
MEMORANDUM

To: Mayor and City Council

From: Carl Carver, Stormwater Manager

Date: 9/12/2011

Subject: **Discussion of Bend Creek Pipe Replacement Project**

ITEM DESCRIPTION

Discussion of Bend Creek Road Storm Pipe Replacement Project

BACKGROUND

This project was originally to replace a damaged 48-inch diameter, circular storm water pipe located at 5602 and 5610 Bend Creek Road (See Attachment "A" sketch). The replacement was initiated due to a sinkhole and collapsed pipe adjacent to the residence at 5602.

The pipeline begins at 5610 and continues downstream through 5602 and two additional properties before emptying into a drainage ditch. As originally conceived the project scope involved excavating and replacing the visibly damaged sections of pipe at 5602 and 5610 including necessary site restoration. Three written quotes were obtained and a Purchase Order (00080) was issued to the low bidder, Blount Construction, for \$32,051.70 (See Attachment "B").

After starting construction we were informed by the adjacent property owner at 5620 Bend Creek about a new sinkhole caused by the deterioration of an upstream storm water pipe. Blount Construction was asked to provide a change order for an additional 20 feet of 48-inch diameter pipe and two headwalls. This work was considered Change Order Number 1 in the amount of \$13,279.70 (Attachment "C") and was incorporated into the project immediately as the sinkhole had caused a break in the water line to the house.

A second change order was required when the existing storm drain pipe at 5602 Bend Creek Road was removed and it was discovered that the downstream pipe was elliptical rather than circular and had a completely rusted out bottom. During the initial investigation the downstream segments could not be evaluated by video due to the collapse at 5602 and complete blockage with sediment at the downstream end. It was anticipated at the time that, if these inaccessible downstream segments were found to be in poor condition when uncovered during the replacement at 5602, the City would solicit bids for a separate contract to line the pipe. Lining the downstream segments was preferred over excavation and replacement to avoid removing landscaping and large hardwoods. However, upon excavating the pipe at 5602 it was discovered that the pipe transitioned from a round pipe at the inlet at 5610 Bend Creek Road to an elliptical pipe beneath the driveway at 5602. Because elliptical pipe cannot be lined, the only option became excavating and replacing the pipe downstream of 5602.



