ARLINGTON COUNTY, VIRGINIA

AGREEMENT NO. 18-089-9 TASK ORDER NO. 1 AMENDMENT NUMBER 2

This Amendment Number 2 (hereby changed from Modification to Amendment) is made on October 7, 2021 by the County and amends Agreement Number 18-0899 ("Main Agreement") Task Order No. 1 dated October 14, 2021 between STV Incorporated ("Contractor") and the County Board of Arlington County, Virginia ("County").

The County and the Contractor agree to amend Task Order No. 1 under the Main Agreement as follows:

PROJECT: Ballston-MU Metrorail Station West Entrance Design/Engineering Services – Task Order No. 1

- 1. The Contractor shall provide additional services in accordance with the attached Scope of Services and Contractor Cost Proposal, dated September 15, 2021.
- 2. The additional services are needed due to changes in project limits and WMATA design criteria, which required the West entrance to shift to the West and expand in size. This task order amendment will require STV to perform site condition survey and spend more effort to have the 2006 design documents meet the current WMATA design criteria.
- 3. The Task Order is increased by a Not-to-Exceed \$455,832.68 with a total Not-to-Exceed amount of \$2,496,990.72;
- 4. Upon execution of this Amendment No. 2 by the County and the Contractor, this amendment to Task Order No.1 will constitute as the Notice to Proceed.
- 5. The Period of Performance shall not exceed 288 calendar days from Item No. 4.

All other terms and conditions of the Main Agreement remain in effect.

WITNESS these signatures:

THE COUNTY BOARD OF ARLINGTON STV INCORPORATED

COUNTY, VIRGINIA

AUTHORIZED: Docusigned by:
SIGNATURE: Dr. Sharon Thu

Ur. Sharon Tlewis

NAME: DR. SHARON T LEWIS

AUTHORIZED: SIGNATURE:

—Docusigned by: Jose Bustamante

Jose Bustamante

1

TITLE: _	PURCHASING AGENT	TITLE:Vice President
DATE:	10/20/2021	DATE: 10/19/2021

\$\hat{O}STV \mathcal{V}_{ears}

September 15, 2021

Kenex Sevilla Project Manager Arlington County Division of Transportation 2100 Clarendon Blvd., Suite 900 Arlington, VA 22201

Reference: Ballston West Entrance – Task Order #1 under Agreement #18-089-9: Revised Change Order #2

Dear Kenex:

Based on discussions with Transit Bureau staff, we are submitting this revised Change Order #2 to provide greater focus and adaptability in meeting County needs for this critical phase of project development.

The following is an overview of work to date and our understanding of County direction for completion of the task.

Work to Date:

Since initiation in October 2019, significant progress has been made in defining/redefining the second entrance project and advancing the 35% design.

The team is managing schedule delays and additional staff effort due to:

- WMATA: Adapting to new WMATA Design Criteria and changes to previously approved design configuration
- Developer: Changes to the allowable footprint based on private easements and uncertainty regarding building plans and interface between the two projects

Instead of the budgeted resources being used to advance the 35% design, significant effort was expended making multiple revisions and confirming feasibility of the concept design.

Revised configuration requires design elements that are outside the original scope, for example:

- Elevators outside vault (major structural design implications)
- Locations of elevator machine rooms (mechanical equipment and ductwork implications)

Assumptions:

Now that the concept design has been confirmed through coordination with County staff, WMATA, and property owners, the project will advance toward completion of the 35% design package.

Change Order #2 proposes reallocating some task budgets and adding significant budget for Task 4, Develop Preferred Concept to 35% Design.

To ensure the total NTP amount did not exceed \$2.5 million, the proposal removes a portion of Task 5 (Construction Schedule and Cost Estimate) and removes Task 6 (Bridging Documents) entirely.

Kenex Sevilla Change Order #2 Updates September 15, 2021

Change Order #2 is essentially a "Re-set" of original scope. The proposed outcome is to advance feasible design to 35%, incorporate current WMATA standards, and deliver the package of preliminary design documents to the County. Attachment 1 includes a draft schedule for delivery.

Commitments:

This Revised CO #2 provides flexibility to address risks as they are better defined through the design process, and to quantify savings by task as STV delivers on the updated scope of services.

The Transit Bureau project management team has directed STV to:

- Refine proposed Change Order #2 to include an Optional Task Budget to address specific risks;
- Provide greater detail in bi-weekly meetings and monthly progress reports;
- Provide regular reporting on evolving design issues based on discipline-specific technical reviews by County and WMATA staff; and
- Facilitate a work session on project delivery based on interim discipline reviews and related risk assessment.

After the project delivery work session, Bureau project management will direct STV in allocating the optional task budget to specific aspects of design (Task 4), or work to support the recommended project delivery method (Tasks 5 and 6). The total fee for the change order is \$455,832.68, which has been revised to remove any direct expenses except for subconsultants.

Please review the attachments herein including the schedule in Attachment A and the scope and fee in Attachment B and provide any further comments that need to be addressed.

