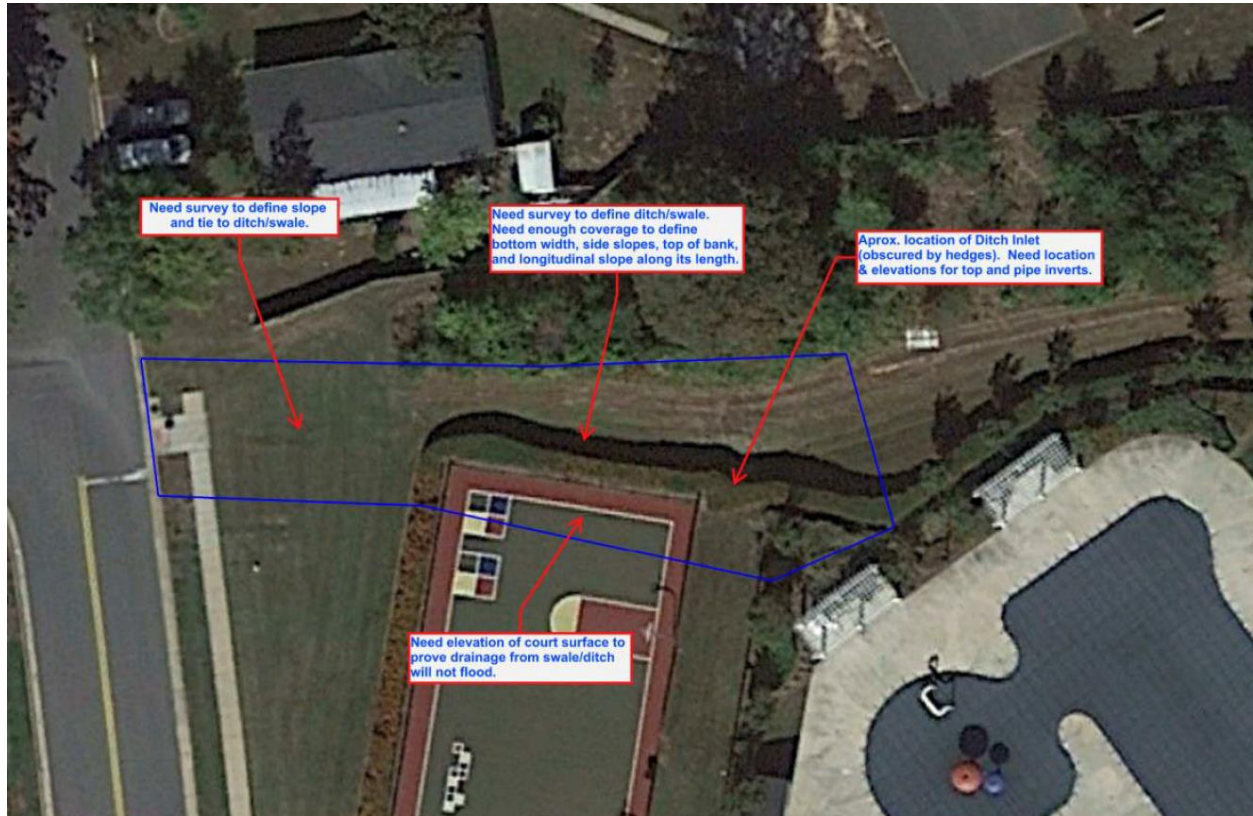
Deliverables

- Survey

COORDINATION

Coordination efforts with the surveyor and drainage engineer will be provided by Wallace Montgomery. This will include performing Quality Assurance and Quality Control (QA/QC) on the survey files and inserting the new survey data onto the plans in accordance with the latest edition of the VDOT Road Design Manual. The construction estimate will be updated as necessary to capture any changes to the project's drainage design that result from the additional survey.

