

MEMORANDUM

To: Mayor and City Council

From: Carl Thomas, Stormwater Manager

Date: April 13th, 2020

Subject: Funding Authorization for 5721 Bend Creek Road

Streambank Stabilization Project

ITEM DESCRIPTION

Requested approval of Funding for a Streambank Stabilization project at **5721 Bend Creek Road**. Estimated cost, plus 20% contingency, is \$123,700.70.

BACKGROUND

An intermittent stream that is a tributary of Ball Mill Creek Staff is experiencing severe streambank erosion consisting of heavy scouring and bank drop-off ranging from 8-12 feet in height. The erosion is located immediately downstream of a pipe replacement project completed by the City in 2011. In order to stabilize the streambank the proposed project will impact 125 linear feet of stream and the City has received, approval from the Army Corps of Engineers under Nationwide Permit (NWP) 13. State approval for disturbance in the 25-foot stream buffer was not required for this project since it is greater than 200 linear feet upstream from a perennial stream.

The project will include:

- 480 cubic yards of channel excavation
- Removal of 8 trees and 580 cubic yards of unsuitable soils
- Installation of a 100 square yard stilling basin, 500 live stakes plantings and 114 square yards of Flexamat[™] vegetative concrete erosion mats to reduce velocity and restore stream with floodplain

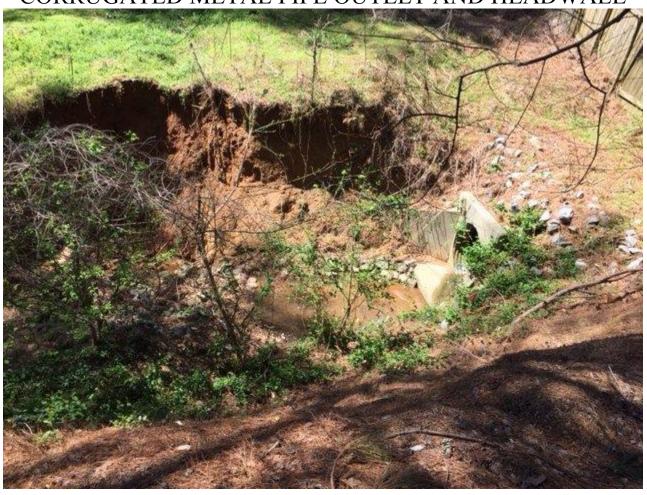
Due to limited access, staff determined the best entry point to be the downstream driveway at 5715 Bend Creek. Heavy equipment mobilization will most likely cause extensive damage to this driveway. As part of the terms stated in the construction easement agreement, the City will compensate the owner for its replacement (\$14,500).

RECOMMENDED ACTION

Staff recommends approving \$123,700.70 in funding, including a 10% contingency, for streambank stabilization at 5721 Bend Creek.



SEVERE EROSION AT 48-INCH CORRUGATED METAL PIPE OUTLET AND HEADWALL





HEAVY SCOUR AND SLIDING (8-12 FOOT DEEP) IMMEDIATELY DOWNSTREAM







Estimate

5721 Bend Creek Road Dunwoody, Georgia 1/16/2019 Revised 3/24/2020

1.00	ls	Mobilization	\$2,400.00	\$2,400.00
1.00	ls	Surveying	\$6,000.00	\$6,000.00
5.00	day	Traffic Control Minor	\$350.00	\$1,750.00
1.00	ea	Const Exit	\$1,450.00	\$1,450.00
447.00	lf	Type C Silt Fence	\$3.25	\$1,452.75
350.00	lf	Maintain Type A Silt Fence	\$1.00	\$350.00
1,030.00	lf	Tree Save Fence	\$2.24	\$2,307.20
200.00	sy	Straw Mulch	\$6.47	\$1,294.00
1.00	ls	Bypass Set Up 6"	\$1,200.00	\$1,200.00
32.00	hr	Bypass Pump 6"	\$75.00	\$2,400.00
1.00	ls	Stump Removal	\$4,250.00	\$4,250.00
1,598.00	sy	Clearing and Grubbing	\$1.75	\$2,796.50
487.00	cy	Channel Excavation	\$6.72	\$3,272.64
587.00	cy	Dirt Export (muck)	\$25.50	\$14,968.50
150.00	cy	Dirt Import	\$22.50	\$3,375.00
1,084.00	sy	Finish Grade	\$1.95	\$2,113.80
100.00	sy	Stilling Basin (Type 3 Rip Rap)	\$58.24	\$5,824.00
23.00	sy	Embedded Rip Rap (Type 3)	\$58.24	\$1,339.52
100.00	tn	#57 Stone	\$36.50	\$3,650.00
40.00	tn	Rock Filter Dam (Rip Rap Type 3)	\$58.24	\$2,329.60
100.00	sy	Filter Fabric	\$7.50	\$750.00
535.00	sy	Permenant Soil Matting	\$4.90	\$2,621.50
114.00	sy	Flex Mat	\$72.00	\$8,208.00
501.00	ea	Live Stakes	\$21.50	\$10,771.50
0.00	sy	Driveway Removal	\$25.50	\$0.00
0.00	lf	Curb and Gutter Removal	\$10.50	\$0.00
0.00	sy	Driveway 4"	\$42.50	\$0.00
0.00	lf	Curb and Gutter Rollback	\$24.00	\$0.00
405.00	sf	Sod (Bermuda)	\$8.55	\$3,462.75
68.00	sy	Pinestraw	\$3.50	\$238.00
1.00	ls	GA Piedmont Riparian Mix (upcharge)	\$425.32	\$425.32

Total \$91,000.58 20% Contingency \$18,200.12

\$109,200.70

Driveway Repair \$14,500 Final Estimated Cost \$\$123,700.70

Plan: Revision +3; dated: 08/08/2019



Unit Prices For Additional Work If Required

Mass Rock - \$40.00/cy Rippable Rock - \$10.00/cy Trench Rock - \$85.00/cy

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The proposal is based plans by PEC dated 4-27-18.

Any under cutting, mucking, additional topsoil, soil drying and haul in/haul off is excluded.

Permitting has not been included.

No rock encounterment is included.

No rip rap grouting has been priced.

No fencing removal or installation is included.

Existing Headwall and 48" CMP is to be left in place.

All items not specifically included considered excluded.

IN WITNESS WHEREOF THE CONTRACTOR and THE OWNER have executed this AGREEMENT this 17th day of March 2020.

CONTRACTOR:	OWNER:
Georgia Development Partners	
Signature	Signature
Printed Name & Title	Printed Name & Title
Date	Date