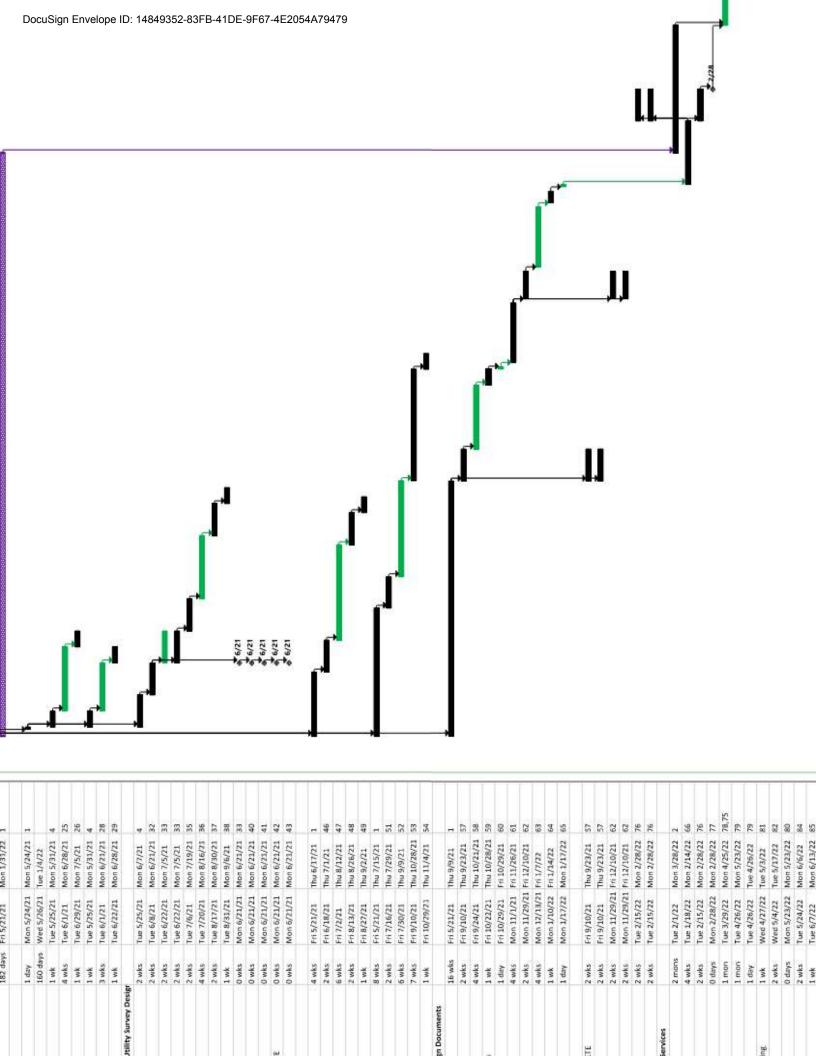
Sincerely,

Jose Bustamante, P.E. Vice President, STV

Cc: Robin E. McElhanney (Arlington County)

estmente

Jason Mumford (STV) Laura Jeffords (STV) Lara Hegler (STV)



ATTACHMENT 2 CO#2 SCOPE AND FEE September 15, 2021



Ballston-MU Metrorail Station West Entrance Task Order #1 Under Agreement #18-089-9 Task Order Modification #02 SCOPE OF WORK 07/27/2021

1. GENERAL ASSUMPTIONS

- TO #1 Modification #02 will be invoiced per our original agreement as a stand-alone lump sum fee. The additional fee will be reallocated within each task item once the change order is approved.
- 2. There is no DBE/SWAM goal for this additional TO modification #02.
- 3. We have assumed approximately 200 Calendar Day schedule to complete the remaining scope in this project with eight (8) invoice periods.
- 4. TO modification #02 includes an order-of- magnitude cost estimate for Concept 1. Any future cost estimates for the project should use the plans developed in Task 4 to develop quantities and bid item costs.
- 5. The fee estimate assumes that we will have two (2) submissions (one draft and one final submission). After the first submission, STV will host one (1) over-the-shoulder design review meeting (in person, if possible) to review all comments and provide clarifications with all reviewers and disciplines. The intention of this meeting is to review the draft design and resolve all comments with an agreed resolution at one time so that we can streamline the design review process and move quickly to the final submission. We will provide the plans to all reviewers before the meeting.
- 6. For access to WMATA Property, STV will provide a Site-Specific Work Plan (SSWP) to the client. The client or client representative will be responsible for submitting the SSWP to WMATA and arranging site access for STV. STV will not be responsible for delays associated with entry or access to the property. STV will attempt to minimize site access trips.
- 7. Conditions not apparent and additional scope of work not included at the time this proposal was prepared may change the scope of work and cost assumptions.
- 8. Attendance at public meetings is excluded.
- 9. The developer or the developer's representative will be in attendance in our design meetings to provide periodic updates on the development of their foundation design and other work. The developer's plans will be provided as a reference file in a format that is compatible with Version 16 of AUTOCADD, Revit 2018 or newer.
- 10. STV will not design any of the foundation or structures for the development at 4420 North Fairfax Drive or perform any calculation reviews of their structures within the scope of this task order.
- 11. STV will continue to use the project survey control/datum provided by the County.
- 12. All previous clarifications from the original scope apply unless otherwise readdressed below.



2. ADDITIONAL SCOPE OF WORK

Task 1. Project Management and Administration

- 1. Additional project management activities due to the extension of the schedule through June 2022
- 2. Up to six (6) additional key discipline lead meetings with WMATA, agendas, and meeting minutes
- 3. Three (3) new subconsultant agreements will be prepared and monthly invoices will be reviewed and approved prior to including these withing a monthly invoice for the County
- 4. Prepare monthly invoices and progress reports
- 5. Perform Quality Control Audits on deliverables
- 6. General Project coordination with discipline leads, subconsultants
- 7. Prepare updated schedule and staffing plan
- 8. Maintain electronic project record files and documents

Task 1 Deliverables:

- 1.1 Agenda, Attendance Sheet and Minutes of six (6) key discipline meetings with WMATA
- 1.2 Attend bi-weekly meetings with County staff and provide bi-weekly reports
- 1.3 Internal Coordination with Design Leads
- 1.4 Monthly Progress Reports and Monthly Invoices