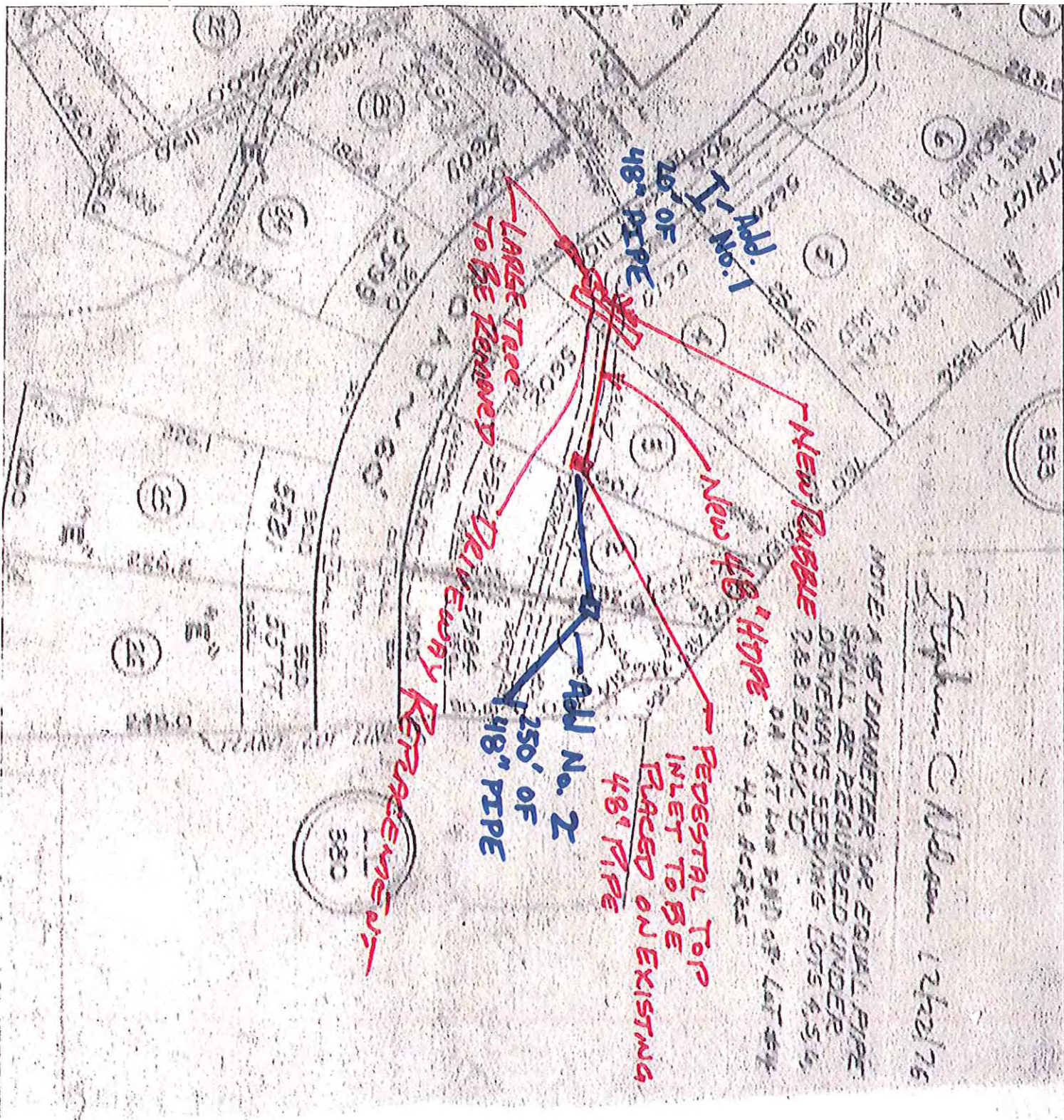
An additional 250 feet of 48-inch diameter pipe was installed on an emergency basis due to open trenches in the backyard of 5602 Bend Creek and the potential for flooding these backyards in the event of a significant rainfall event. The existing pipe alignment was modified to avoid removal of the large trees. The additional work was charged at unit rates consistent with the rates in the original bid. Change Order Number 2 was issued for \$49,786.40. The following is summary of the cost of this project.

Original Purchase Order	\$32,051.70
Change Order No. 1	\$13,279.70
Change Order No. 2	\$49,786.40
Total	\$95,117.80

As the total cost now exceeds \$50,000, the purchase order is presented to Council for ratification.

RECOMMENDED ACTION

Staff respectfully requests Council's ratification of the purchase order for the Bend Creek Road Pipe Replacement project.



5602 BEND CREEK ROAD

5602 Bend Creek Rd

Stormwater Bid Evaluations

9/1/2011

Contractor	Unit	Bid	Contingency	Total
RoadWorx	Lump Sum	\$40,279.10	0%	\$40,279.10
Blount Construction Company, In	Lump Sum	\$32,051.70	0%	\$32,051.70
Stillwater Services, Inc.	Lump Sum	\$40,350.00	0%	\$40,350.00
Reynolds Inliner, LLC	Lump Sum	\$0.00	0%	\$0.00

**ATTACHMENT "B"
BLOUNT CONSTRUCTIN DETAILED ESTIMATE**

Proposal

Date: 18-Jun-11

City of Dunwoody
41 Perimeter Center E, Suite 250
Dunwoody, GA 30346

Project: 5602 Bend Creek Rd

Attn: Carl Carver
Ph #: 678-382-6854
Fx#: 770-396-4828

Description	Quantity	Units	Cost	Subtotal
1. Pipe Removal	170	LF	\$ 15.00	\$ 2,550.00
2. Debris Removal	1	LS	\$ 450.00	\$ 450.00
3. 48" HDPE	170	LF	\$ 53.76	\$ 9,139.20
4. 48" Rubble HW	9	CY	\$ 425.00	\$ 3,825.00
5. Clearing	1	LS	\$ 2,250.00	\$ 2,250.00
6. Fill Material	15	CY	\$ 18.00	\$ 270.00
7. Driveway Concrete	25	SY	\$ 38.70	\$ 967.50
8. Sod	120	SY	\$ 5.00	\$ 600.00
9. Erosion Control	1	LS	\$ 1,000.00	\$ 1,000.00
10. Drop Inlet	3	EA	\$ 3,550.00	\$ 10,650.00
			Subtotal	\$ 31,701.70
11. Remove and Replace Deck Boards	1	LS	\$ 350.00	\$ 350.00
			Total	\$ 32,051.70

Accepted for: City of Dunwoody

Blount Construction Company, Inc.