APPENDIX A – SURVEY LIMITS MAP



APPENDIX B – MAN HOUR BREAKDOWN

[Engineer to provide Man Hour Breakdown using standard template for Approval with the Scope of Services and Fee Proposal]

Wallace, Montgomery & Associates, LLP
2920 West Broad Street, Suite 18
Richmond, Virginia 23230

Proposal of Engineering Services
County of Stafford, Virginia
Staffordboro Sidewalk Change Order #1

Item No	ITEM OF WORK	Project Manager	Engineer V	Engineer IV	Engineer III	Engineer II	Engineer I	TECH V	TECH IV	TECH III	TECH II	TECH I	Total
Survey													
a	Recover Existing Control/ Project Datum	0	0	0	0	0	0	0	0	0	0	0	0
b	Cross Sections and Topographic Survey	0	0	0	0	0	0	0	0	0	0	0	0
c	DTM and Contours	0	0	0	0	0	0	0	0	0	0	0	0
d	Storm Drainage Survey	0	0	0	0	0	0	0	0	0	0	0	0
e	Utility Survey	0	0	0	0	0	0	0	0	0	0	0	0
Survey Sub-Total		0	0	0	0	0	0	0	0	0	0	0	0
Coordination													
a	General Coordination	2	0	0	0	0	0	0	0	0	0	0	2
b	Survey QA/QC	0	0	0	0	1	0	0	0	0	0	0	1
c	Updating Plans & Estimates	0	0	0	0	3	4	0	0	0	0	0	7
Task 2 Sub-Total		2	0	0	0	4	4	0	0	0	0	0	10
Total		2	0	0	0	4	4	0	0	0	0	0	10

Project: Staffordboro Sidewalk Change Order #1
UPC:

Wallace Montgomery

Consultant Distribution of Manhours

Activity	TASK DESCRIPTION	Project Manager	Engineer V	Engineer IV	Engineer III	Engineer II	Engineer I	TECH V	TECH IV	TECH III	TECH II	TECH I	Total
		Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
1	Survey	0	0	0	0	0	0	0	0	0	0	0	0
2	Coordination	2	0	0	0	4	4	0	0	0	0	0	10
Total		2	0	0	0	4	4	0	0	0	0	0	10

DIRECT NON-SALARY COSTS

Project: Staffordboro Sidewalk Change Order #1
County of Stafford, Virginia

FIRM: Wallace Montgomery
DATE: 3/6/2023

0

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
TRAVEL (per current VDOT guidelines)				
Personal Auto (roundtrips x miles per trip)+(miles/day on site)= (20 trips x 50 mi)	0	Mile	\$ 0.655	\$ -
Lodging (per current VDOT guidelines)	0	EA	\$ 96.00	\$ -
Meals (Travel Day - per current VDOT guidelines)	0	EA	\$ 44.25	\$ -
Meals (Full Day - per current VDOT guidelines)	0	EA	\$ 59.00	\$ -
SUBTOTAL				\$ -

MATERIALS AND SUPPLIES				
			\$ -	\$ -
SUBTOTAL				\$ -

PRINTING AND REPRODUCTION				
		LS		\$ -
SUBTOTAL				\$ -

TECHNOLOGY				
				\$ -
				\$ -
				\$ -
				\$ -
SUBTOTAL				\$ -

POSTAGE / MAIL				
		LS		
SUBTOTAL				\$ -

OTHER				
				\$ -
SUBTOTAL				\$ -

SUBCONSULTANT				
Accumark, Inc.	1		\$ 6,225.58	\$ 6,225.58
				\$ -
				\$ -
				\$ -
SUBTOTAL				\$ 6,225.58

DIRECT & NON-SALARY DIRECT BREAKDOWN

Project: Staffordboro Sidewalk Change Order #1

FIRM:

Wallace Montgomery

DATE:

3/6/2023

COMPUTATION OF DIRECT SALARY COSTS

Labor Category Average Rates

PERSONNEL CLASSIFICATIONS	HOURS	RATE	AMOUNT
Project Manager	2	\$ 266.83	\$ 533.66
Engineer V	0	\$ 242.73	\$ -
Engineer IV	0	\$ 192.92	\$ -
Engineer III	0	\$ 159.47	\$ -
Engineer II	4	\$ 126.32	\$ 505.28
Engineer I	4	\$ 90.89	\$ 363.56
Technical Specialist V	0	\$ 236.44	\$ -
Technical Specialist IV	0	\$ 168.75	\$ -
Technical Specialist III	0	\$ 138.55	\$ -
Technical Specialist II	0	\$ 88.23	\$ -
Technical Specialist I	0	\$ 63.82	\$ -

TOTAL DIRECT SALARY COSTS	10		\$ 1,402.50
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COMPUTATION OF DIRECT NON-SALARY COSTS