Task 2 – Data Collection, Site Investigation, and Property and Utility Survey

- 1. Data collection coordination with technical leads and subconsultants
- 2. Prepare a SSWP for WMATA for new field visit
- 3. Update WMATA safety training and contractor ID badge pickup
- 4. Field Visit with key technical disciplines (one per discipline for site visits)
- 5. Prepare Stormwater Management Plan and Subsurface Utilities Investigation Report
- 6. Quality control of field notes, reports, and site plans
- 7. Supplemental survey to include the new limits for the project
- 8. Supplemental utility investigation due to the new limits for the project
- 9. Subsurface Geotech exploration, laboratory testing, draft, and final geotechnical report

Task 2 Deliverables:

- 2.1 Supplemental Topographic, Property Line, and Utility Location Survey
- 2.2 Supplemental Utility Investigation Report
- 2.3 Draft and Final Geotechnical Report
- 2.4 Draft and Final Stormwater Management Plan
- 2.5 SSWP and Site Visit

Task 3. Technical Analysis

- 1. The existing budget capacity in this task can absorb the required work that will be delivered.
- STV will update the pedestrian model developed for the future station design and rerun the analysis using the NFPA 130 spreadsheet analyses that were completed for the future station design

<u>Task 3 Deliverables:</u>

3.1 Technical Egress Analysis Report (CE excluded)

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I dash Order #1 under Agreement #10-063-3

Modification #2 Request - Revised

August 18, 2021

STV Project Number 4020372



Task 4. Development of 35% Design – New Concept

- 1. Additional task coordination to ensure that discipline leads understand the plan development process and resolve conflicts with discipline leads
- 2. The station entrance design will be configured to accommodate Arlington County's easements with the owner of 4420 North Fairfax Drive
- 3. STV's design will proceed with the assumption that there are no constraints that limit the footprint of the project other than the air rights, subsurface limits of construction and grade level property lines of the property at 4420 Fairfax Drive
- 4. Concept 1 will be designed to approximately 35% level with plan sheets and details for all elements of the following disciplines: Architecture, Structures, Mechanical, Electrical & Fire Alarm, Plumbing & Fire Protection, Systems/Communications, Site Civil, including MOT Phasing and Landscape Architecture.
- 5. All design drawings will be prepared in AutoCad 2016 and REVIT 2018 or newer
- 6. The project will develop a BIM model in REVIT 2018 or newer
- 7. The project will prepare renderings of the new concept for WMATA, up to four (4) renderings
- 8. Each discipline lead will review and confirm the new concept design, review all calculations against the design criteria, develop the plan sets for their discipline, review conflicts with disciplines and coordinate resolution, follow the established quality plan to qa/qc their work, attend one (1) design plan review meeting, address and incorporate appropriate review comments, develop specifications and finalize the 35% design package
- 9. STV will design to the existing 4420 North Fairfax Drive building footprint while also providing accommodations for future development of a new building with subsurface parking garage.
- 10. Fire Protection will be included in the Mezzanine Area of Refuge, Restrooms, Electrical Room and Elevator Machine Room
- 11. Signage plans and details are excluded. The bridging documents will include specifications and standard drawings for signage per the current WMATA standards
- 12. The elevator headhouse will be a stand-alone building on a plaza vs integral to the 4420 North Fairfax Drive building
- 13. All escalators have been omitted from the project and that stairs and elevators are the only vertical circulation elements included in the project
- 14. STV will advance the Mezzanine to platform elevator structure at the inbound platform and provide new calculations and drawings
- 15. STV will advance the concept that demolishes the existing train room shell and reinforcement for a new opening in station arch for platform level access from new elevators at the inbound platform. This effort assumes the design from other stations can be easily adapted
- 16. STV will revisit demolition for an opening from the tunnel into service area and access impacts for the new adjacent elevator structure
- 17. STV will revisit the new opening in station train room wall for access to new mezzanine and access impacts for new construction
- 18. STV will advance other demolition/reinforcement in the service area, which should be primarily for the outbound mezzanine-to-platform elevator shaft secondarily for MEP related penetrations.
- 19. STV will include miscellaneous structures and pads in the service area for equipment pads, access platforms, etc.

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Modification #2 Request - Revised

August 18, 2021

STV Project Number 4020372

STV Jeans

Task 4. Development of 35% Design – New Concept (cont.)

- 20. STV will modify the previously approved mezzanine framing system to accommodate the reduced mezzanine footprint and reduce the vertical circulation to the platform from four (4) stairs down to two (2)
- 21. STV will update the elevator headhouse at street level and revised the headhouse to meet new design criteria

Task 4 Deliverables:

- 4.1 35% Design Drawings for Concept 1 Draft and Final
- 4.2 Design Calculations for Concept 1- Draft and Final
- 4.3 Design Review Meeting, Materials and Minutes- Draft
- 4.4 Design Review Comments, Responses and Resolution Log Draft
- 4.5 Technical Specifications for Concept 1- Draft and Final

Task 5: Construction Schedule and Cost Estimate

- 1. Develop an order-of-magnitude cost estimate for Concept 1.
- 2. All other work and fee for this task item will be removed.

Task 5 Deliverables:

5.1 Order-of- magnitude cost estimate for Concept 1

Task 6: Bridging Documents and Procurement Services - REMOVED

Task 6 Deliverables:

6.1 None

Task 7: Safety and Security

STV will update the preliminary hazard analysis (PHA) for the developed 35% design of the project.
The PHA will identify hazards and life safety vulnerabilities and develop recommended mitigation
measures for the successful bidder to use during the design and the construction phases of the
project.

Task 7 Deliverables:

7.1 PHA for Concept 1

Task 8: Additional Design and Review Services

1. STV will provide additional design and review services to bring the design documents to 35% and receive WMATA approval. This work will be performed on an as-needed hourly rate basis not to exceed a maximum allowance of \$100,284.01.



