

MEMORANDUM

To: Mayor and City Council
From: Carl Thomas, Stormwater Manager
Date: November 9th, 2020
Subject: **Memorandum – Funding Authorization for 5651 Mill Glen Ct Stormwater Repairs**

ITEM DESCRIPTION

Approval of Funding for Stormwater Pipe Repairs at **5651 Mill Glen Ct**. Estimated cost, plus 20% contingency, is **\$96,549.60**.

BACKGROUND

City staff identified structural deficiencies in the storm system on Mill Glen Ct performing routine inspections before scheduled paving. The pipes are approximately 55 years old and in poor condition. CCTV footage in 2019 identified corrosion, visible holes in the invert, and a damaged outlet headwall. The original schedule for repairs was in the 1st QTR of 2021. Recent rain events have accelerated the deterioration of the storm system, separating the pipe from the headwall and forming a 4x6 foot sinkhole that is migrating towards the road. Recommended repairs include:

- Restore 90 linear feet of 18-inch Corrugated Metal Pipe (CMP) with cured in place pipe (CIPP)
- Dig and Replace 30 linear feet of deformed CMP
- Restore 92 linear feet of 48-inch Corrugated Metal Pipe (CMP) with EcoCast™ centrifugal spin cast liner

If approved by Council, this project will be funded from the FY2020 Stormwater Repairs and Maintenance Budget.

RECOMMENDED ACTION

Staff recommends approving \$96,549.60 in funding for Stormwater Pipe Repairs at 5651 Mill Glen Ct.

