Appendix K Cost Estimate

TAYLOR RUN INFRASTRUCTURE STABILIZATION						AECOM
60% OPINION OF PROBABLE CONSTRUCTION COSTS						Apr-26
CITY OF ALEXANDRIA						BY: S BERNHEISEL
#	TECH SPEC #	ITEM/DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
		General Conditions				
1.1	ITEM 1050	Maintenace of Traffic	1	LS	$4,800.00	$4,800.00
		Construction Surveying				
2.1	ITEM 1030	Construction Stakeout	1	LS	$102,000.00	$102,000.00
		Erosion/Sediment Control				
3.1	ITEM 3010	Stabilzed Construction Entrance	2	EA	$4,098.00	$8,196.00
3.2	ITEM 3020	Temporary Access Road	1287	LF	$44.00	$56,628.00
3.3	ITEM 3030	Temporary Access Bridge	2	EA	$5,175.00	$10,350.00
3.4	ITEM 3030	Contingent Silt Fence	NA	LF	$6.00	$0.00
3.5	ITEM 3050	Super Silt Fence	279	LF	$16.00	$4,464.00
3.6	ITEM 1080	Chain Link Fence	3221	LF	$4.00	$12,884.00
3.7	ITEM 7020	Temporary Seeding and Mulching	1295	SY	$1.00	$1,295.22
3.8	ITEM 3060	Tree Protection Fence	759	LF	$12.00	$9,108.00
3.9	ITEM 3080	Tree Protection Planking	19	EA	$390.00	$7,410.00
3.10	ITEM 3090	Contingent Root Pruning	NA	LF	$8.00	$0.00
3.11	ITEM 3050	Maintenance of Stream Flow	1	LS	$38,800.00	$38,800.00
		Access Road & Staging				
4.1	ITEM 1100	Stockpile/Staging Areas	613	SY	$8.00	$4,904.00
		Clearing and Demolition				
5.1	ITEM 1040	Clearing & Grubbing, Including Trees up to 12" Diameter	0.3	AC	$6,800.00	$1,785.39
5.2	ITEM 1040	Tree Removal (13" to 24" diameter)	10	EA	$650.00	$6,500.00
5.3	ITEM 1040	Tree Removal (25" to 54" diameter)	1	EA	$3,000.00	$3,000.00
5.4	ITEM 1070	Demolition of Existing Structures	2	LS	$25,000.00	$50,000.00
		Earthwork				
6.1	ITEM 2010	Stream Channel Excavation - Class 5	1895	CY	$30.00	$56,856.85
6.2	ITEM 2020	Load and Haul Off-site	905	CY	$46.00	$41,636.83
		Project Area 1: Upstream Stormwater Outfall				
7.1	ITEM 9080	VDOT No. 78 Stone (Drainage Stone)	78	TON	$65.00	$5,101.88
7.2	ITEM 9080	VDOT No. 1 Stone (Leveling Pad)	57	TON	$85.00	$4,882.10
	ITEM 9080	VDOT No. 57 Stone (Boulder Cascade)	45	TON	$36.00	$1,620.00
7.4	ITEM 4030	Gravity Retaining Wall, Concrete Gravity (greater than 6 FT)	140	LF	$1,164.00	$162,960.00
7.5	ITEM 4070	Gravity Wingwall, 8' high	1	EA	$4,528.00	$4,528.00
7.6	ITEM 9060 & 9070	Rip Rap Class III (Cascade Pool and Plunge Pool)	489	TON	$110.00	$53,740.13
7.7	ITEM 4010 &9010	Imbricated Rock for Rock Cascade	160	TON	$215.00	$34,292.50
7.9	ITEM 7010	Type D Soil Stabilization Matting	345	SY	$6.00	$2,068.27
7.10	ITEM 4080	Rock Façade Stamp & Seal	1	LS	$5,000.00	$5,000.00
7.11	ITEM 4040	Three Rail Smooth Aluminum Railing	140	LF	$152.00	$21,280.00
					Project Area 1 Subtotal:	$295,472.89
		Project Area 2: Sanitary Sewer Crossing 1 and Stormwater Outfall				
8.1	ITEM 4060	Armored Utility Crossing	22	LF	$97.00	$2,134.00
8.2	ITEM 4050	Concrete Endwall, 36" Pipe	1	EA	$2,113.00	$2,113.00
8.3	ITEM 9080	VDOT No. 78 Stone (Drainage Stone)	85	TON	$65.00	$5,519.09
8.4	ITEM 9080	VDOT No. 1 Stone (Leveling Pad)	38	TON	$85.00	$3,243.98
	ITEM 9080	VDOT No. 57 Stone (Boulder Cascade)	88	TON	$36.00	$3,168.00
8.5	ITEM 4030	Retaining Walls, Concrete Gravity (greater than 6 FT)	125	LF	$1,164.00	$145,406.88
8.6	ITEM 9070	Rip Rap Class III (Cascade Pool)	296	TON	$110.00	$32,505.98
8.7	ITEM 4010 & 9010	Imbricated Rock for Rock Cascade	222	TON	$215.00	$47,659.48
8.9	ITEM 7010	Type D Soil Stabilization Matting	356	SY	$6.00	$2,133.33
8.10	ITEM 4080	Rock Façade Stamp & Seal	1	LS	$3,000.00	$3,000.00

8.11	**ITEM 4040**	Three Rail Smooth Aluminum Railing	125	LF	$152.00	$18,987.84
		Project Area 2 Subtotal:				$265,871.58
		Project Area 3: Exposed Sanitary Sewer Manhole				
9.1	**ITEM 9080**	VDOT No. 78 Stone (Drainage Stone)	209	TON	$65.00	$13,556.40