ESTIMATE OF PROFESSIONAL SERVICES **SUMMARY PAGE**

STV Proposal or Job Number: 4020372	Client Job Number:	18-089-9 Task 1 CO#2

Project Description/Location: Ballston Metro Station West Entrance 35% Design Documents

Client Project Manager: Kenex Sevilla Client: Arlington County

ltem	TAB	Hours	CO #2 Budgeted Effort	CO #2 Removed Scope	CO#2 Subs	Change Order #2 Grand Total
Task 1: Project Management	Α	422	\$ 80,374.44		s -	\$ 80,374.44
Task 2: Data Collection, Site Investigation, & Property & Utility Survey	В	184	\$ 28,551.67		\$ 122,572.78	\$ 151,124.45
Task 3: Technical Analysis - Egress Analysis Only	С	0	\$ -		\$ -	s -
Task 4: Develop Preferred Concept to 35%	D	4,170	\$ 653,414.91		\$ 39,000.00	\$ 692,414.91
Task 5: Construction Schedule & Construction Cost Estimate	E	149	\$ 24,830.61	\$ (238,569.52)	\$ -	\$ (213,738,91)
Task 6: Bridging Documents & Design-Build Procurement Services	F	0	\$ -	\$ (367,141.68)	\$ -	\$ (367,141.68)
Task 7: Safety and Security	G	126	\$ 26,745.02	\$ (13,258.76)	\$ -	\$ 13,486.26
Task 8: Optional Task - Design and Review Services	н	575	\$ 99,313.21			\$ 99,313.21
Totals	GRAND TOTALS >	4,925	\$ 913,229.86	\$ (618,969.96)	\$ 161,572.78	\$ 455,832.68

NOTES: STV AMOUNT = STV PERCENTAGE =

\$ 294,259.90 64.55%

SUBCONSULTANT AMOUNT = SUBCONSULTANT PERCENTAGE =

\$ 161,572.78 35.45%

prepared by STV Incorporated

Business Unit Leader, STV Incorporated
15-Sep-21



ESTIMATE OF PROFESSIONAL SERVICES Task 1: Project Management

STV Proposal or Job Number:	4020372	Client Job Number 18-089-9 Task 1 Modification #2, revised
Project Description/Location:	Ballston Metro Station W	est Entrance 35% Design Documents
Client:		·
Design Assumptions:	1. Extension of schedule for	or approximately 8 months
	1. Task 8 will be used on	a time and materials basis as needed and per direction from the County
	·	
Prepared By/Date:	LEH 06/05/21	
Reviewed By/Date:	JB 06/08/21	

Manhours by Classification

		mannour by viacontouron						
Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total
								-
Project Management								-
General Project Management	16	210		40				266
Subconsultant Agreements		2					4	6
Kick-Off Meeting with County (1)								-
Attend Monthly Specific Design Coordination Meetings w/ Cty/WMATA (up to 6)	6	12	12				24	54
Prepare Bi-weekly Meeting Agendas & Minutes (up to 6)		4					24	28
Prepare Monthly Invoice & Progress Report (8)	4	8		0	16		8	36
Quality Control/Audits		8	24					32
Optional Budget								
Project Administration								
General Project Coordination								-
Subconsultant Coordination								-
Prepare an Updated Schedule & Staffing Plan								-
Maintain Electronic Project Record Files and Documents								-
								-
								-
Manhour Totals:	26	244	36	40	16	0	60	422
Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59	
Budgeted Costs:	\$7,256	\$51,792	\$7,641	\$6,302	\$2,368	\$0	\$5,016	

Other Direct Costs (ODC) Estimate:

	UNITS	UNIT COST	ITEM COST	Summary
Travel (mileage), per vehicle-mile		\$ 0.560	\$ -	1 —
Air Fare, per airline ticket		600.00	-	BUDGETED COSTS: \$ 80,374.44
Ground Transport, per vehicle-trip		14.00	-	EFFORT MULTIPLIER: 1.0000
Meals, per person per day		76.00	-	BUDGETED EFFORT: \$ 80,374.44
Lodging, per room-night		258.00	-	
Third-Party Photocopies, per copy		0.15	-	7
Blackline or Blueline Prints, per sheet		0.80	-	ODC: \$ -
Bond or Vellum Reproductions, per sheet		1.25	-	ODC MULTIPLIER: 1.00
Mylar Sepias, per sheet		10.00	-	BUDGETED ODC: \$ -
Photographs, per roll (including development)		12.00	-	7
Overnight Postage, per package		20.00	-	7
Parking		14.00	-	SUBCONSULTANTS: \$ -
OTHER:		-	-	SUB MULTIPLIER: 1.00
	SUBTO	TAL ODC:	\$ -	BUDGETED SUBS: \$ -
OUDGONOUL TANTO				
SUBCONSULTANTS:		1	ITEM COST	-
			\$ -	┨
			-	TOTAL: \$ 80,374.44
	SUBTO	AL SUBS:	\$ -	



ESTIMATE OF PROFESSIONAL SERVICES

Task 2: Data Collection, Site Investigation, & Property & Utility Survey

STV Proposal or Job Number: 4020372 Client Job Number 18-089-9 Task 1 Modification #2, revised Project Description/Location: Ballston Metro Station West Entrance 35% Design Documents Client: Design Assumptions: 1. Additional Site Specific Work Plan and Site Visit 1. Task 8 will be used on a time and materials basis as needed and per direction from the County 3. Updated Geotech Report and Field Work (RK&K)

LEH 06/05/21 Prepared By/Date:

06/08/21 Reviewed By/Date:

Reviewed By/Date:	JB	00/00/21						
			Manho	ours by CI	lassificati	on		
Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total
Architectural Design								-
Optional Budget					•			-
WMATA Safety Training &/or Contractor ID Pickup (re-badging)								-
Site Visit (1)								-
								-
Mechanical Design								-
Documentation & Data Collection								-
WMATA Safety Training &/or Contractor ID Pickup (re-badging)			Removed a	and will use r	remaining cap	pacity		-
Site Visit (1)	1							-
	1							-
Electrical & Fire Alarm Design	1							-
Documentation & Data Collection	1							-
WMATA Safety Training &/or Contractor ID Pickup (re-badging)	1							-
Site Visit (1)								-
Task 8	: Optional Ta	isk - Design a	nd Review S	ervices				-
								-
Documentation & Data Collection			4					4
WMATA Safety Training &/or Contractor ID Pickup (re-badging)			4					4
Site Visit (1)			8					8
Stormwater Management Plan (Draft)			8	40		56		104
Subsurface Utilities Investigation Report			8	16		40		64
QA/QC - Reports	4		<u> </u>					
Manhour Totals:	4	0	32	56	0	96	0	184
Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59	104
riourly rayron wate.	\$1,116	\$0	\$6,792	\$8,822	\$0	\$11.821	\$0	

Other Direct Costs (ODC) Estimate:

	UNITS	UNIT COST	ITEM COST	<u>Summary</u>
Travel (mileage), per vehicle-mile		\$ 0.560	\$ -	7
Air Fare, per airline ticket		600.00	-	BUDGETED COSTS: \$ 28,551.67
Ground Transport, per vehicle-trip		14.00	-	EFFORT MULTIPLIER: 1.0000
Meals, per person per day		30.00	-	BUDGETED EFFORT: \$ 28,551.67
Lodging, per room-night		200.00	-	7
Third-Party Photocopies, per copy		0.15	-	7
Blackline or Blueline Prints, per sheet		0.80	-	ODC: \$ -
Bond or Vellum Reproductions, per sheet		1.25	-	ODC MULTIPLIER: 1.00
Mylar Sepias, per sheet		10.00	-	BUDGETED ODC: \$ -
Photographs, per roll (including development)		12.00	-	
Overnight Postage, per package		20.00	-	
Parking		14.00	-	SUBCONSULTANTS: \$ 122,572.78
OTHER:		-	-	SUB MULTIPLIER: 1.00
	SUBTO	OTAL ODC:	\$ -	BUDGETED SUBS: \$ 122,572.78
SUBCONSULTANTS:			ITEM COST	_
Supplemental Survey- Timmons			\$ 3,079.90	
Supplemental Utility Investigation - Timmons			\$ 2.995.4	
Geotechnical Borings, Investigation and Report - RK&K			\$ 116,497.4	
Coolean mode Donnigo, myoodigadan and Nopole Tillian	SUBTO	TAL SUBS:	\$ 122,572.78	
printed: September 15, 2021, 05:23 PM	00010	5000.	122,07217	<u>-1</u>



ESTIMATE OF PROFESSIONAL SERVICES Task 3: Technical Analysis - Egress Analysis Only

STV Proposal or Job Number: Project Description/Location:	4020372 Client Job Number: 18-089-9 Task 1 Modification #2, revised Ballston Metro Station West Entrance 35% Design Documents
Client:	
Design Assumptions:	1. Update the pedestrian model developed for the future station design and rerun the analysis
	1. Task 8 will be used on a time and materials basis as needed and per direction from the County
	5. Additional effort reg'd to update CE efforts to match with the updated plan
Prepared By/Date:	LEH 06/05/21
Reviewed By/Date:	JB 06/08/21

Manhours by Classification

	Mannours by Classification							
Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total
								-
Optional Budget								
Environmental Clearance								-
								-
Categorical Exclusion/Documentation								-
								-
								-
Manhour Totals:	0	0	0	0	0	0	0	0
Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59	
Budgeted Costs:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Other Direct Costs (ODC) Estimate:

	UNITS	UNIT COST	ITEM COST	<u>Summary</u>	
Travel (mileage), per vehicle-mile		\$ 0.560			
Air Fare, per airline ticket		600.00		BUDGETED COSTS: \$	-
Ground Transport, per vehicle-trip		14.00		EFFORT MULTIPLIER:	1.0000
Meals, per person per day		30.00		BUDGETED EFFORT: \$	-
Lodging, per room-night		200.00			
Third-Party Photocopies, per copy		0.15			
Blackline or Blueline Prints, per sheet		0.80		ODC: \$	-
Bond or Vellum Reproductions, per sheet		1.25		ODC MULTIPLIER:	1.00
Mylar Sepias, per sheet		10.00		BUDGETED ODC: \$	-
Photographs, per roll (including development)		12.00			
Overnight Postage, per package		20.00			
		14.00		SUBCONSULTANTS: \$	_
OTHER:		_	-	SUB MULTIPLIER:	1.00
	SUBT	OTAL ODC:	\$ -	BUDGETED SUBS: \$	-
Directs					
			ITEM COST		
EDR Data purchase for Phase 1					
	OUDTO	TAL SURS:			

SUBTOTAL SUBS: \$



ESTIMATE OF PROFESSIONAL SERVICES Task 4: Develop Preferred Concept to 35%

STV Proposal or Job Number: Project Description/Location: Client: Design Assumptions:

4020372 Client Job Number 18-089-9 Task 1 Modification #2, revised
Ballston Metro Station West Entrance 35% Design Documents

Concept 1 developed to 35%
 Task 8 will be used on a time and materials basis as needed and per direction from the County

3. Adapt the Ballston Station entrance tunnel structure design to accommodate two conditions.

- Existing 4420 Building

- New 4420 Building and below grade parking garage

Prepared By/Date: Reviewed By/Date:

06/08/21

Manhours by Classification

	Manhours by Classification								
Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total	
								-	
Architectural Design								-	
Review & Confirm 35% Concept Design								-	
Review Against Current Design Criteria		4	4	4	20	40	12	84	
Optional Budget		24	60	80	314	240	480	1,198	
Develop 35% Specifications		32	40	40	80	24	16	232	
Develop 35% Code Analysis	40		40					80	
QA/QC	40							40	
Attend 35% Design Review Meeting (1)		4	4					8	
Address 35% Comments			16		16			32	
Develop Project Renderings	4				200			204	
Structural Design								-	
Review & Confirm 35% Concept Design								-	
Review Against Current Design Criteria								-	
Develop 35% Plans			40	80			116	236	
Develop 35% Specifications			40	24				64	
Calculations			60			160		220	
Basis of Design Report (Draft)			8	24				32	
QA/QC (Other than Calcs)	8		56					64	
QA/QC (Calcs)	8		32					40	
Attend 35% Design Review Meeting (1)			8	16				24	
Address 35% Comments	Optional Task	. Design a	24	60				84	
7 Add 655 66 70 Golfffiniants	Optional ruoi	Doolgii u		- 00				-	
Mechanical Design									
Review & Confirm 35% Concept Design	4		4			8		16	
Review Against Current Design Criteria	' '		8					8	
Develop 35% Plans			72			246		318	
Develop 35% Specifications			40			2.0	8	48	
Basis of Design Report (Draft)			8				_	8	
QA/QC	4		32					36	
Attend 35% Design Review Meeting (1)	,		8					8	
Address 35% Comments	2		24			40		66	
								-	
Electrical & Fire Alarm Design								-	
Review & Confirm 35% Concept Design	4		16	16				36	
Review Calculations			24					24	
Review Against Current Design Criteria			8	24				32	
Develop 35% Plans			24	32		40		96	
Develop 35% Specifications			16	8				24	
Basis of Design Report (Draft)			8	8				16	
QA/QC	2	16	8					26	
Attend 35% Design Review Meeting (1)			4					4	
Address 35% Comments			8			24		32	
Plumbing/Fire Protection Design								-	
Review & Confirm 35% Concept Design		2	8	8				18	
Review Against Current Design Criteria			8	8				16	
Develop 35% Plans			12	24				36	
Develop 35% Specifications				24				24	
QA/QC	2	8	8					18	

Systems/Communications Design									-
Review & Confirm 35% Concept Design		8		24					32
Review Calculations		4		16					20
Review Against Current Design Criteria		20		20					40
Develop 35% Plans		8		40					48
Develop 35% Specifications		4		20					24
QA/QC		2	16						18
Site/Civil/MOT Phasing Design									-
Review & Confirm 35% Concept Design				4	4		8		16
Develop Conceptual MOT and Phasing				24	24		40		88
Review Against Current Design Criteria				8	8		8		24
Develop 35% Plans				16			100		116
QA/QC		16							16
									-
Landscape Architecture Design									-
Review & Confirm 35% Concept Design			4	8	8				20
Develop 35% Plans			8	32	64		32		136
QA/QC		4		16					20
	·								_
	Manhour Totals:	184	118	1,008	588	630	1,010	632	4,170
	Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59	
	Budgeted Costs:	\$51,350.01	\$25,046.93	\$213,960.19	\$92,635.54	\$93,229.18	\$124,362.06	\$52,831.00	1

Other Direct Costs (ODC) Estimate:

other birect oosts (obo) Estimate.				0
	UNITS	UNIT COST	ITEM COST	<u>Summary</u>
Travel (mileage), per vehicle-mile		\$ 0.560	\$ -	
Air Fare, per airline ticket		600.00	-	BUDGETED COSTS: \$ 653,414.91
Ground Transport, per vehicle-trip		14.00	-	EFFORT MULTIPLIER: 1.0000
Meals, per person per day		30.00	-	BUDGETED EFFORT: \$ 653,414.91
Lodging, per room-night		200.00	-	
Third-Party Photocopies, per copy		0.15	-	
Blackline or Blueline Prints, per sheet		0.80	-	ODC: \$ -
Bond or Vellum Reproductions, per sheet		1.25	-	ODC MULTIPLIER: 1.00
Mylar Sepias, per sheet		10.00	-	BUDGETED ODC: \$ -
Photographs, per roll (including development)		12.00	-	
Overnight Postage, per package		20.00	-	
Parking		14.00	-	SUBCONSULTANTS: \$ 39,000.00
OTHER:		-	-	SUB MULTIPLIER: 1.00
	SUBTO	OTAL ODC:	\$ -	BUDGETED SUBS: \$ 39,000.00
SUBCONSULTANTS:				
			ITEM COST	
VDA			\$ 39,000	00
				TOTAL: \$ 692,414.91
	SUBTO	TAL SUBS:	\$ 39,000.	00



ESTIMATE OF PROFESSIONAL SERVICES Task 5: Construction Schedule & Construction Cost Estimate

STV Proposal or Job Number: Project Description/Location:	4020372 Client Job Number: 18-089-9 Task 1 Modification #2, revised Ballston Metro Station West Entrance 35% Design Documents
Client: Design Assumptions:	Owner directed request to develop order-of-manitude cost estimate for Concept 1 Task 8 will be used on a time and materials basis as needed and per direction from the County
	The state of the s
Prepared By/Date: Reviewed By/Date:	LEH 06/05/21 JB 06/08/21

Manhours by Classification

	marinours by Glassinoution								
Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total	
								-	
Project Coordination								-	
General Project Coordination								-	
Deliverable Coordination (Cost Estimate)								-	
								-	
Cost Estimate									
Additonal Cost Estimate - Requested by County			64			80		144	
QA/QC - Cost Estimate	5							5	
Optional Budget								-	
Manhour Totals:	5	0	64	0	0	80	0	149	
Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59		
Budgeted Costs:	\$1,395	\$0	\$13,585	\$0	\$0	\$9,850	\$0		

Other Direct Costs (ODC) Estimate:

	UNITS	UNIT COST	ITEM	COST	Summary	
Travel (mileage), per vehicle-mile		\$ 0.560	\$	-		
Air Fare, per airline ticket		600.00		-	BUDGETED COSTS: \$ 24,8	830.61
Ground Transport, per vehicle-trip		14.00		-	EFFORT MULTIPLIER:	1.0000
Meals, per person per day		30.00		-	BUDGETED EFFORT: \$ 24,8	830.61
Lodging, per room-night		200.00		-		
Third-Party Photocopies, per copy		0.15		-		
Blackline or Blueline Prints, per sheet		0.80		-	ODC: \$	_
Bond or Vellum Reproductions, per sheet		1.25		-	ODC MULTIPLIER:	1.00
Mylar Sepias, per sheet		10.00		-	BUDGETED ODC: \$	-
Photographs, per roll (including development)		12.00		-		
Overnight Postage, per package		20.00		-		
Parking		14.00		-	SUBCONSULTANTS: \$	-
OTHER:		_		-	SUB MULTIPLIER:	1.00
	SUBT	OTAL ODC:	\$	-	BUDGETED SUBS: \$	-
SUBCONSULTANTS:			ITEM.	0007		
			I I EM	COST		
			Ψ		TOTAL: \$ 24.8	330.61
	SUBTO	TAL SUBS:	<u>'</u> \$			



ESTIMATE OF PROFESSIONAL SERVICES Task 6: Bridging Documents & Design-Build Procurement Services

STV Proposal or Job Number: 0070826 Client Job Number: 18-089-9 Task 1

Project Description/Location: Client: Ballston Metro Station West Entrance 35% Design Documents

Arlington County

Design Assumptions: 1. Additional hours based on updated concept and coordination with WMATA and the County

1. Task 8 will be used on a time and materials basis as needed and per direction from the County

Prepared By/Date: 03/18/21 09/23/19 Reviewed By/Date:

Manhoure by Classification

	Manhours by Classification										
Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total			
								-			
Architectural Design								-			
Develop Bridging Documents								-			
0								-			
Structural Design								-			
Develop Bridging Documents							-	-			
Mechanical Design								-			
Develop Bridging Documents								-			
Optional Budget								-			
Electrical & Fire Alarm Design								-			
Develop Bridging Documents								-			
								-			
Plumbing/Fire Protection Design								-			
Develop Bridging Documents								-			
Systems/Communications Design								-			
Develop Bridging Documents								-			
								-			
Site/Civil/MOT Phasing Design								-			
Develop Bridging Documents								-			
Landanaa Arabitaatuus Danias								-			
Landscape Architecture Design								-			
Develop Bridging Documents								-			
QA/QC								-			
								-			
Manhour Totals:	0	sk - Design a	0	0	0	0	0	0			
Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59				
Budgeted Costs:	\$0	\$0	\$0	\$0	\$0	\$0	\$0				

Other Direct Costs (ODC) Estimate:

	UNITS	UNIT COST	ITEM COST	Summary	
Travel (mileage), per vehicle-mile		\$ 0.580	\$ -		
Air Fare, per airline ticket		600.00	-	BUDGETED COSTS: \$	-
Ground Transport, per vehicle-trip		14.00	-	EFFORT MULTIPLIER:	1.0000
Meals, per person per day		30.00	=	BUDGETED EFFORT: \$	-
		200.00	-		
Third-Party Photocopies, per copy		0.15	-		
Blackline or Blueline Prints, per sheet		0.80	-	ODC: \$	-
Bond or Vellum Reproductions, per sheet		1.25	-	ODC MULTIPLIER:	1.00
Mylar Sepias, per sheet		10.00		BUDGETED ODC: \$	-
Photographs, per roll (including development)		12.00			
Overnight Postage, per package		20.00	-		
		_		SUB MULTIPLIER:	1.00
	SUBTO	TAL ODC:	\$ -	BUDGETED SUBS: \$	-
SUBCONSULTANTS:					
ODDONOGETANTO.			ITEM COST		
			_	TOTAL: \$	_

SUBTOTAL SUBS: \$

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ESTIMATE OF PROFESSIONAL SERVICES Task 7: Safety and Security

STV Proposal or Job Number:	0070826 Client Job Number: 18-089-9 Task 1
Project Description/Location:	Ballston Metro Station West Entrance 35% Design Documents
Client:	Arlington County
Design Assumptions:	PHA altready in progress (stopped work)
	1. Task 8 will be used on a time and materials basis as needed and per direction from the County
Prepared By/Date:	LEH 06/05/21
Reviewed By/Date:	JB 06/08/21

Manhours by Classification

Direct Labor Estimate:	Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total		
								-		
								-		
Optional Budget								-		
Project Meetings			6					6		
Preliminary Hazard Analysis			100					100		
QA/QC			20					20		
								-		
								-		
								-		
								-		
								-		
Manhour To	tals: 0	0	126	0	0	0	0	126		
Hourly Payroll F	Rate: \$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59			
Budgeted Co	osts: \$0	\$0	\$26,745	\$0	\$0	\$0	\$0	1		

Other Direct Costs (ODC) Estimate:

·	UNITS	UNIT COST	ITE	M COST	Summary	
Travel (mileage), per vehicle-mile		\$ 0.580	\$	_	1	
Air Fare, per airline ticket		600.00		-	BUDGETED COSTS: \$	26,745.02
Ground Transport, per vehicle-trip		14.00		-	EFFORT MULTIPLIER:	1.0000
Meals, per person per day		30.00		-	BUDGETED EFFORT: \$	26,745.02
Lodging, per room-night		200.00		-		
Third-Party Photocopies, per copy		0.15		-	1	
Blackline or Blueline Prints, per sheet		0.80		-	ODC: \$	-
Bond or Vellum Reproductions, per sheet		1.25		-	ODC MULTIPLIER:	1.00
Mylar Sepias, per sheet		10.00		-	BUDGETED ODC: \$	_
Photographs, per roll (including development)		12.00		-	1	
Overnight Postage, per package		20.00		-	1	
Parking		14.00		-	SUBCONSULTANTS: \$	-
OTHER:		-		-	SUB MULTIPLIER:	1.00
	SUBTO	OTAL ODC:	\$	-	BUDGETED SUBS: \$	-
SUBCONSULTANTS:						
			ITE	M COST	1	
NAME / DESCRIPTION	•	•	\$	-]	
NAME / DESCRIPTION	·			-	TOTAL: \$	26,745.02
·	SUBTO	TAL SUBS:	\$	-		