		AMOUNT
ITEM DESCRIPTION		\$ -
TRAVEL		\$ -
MATERIALS AND SUPPLIES		\$ -
PRINTING AND REPRODUCTION		\$ -
TECHNOLOGY		\$ -
POSTAGE/MAIL		\$ -
OTHER		\$ -
SUBCONSULTANTS		\$ 6,225.58

TOTAL DIRECT NON-SALARY COSTS		\$ 6,225.58
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CONSULTANT TASKS/SUB-TOTAL SUMMARY WORKSHEET

PROJ: Staffordboro Sidewalk Change Order #1

DATE: 3/6/2023

Activity	DESCRIPTION OF TASK	WM	HWR	ECS	CES	ERM	Accumark	Total
1	Survey						6,225.58	6,225.58
2	Coordination	1,402.50						1,402.50
Sub-Total (Labor Only)		1,402.50	0.00	0.00	0.00	0.00	6,225.58	7,628.08
Direct Expenses								0.00
Escalation								0.00
Grand Total		1,402.50	0.00	0.00	0.00		6,225.58	7,628.08

Accumark Inc

9500 King Air Court
Ashland, VA 23005



Proposal to perform subsurface utility services to Wallace Montgomery in reference to Staffordsboro Sidewalk Project - Additional Topographic Survey, Stafford, VA

Date	Services Performed By:	Services Performed For:
March 1, 2023	Accumark Inc 9500 King Air Court Ashland, VA 23005	Wallace Montgomery Ian S. Millikan, PE Phone: 804-366-0169 Email: imillikan@wallacemontgomery.com

Scope of Work

Contractor shall provide the Services as follows:

Section 1 – Scope of Survey

Task 1 – Additional Topographic Services

Accumark will perform a conventional topographic survey within the additional survey limits as indicated herein under the “Project Limits” of this proposal and as further shown with a blue line. The following items will be incorporated into the conventional topographic survey work:

- Permanent planimetric features that are visible to the surveyor including, but not limited to sidewalks, edge of pavement, pavement striping, signs (with identification), electrical boxes, buildings, roadways, streams, utility pedestals, fences and gates, swales, retaining walls, rock outcrops, boulders, curbing, entrances, handicap ramps, parking meters, pedestrian trails, visible surface evidence of non-gravity utilities, light poles, power poles (with numbers), aerial utility connectivity, water wells, meters, fire hydrants, hand holes and witness posts.
- Trees and tree lines will be depicted as follows, unless otherwise directed.
Freestanding trees four (4) inches and larger will be located individually and will include the basic name (Pine, Oak, Maple, etc.), diameter at breast height. Forested areas will be represented with a tree line and will not show individual trees. Hedges or

bushes will not be individually located, however, will be outlined as planted or landscaped areas.

Task 2 – Storm and Sanitary Sewer

Accumark will survey the above ground features relating to the storm drainage systems along the survey corridor. Pipe inverts and/or structure as-builts will be captured on the existing grate inlet located within the survey limits and the two (2) connecting structures located to the east and south of the survey limits.

Task 3 – Right-of-Way Plan Sheet

Accumark will update the Right-of-Way plan set to include an additional RW Plan Sheet for purposes of showing a proposed drainage easement connecting to the existing storm sewer easement.

Horizontal and Vertical Control

Accumark will utilize the previously established ground control network.

Property Surveys

Additional property surveys are not anticipated for this task and are hereby excluded from the scope of services.

Section 2 – Scope of Utility Service

Quality Level B (QL-B) Utility Designation Standard Procedures

Accumark will perform designating in compliance with CI/ASCE 38-02, *Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*, hereinafter referred to as Standard 38-02.

- **Quality Level B Designation Operations**

- Accumark personnel will contact the client, facility and utility owning agencies, as deemed appropriate, to request and acquire records of the existing underground facilities. Utility record information will be used as an aid in the identification of the number, identity, size and material of utilities located in the field. Records will not be used as a substitute for actual geophysical location unless the system cannot be verified electronically using industry standard techniques for this level of investigation.
- Upon receiving notice to proceed, contact will be made with the client and/or their consultant, to acquire a digital copy of the base mapping for the project. Those

drawings will be used in preparing designating field draft sheets and later for a base mapping background reference used in the QA/QC process.