9.2	**ITEM 9080**	VDOT No. 1 Stone (Leveling Pad)	123	TON	$85.00	$10,434.60
9.4	**ITEM 4030**	Retaining Walls, Concrete Gravity (6FT or less)	19	LF	$657.00	$12,574.98
9.5	**ITEM 4030**	Retaining Walls, Concrete Gravity (greater than 6 FT)	50	LF	$1,164.00	$58,188.36
9.6	**ITEM 4040**	Three Rail Smooth Aluminum Railing	69	LF	$152.00	$10,507.76
		Project Area 3 Subtotal:				$105,262.10
		Project Area 4: Sanitary Sewer Crossing 2 and Retaining Wall				
10.1	**ITEM 9050**	Riprap for Rockpacking (Rip Rap Type III)	40	TON	$215.00	$8,632.25
10.2	**ITEM 7010**	Type D Soil Stabilization Matting	363	SY	$6.00	$2,180.91
10.4	**ITEM 9070**	Rip Rap Class III (Cascade Pool)	136	TON	$110.00	$14,966.36
10.5	**ITEM 4010 &9010**	Imbricated Rock for Rock Cascade	125	TON	$215.00	$26,957.45
10.6	**ITEM 9060**	VDOT No. 78 Stone (Drainage Stone)	209	TON	$65.00	$13,556.40
10.7	**ITEM 9060**	VDOT No. 1 Stone (Leveling Pad)	123	TON	$85.00	$10,434.60
	ITEM 9080	VDOT No. 57 Stone (Boulder Cascade)	27	TON	$36.00	$972.00
10.8	**ITEM 4030**	Retaining Walls, Concrete Gravity (6FT or less)	12	LF	$657.00	$7,581.78
10.9	**ITEM 4030**	Retaining Walls, Concrete Gravity (greater than 6 FT)	69	LF	$1,164.00	$80,537.16
10.10	**ITEM 4060**	Armored Utility Crossing	22	LF	$97.00	$2,134.00
10.11	**ITEM 4040**	Three Rail Smooth Aluminum Railing	81	LF	$152.00	$12,270.96
		Project Area 4 Subtotal				$180,223.86
		Planting and Seeding				
11.1	**ITEMS 7030 & 7040 & 7050 & 7060**	Permanent Seeding	1,908	SY	$14.00	$26,715.11
11.2	**ITEM 7080**	Tree Planting #7 Container	55	EA	$140.00	$7,700.00
11.3	**ITEM 7080**	Shrub Planting #2 Container	360	EA	$50.00	$18,000.00
11.4	**ITEM 7090**	Deer Protection Guard (Single Stem Trees)	55	EA	$20.00	$1,100.00
11.5	**ITEM 7090**	Deer Protection Guard (Multi-Stem Trees and Shrubs)	360	EA	$47.00	$16,920.00
					Construction Subtotal	$1,337,883.83
					Construction Escalation Factor (4.3%)	$76,705.34
					Construction Subtotal w/ Escalation Factor	$1,414,589.17
					Mobilzation/Demobilziation (5%)	$96,894.19
					Construction Contingency (20%)	$282,917.83
					Construction Total	**$1,794,401.20**
Notes :						
(1)		Assumes a construction start date of October 2026, midpoint of construction February 2027. The annual inflation rate is 4.4% for the 12 months ending in September 2025, according to data published by the U.S Department of Labor. This 4.4% is applied to the construction subtotal until the midpoint of construction.				
(2)		Mobilization/Demobilization is assumed to include the transport, staging, delivery, assembly and set-up of all equipment, tools, storage facilities, fuel and oil, office trailers, etc. required to perform the work, and the subsequent demobilization of same. It also includes labor costs for on-site project manager, project engineer and quality assurance manager. No additional payment will be made for demobilization and remobilization because of shutdowns, suspensions of work, or other mobilization actives. Based on standard VDOT formula for projects up to $200,000 is 10% of total contract amount, for projects under $1M ($20,000 + 7.5%*(Total Construction Cost - $200,00)), and for projects over $1M is ($80,000 + 5%*(Total Construction Cost - $1M)).				
(3)		The "Construction Contingency" is to account for unforeseen and unknown items that may be encountered during the construction of the project and variations in contractor unit prices resulting from competitive bidding. Due to the level of detail contained in this construction cost estimate, the contingency is estimated at 20% of the Subtotal plus its Escalation Factor.				