By: _____

By: _____

Date: _____

Randall Popham
Project Manager



1730 Sands Place
Marietta, GA 30087
Phone: 770-541-7333
Fax: 770-541-7340

Change Order Request

Date: 23-Aug-11

City of Dunwoody
41 Perimeter Center E, Suite 250
Dunwoody, GA 30346

Project: 5602 Bend Creek Rd
Change Order Request # 1

Attn: Carl Carver
Ph #: 678-382-6854
Fx#: 770-396-4828

Description	Quantity	Units	Cost	Subtotal
1. Pipe Removal	20 ✓	LF	\$ 15.00	\$ 300.00
2. Debris Removal	1 ✓	LS	\$ 450.00	\$ 450.00
3. 48" HDPE	20 ✓	LF	\$ 53.76	\$ 1,075.20
4. 48" Rubble HW	18 ✓	CY	\$ 425.00	\$ 7,650.00
5. Clearing	1 ✓	LS	\$ 2,250.00	\$ 2,250.00
6. Driveway Concrete	35 ✓	SY	\$ 38.70	\$ 1,354.50
7. Sod	40 ✓	SY	\$ 5.00	\$ 200.00
			Subtotal	\$ 13,279.70

Accepted for: City of Dunwoody
By: Carl Carver
Date: 8/26/11

Blount Construction Company, Inc.
By: Randall Popham
Randall Popham
Project Manager

We had to expand the project after getting started to address a problem upstream at 5610 Bend Creek. The problem consisted of a sinkhole over the existing 48" pipe which caused a break in the residents water service and undermining of the driveway.

Carl Carver
8/26/11



1730 Sands Place
Marietta, GA 30067
Phone: 770-541-7333
Fax: 770-541-7340

Change Order Request

City of Dunwoody
41 Perimeter Center E, Suite 250
Dunwoody, GA 30346

Date: 30-Aug-11
Project: 5602 Bend Creek Rd
Change Order Request # 2
Revision 1

Attn: Carl Carver
Ph #: 678-382-6854
Fxs#: 770-396-4828

Description	Quantity	Units	Cost	Subtotal
1. Debris Removal	1	LS	\$ 450.00	\$ 450.00
2. 48" HDPE	250	LF	\$ 53.76	\$ 13,440.00
3. 48" Rubble HW	9	CY	\$ 425.00	\$ 3,825.00
4. 18" HDPE	70	LF	\$ 22.22	\$ 1,555.40
5. Remove and Replace Chain Link Fence	100	LF	\$ 20.00	\$ 2,000.00
6. Yard Inlets	3	EA	\$ 3,600.00	\$ 10,800.00
7. Sod	300	SY	\$ 5.00	\$ 1,500.00
8. Flowable Fill	100	CY	\$ 125.00	\$ 12,500.00
9. Bulkhead	4	EA	\$ 500.00	\$ 2,000.00
10. Tie to Existing Structure	1	EA	\$ 500.00	\$ 500.00
11. Rip Rap	32	EA	\$ 38.00	\$ 1,216.00
			Subtotal	\$ 49,786.40

Accepted for: City of Dunwoody
By: Carl Carver
Date: 8-31-11

Blount Construction Company, Inc.
By: Randall Popham
Randall Popham
Project Manager

DUE TO UNFORSEEN DOWNSTREAM PIPE CONDITION AND TYPE OF PIPE THE BEND CREEK DRIVE PROJECT HAD TO BE EXTEND TO 5594 AND 5584 BEND CREEK DR. THE EXISTING DOWNSTREAM PIPE WAS DISCOVERED TO BE ELLIPTICAL PIPE WHICH DID NOT ALLOW US TO CONNECT THE 48" ROUND PIPE. ALSO THE EXISTING PIPE HAS A COMPLETELY RUSTED OUT BOTTOM. PREVIOUS ATTEMPTS TO

VIDEO THIS SYSTEM COULD NOT BE ACCOMPLISHED DUE TO BLOCKAGE AND UPSTREAM COLLAPSE.