- Designators will draft field sheets that show the location, trend and configuration of utilities detected. Field sheets will show all scoped underground utility surface features and lines, and will be prepared with color to differentiate the utility systems. Utilities will be annotated with size and material where available. Project specific field notes will be shown as deemed appropriate.
- **Photos may be taken of the field marked utilities in particularly congested areas, where applicable, to assist the CAD draftsmen in applying the surveyed data correctly.**

Referencing the project's survey control the utility paint will be surveyed, processed and plotted for QA/QC review. This Quality Assurance – Quality Control effort (QA/ QC) involves a Project Manager reviewing the CAD drafted utility locations against available records, site drafted utility sketches, survey notes, imagery and base mapping. If available, the Client shall provide Accumark with any record information they have available at time of survey. During these processes, if any anomalies or discrepancies are observed between the various data sets and the drafted utilities, the Project Manager will execute a site walk with the plots 'in hand', at a minimum, in attempt to identify the source of the discrepancy and assign a corrective action prior to delivery.

Project Limitations

This service will be provided with due diligence and in a manner consistent with standards of the subsurface utility mapping industry. Every reasonable effort will be made to locate all systems of interest whether indicated on records available to us or not. However, we do not guarantee that all existing utility systems can or will be detected. It may not be possible to detect utilities without prior knowledge, such as systems that are not depicted on records made available to us. Further, this service is not intended to detect non-utility structures such as, but not limited to: foundations, irrigation systems, septic systems, wells, tunnels, concrete or metal structures, or the true size and limits of subsurface utility vaults and manholes. **Gravity-Flow Sanitary Sewer systems are excluded within the scope of work.** Use of this service does not relieve interested parties from their responsibility to make required notifications prior to excavation.

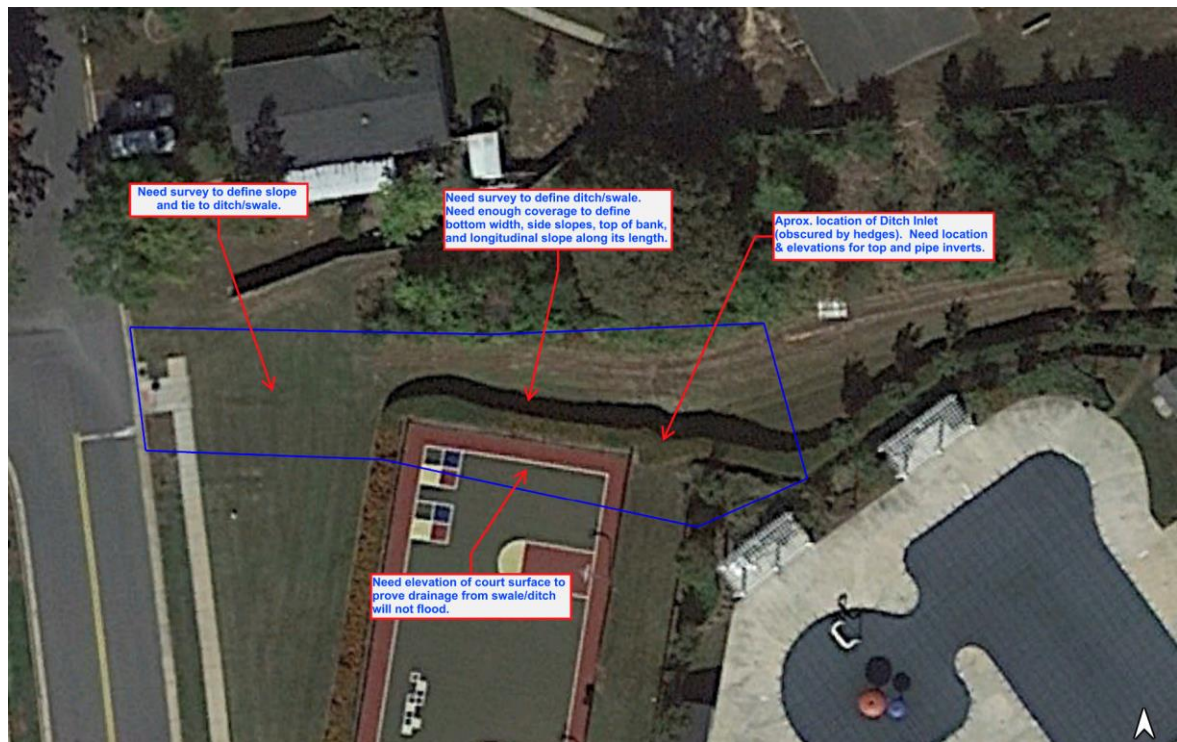
The mapping services will reflect interpretation of electronic data collaborated with record and visual indications. Professional judgment will be used to reflect the underground utilities with the intended utmost accuracy and comprehensiveness. The results may be affected by numerous site conditions, including but not limited to utility materials, joint types, fittings, density of