PIPE SEPARATION OF 48-INCH CORRUGATED METAL PIPE FROM DAMAGED HEADWALL



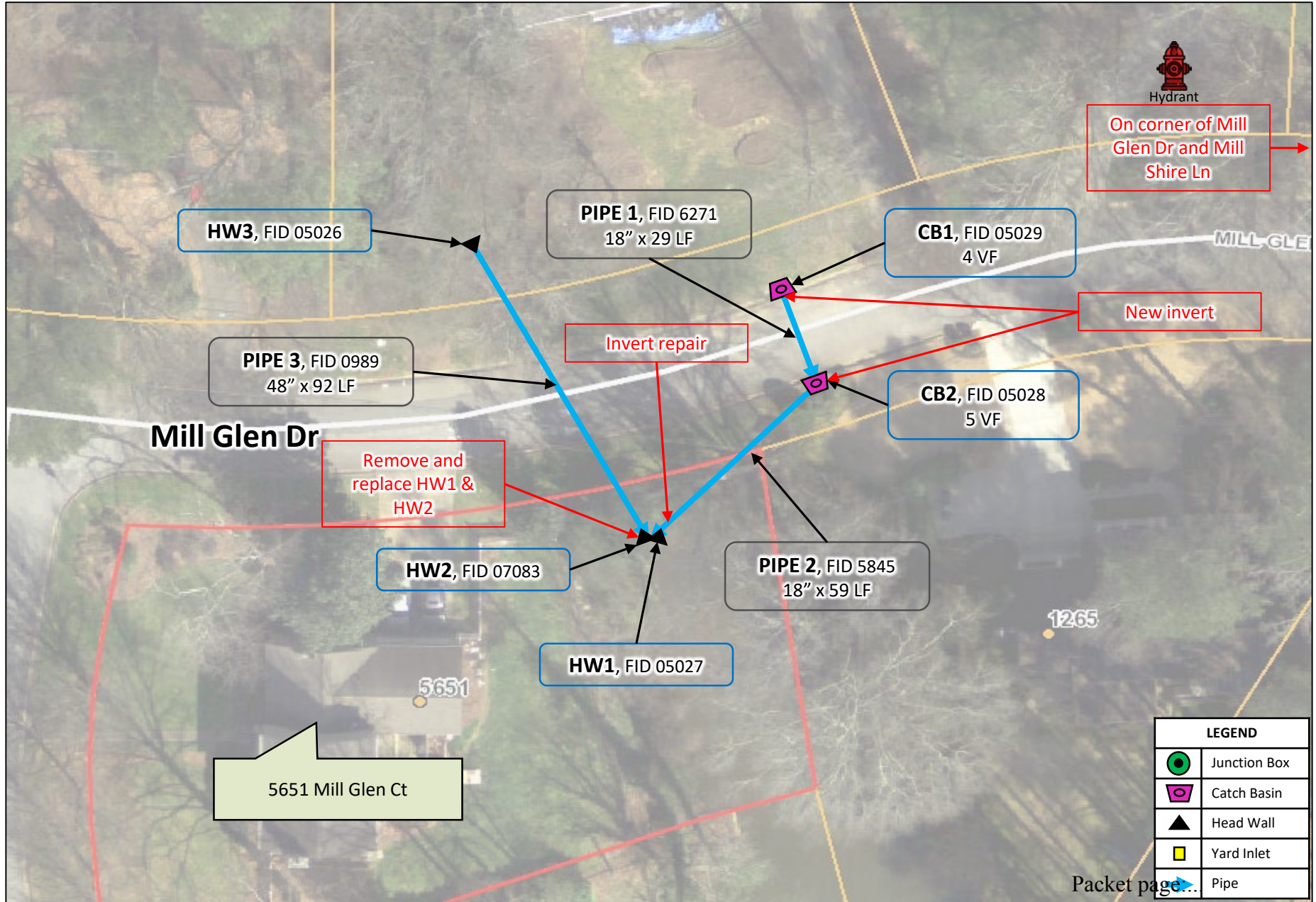
FEBRUARY 2020



OCTOBER 2020

SEDIMENT FROM 4 X 6 FOOT SINKHOLE
OBSTRUCTING FLOW OF PIPE





IPR Southeast LLC	
ESTIMATE - RFP 18-04 2018 STANDBY STORMWATER REPAIR UNIT CONTRACT	
PROJECT LOCATION:	5651 Mill Glen Ct
DATE ESTIMATE PREPARED:	14-10-20
ESTIMATE PREPARED BY:	Derek Mierswa
ESTIMATE AMOUNT:	\$80,458.00
20 % CONTINGENCY:	\$16,091.60
ESTIMATE GRAND TOTAL:	\$96,549.60

Pre-Lining Work:	
	Pre CCTV and Cleaning
	18", 48" pipe point repair
	Replace HW1 & HW2 (combined HW for 48" and 18" pipes)
Lining Work:	
	88 LF of 18" pipe x 9 mm
	92 LF of 48" pipe x 1.0" EcoCast
Post Lining Work:	
	Post CCTV
	Restoration
	Pipe end seals
	New inverts in all structures

ITEM #	Description	Unit	Unit Price	Quantity	Total Costs
	General Conditions				
1	Mobilization	EA	\$ 2,000.00	1.00	\$ 2,000.00
	Traffic Control				
5	Traffic Control Minor 2 - Includes Cones and Signage	DA	\$ 1,850.00	3.00	\$ 5,550.00
	TV Inspection and Jet-Vac Cleaning				
7	CCTV Storm (w/ DVD & Report)	LF	\$ 2.50	180.00	\$ 450.00
	Storm Cleaning (less than 25% full)				
12	18" Pipe - Cleaning less 25% full	LF	\$ 4.75	88.00	\$ 418.00
18	48" Pipe - Cleaning less than 25% full	LF	\$ 8.00	92.00	\$ 736.00
	Cast-In_Place Concrete Headwall				
107	Cast-n-Place Conc HW-DeKalb Std.Detail	CY	\$ 705.00	10.00	\$ 7,050.00
	Brick-in-Place Headwall				
109	Brick Headwall for 18" Pipe	EA	\$ 525.00	1.00	\$ 525.00
114	Brick Headwall for 48" Pipe	EA	\$ 1,800.00	1.00	\$ 1,800.00
	Flowable Paved Pipe Invert				
122	18" Diameter	LF	\$ 28.00	5.00	\$ 140.00
	Internal Point Repair				
131	18" Diameter	LF	\$ 375.00	10.00	\$ 3,750.00
136	48" Diameter	LF	\$ 205.00	20.00	\$ 4,100.00
	Misc & Special Structures/Components				
209	Invert Installation, 4' Dia	EA	\$ 275.00	2.00	\$ 550.00
	Grout Connection to Structure				
222	18" Grout Each End to Structure	EA	\$ 185.00	4.00	\$ 740.00

	Lining Requirements				
	CIPP (12' or less in depth)				
	Includes Pre and Post TV during lining				
238	18" - 8.0mm (.315")	LF	\$ 65.00	88.00	\$ 5,720.00
255	Add Thickness Per 1.5mm -18"	LF	\$ 3.00	88.00	\$ 264.00
	Inversion Setup				
270	Inversion Setup Charge 15-36" CIPP	EA	\$ 900.00	2.00	\$ 1,800.00
	Spin Cast Lining				
276	48" Cent Spin Cast Lining	LF	\$ 345.00	92.00	\$ 31,740.00
	Earthwork & Grading				
363	Tree Removal 13"- 23"	EA	\$ 800.00	2.00	\$ 1,600.00
365	Clear & Grubbing	SY	\$ 12.50	80.00	\$ 1,000.00
370	Finish Grading	SY	\$ 5.00	150.00	\$ 750.00
	Erosion Control				
374	Stone Rip Rap Type III In Place	SY	\$ 65.00	30.00	\$ 1,950.00
386	Seed & Straw (Permanent Grassing)	SY	\$ 2.00	100.00	\$ 200.00
389	Sodding Complete - Bermuda	SY	\$ 5.75	100.00	\$ 575.00
	Miscellaneous Items				
407	Debris Removal, Tandem Dump Truck	Load	\$ 800.00	1.00	\$ 800.00
409	Removal of Existing Drainage Structure	EA	\$ 850.00	2.00	\$ 1,700.00
410	Removal Existing Pipe all Types and Sizes	LF	\$ 65.00	10.00	\$ 650.00
418	Bypass pump setup-equipment and hose placement	EA	\$ 850.00	1.00	\$ 850.00
419	4" Pumping Operation Time	HR	\$ 55.00	20.00	\$ 1,100.00
429	Rem/Rep Existing 4' Wood Fence Residential	LF	\$ 65.00	30.00	\$ 1,950.00
	TOTAL ESTIMATE				\$80,458.00