SUBTOTAL SUBS:



ESTIMATE OF PROFESSIONAL SERVICES Task 8: Optional Task - Design and Review Services

STV Proposal or Job Number: Project Description/Location:	0070826 Client Job Number: 18-089-9 Task 1 Ballston Metro Station West Entrance 35% Design Documents
Client: Design Assumptions:	Arlington County 1. Task 8 will be used on a time and materials basis as needed and per direction from the County
Prepared By/Date:	LEH 07/22/21 JM 07/22/21

Manhours by Classification

		indimodis by oldsemodion								
Direct Labor Estimate:		Sr. PM	Task Lead	Sr. Eng.	Eng. 2	Arch.	Eng. 1	Jr. Eng.	Total	
									-	
									-	
Optional Budget									-	
From Task A		16	92	24				42	174	
From Task B			8	15	8	24			55	
From Task C		4		4	16	32	72		128	
From Task D - Architecture		2		4	8	36	74	70	194	
From Task D - Structures				20	40			4		
From Task E			6						6	
From Task F									-	
From Task G				18					18	
									-	
	Manhour Totals:	22	106	85	72	92	146	116	575	
	Hourly Payroll Rate:	\$279.08	\$212.26	\$212.26	\$157.54	\$147.98	\$123.13	\$83.59		
	Budgeted Costs:	\$6,140	\$22,500	\$18,042	\$11,343	\$13,614	\$17,977	\$9,697		

Other Direct Costs (ODC) Estimate:

	UNITS	UNIT COST	ITEM COST	<u>Summary</u>
Travel (mileage), per vehicle-mile		\$ 0.580	\$ -	1
Air Fare, per airline ticket		600.00	-	BUDGETED COSTS: \$ 99,313.21
Ground Transport, per vehicle-trip		14.00	-	EFFORT MULTIPLIER: 1.0000
Meals, per person per day		30.00	-	BUDGETED EFFORT: \$ 99,313.21
Lodging, per room-night		200.00	-	
Third-Party Photocopies, per copy		0.15	-	1
Blackline or Blueline Prints, per sheet		0.80	-	ODC: \$ -
Bond or Vellum Reproductions, per sheet		1.25	-	ODC MULTIPLIER: 1.00
Mylar Sepias, per sheet		10.00	-	BUDGETED ODC: \$ -
Photographs, per roll (including development)		12.00	-	1
Overnight Postage, per package		20.00	-	1
Parking		14.00	-	SUBCONSULTANTS: \$ -
		-		SUB MULTIPLIER: 1.00
	SUBTO	TAL ODC:	\$ -	BUDGETED SUBS: \$ -
OUDCONOUL TANTO				
SUBCONSULTANTS:			ITEM COST	-
NAME / DESCRIPTION			\$ -	1
NAME / DESCRIPTION			-	TOTAL: \$ 99,313.21



DEPARTMENT OF ENVIRONMENTAL SERVICES

Division of Transportation

2100 Clarendon Boulevard, Suite 900, Arlington, VA 22201
TEL 703-228-7249 FAX 703-228-7548 www.arlingtonva.us

MEMORANDUM

TO:	TO: File – Ballston-MU Metrorail Station West Entrance			
FROM:	Kenex Sevilla, DES – Transit Bureau Michelle Chaney, DES – Contracts Administrator DATE: 09/17/2020			
CC:	Lynn Rivers, DES – Transit Bureau Pierre Holloman, DES – Transit Bureau Elizabeth Robin McElhenny – Transit Bureau			
SUBJECT:	Design and Engineering Services to Update Previously Developed 35% Design Documents and Prepare Bridging Documents, Task Order Modification #02			

Background:

The County issued a Request for Fee Proposals on August 30, 2019 to STV for a task order assignment under County Agreement #18-089-9 for on-call A&E Services, to have the Contractor update the previously developed 35% design documents for Ballston-MU Metrorail Station West Entrance and prepare bridging documents that the County shall use to solicit Design-Build services to complete design and fully construct the station's West Entrance. On October 8, 2019 the County issued Task Order #1 and a Purchase Order to STV for this work in the amount of \$1,827,904.04. The scope of work included the following services.

- Task 1: Project Management and Administration
- Task 2: Data Collection, Site Investigation and Property and Utility Survey Design
- Task 3: Technical Analysis
- Task 4: Evaluation and Update of Previously Developed Design Documents
- Task 5: Construction Schedule and Cost Estimates
- Task 6: Bridging Documents and Procurement Services

On June 19, 2020 the County issued a task order modification#01 to integrate the additional tasks listed below into the task order.

- 1. Subsurface exploration to locate the foundation of the adjacent building at 4420 Fairfax Drive because as-builts drawings were not available
- 2. Prepare elevator analysis report to assist the County with obtaining a waiver to deviate from WMATA's Design Criteria requirements for platform elevators.
- 3. Update the structural design of the existing stair well to accept stairs only.
- 4. Prepare a Preliminary Hazard Analysis per WMATA's requirements. This work was not included in the original scope listed in the task order issued to STV as both parties were unaware that these services would be needed when the original scope of work was negotiated and awarded.

Since the issuance of task order medication#01 the project team has identified new requirements and constraints that require STV to update the West entrance design layout. Some of the new requirements/constraint include the shifting of entrance location, expansion of excavation area, and the