underground utilities, interference with above ground conductors and soil characteristics. There is no guarantee that all facilities can be found and shown.

Every reasonable attempt will be made to find, locate and map all active and abandoned underground utilities at Quality Level "B" of the Standard 38-02. All non-locatable utilities that are shown on record or learned about from verbal recollections or otherwise will be shown at Quality Levels "C" or "D" of the Standard 38-02. In addition, an effort will be made to learn the existence of non-locatable and non-recorded utilities that we may become aware of due to the presence of site features or otherwise. Those findings will be noted and provided to the client. The intent of the service is to map all underground utilities, included in the scope, active or abandoned if possible. Our work does not relieve the users of our drawings from contacting the one call protection office and we are typically not responsible for the damage of utilities caused by others due to the responsibilities borne on utility owning agencies and the one call system.

Project Limits

Project limits are indicated by the attached mapping below.



Section 3 – Deliverables

Accumark will update the previous submittals to incorporate the new survey data located under this proposal.

Estimated Project Schedule

Schedule to be negotiated with client upon notice to proceed.

Fee Schedule

This proposal is only valid for 90 days from transmittal date to Buyer. After 90 day period, Accumark reserves the right to revise the proposal as necessary.

<u>Direct Labor</u>	<u>Hourly Rate</u>	<u>Hours</u>	<u>Total</u>
Project Manager	\$128.93	0	\$0.00
Licensed Surveyor	\$178.92	0	\$0.00
SUE Engineer	\$98.24	0	\$0.00
GPR Technician	\$94.97	0	\$0.00
Survey Crew Chief	\$92.89	14	\$1,300.46
Instrument Person	\$72.13	14	\$1,009.82
SUE Crew Chief	\$161.20	0	\$0.00
SUE Field Technician	\$93.28	0	\$0.00
CAD / GIS Technician	\$126.30	31	\$3,915.30
			<u>\$6,225.58</u>

Standard Terms of Payment

- **Standard Terms of Payment**
 - Payments for services invoiced are to be received within 30-days from date of invoice. If payment is contingent upon Buyer being paid by a “Third Party” for services, Accumark must be notified of the name and address of the “Third Party” prior to commencement of services. Buyer will submit invoices to the “Third Party” in a timely manner and Accumark will receive payments from

Buyer within 15 days of Buyer being paid. If this is not the case then Accumark reserves the right to modify this clause to reflect a revised payment schedule.

IN WITNESS WHEREOF, the parties hereto have caused this proposal to be effective as of the day, month and year first written above.

Wallace Montgomery

Accumark Inc

By: _____
Name:
Title:

By: 
Name: _____
Title: Vice President

CHANGE ORDER SUMMARY

PO # 221028.0001

CHANGE ORDER # 1

PROJECT: Staffordboro Sidewalks
CLIENT: Stafford County
DATE: March 6, 2023

THE FOLLOWING CHANGES TO THE SCOPE OF SERVICES HAVE BECOME NECESSARY

DESCRIPTION OF CHANGE(S)	FEE
1. Additional Survey for Drainage Outfall	\$ 7,628.08
2.	\$
3.	\$

TOTAL FEE ADJUSTMENT FOR ABOVE SERVICES:-----

\$

FEE SUMMARY

	DATE APPROVED	FEE
ORIGINAL FEE	December 21, 2021	\$ 413,356.54
CHANGE ORDER #1		\$ 7,628.08
CHANGE ORDER #2		\$
TOTAL		\$ 420,984.62

FOLLOWING THE PROCESSING OF CO #1, THE CUMULATIVE CO AMOUNT IS

1.8%

OF THE ORIGINAL FEE