

Caney Pond Drainage Project City of Cottondale, Florida

VIRTUAL CONFERENCE MEETING

GENERAL INFRASTRUCTURE REPAIR PROGRAM

Introductions (5 minutes)

- City of Cottondale Team Members on the Call Today:
 - Theresa Brannen – City Clerk, City of Cottondale
 - Floyd Scott – Utility Supervisor, City of Cottondale
 - Fred Fox – Grant Administrator, Fred Fox Enterprises
 - Robert (Bobby) Lee – Project Manager, CDG Engineers & Associates, Inc.

DEO will introduce their team members on the call today

Presentation (15 minutes)

Please discuss:

- Project purpose
- Value of the project to the community
- Work to be undertaken and how it will be completed
- Implementation timeline
- Budget
 - Line items, admin fees, leveraged funds
- Area of Benefit
- Deliverables

Project Description & Purpose

The Caney Pond Stormwater Retention Basin encompasses the northwestern portion of the City of Cottondale. The Service Area is bound on the east by Willow Street, on the south by the Bay Line Railroad, on the west by West Street and on the North by Third Street and the extension thereof. The basin consist of approximately 275 acres. During normal rainfall, the stormwater infrastructures is able to handle the rainfall event. However, a significant rain event, like Hurricane Michael, causes flash flooding in the Caney Stormwater Basin.

The Caney Pond stormwater drainage system had several failures during Hurricane Michael. A number of culverts collapsed, ditch sections filled with debris, resulting in many of the existing stormwater pipes and ditch sections unable to handle the runoff resulting from Hurricane Michael resulting in significant flooding in the Caney Pond Service Area. The project proposes to replace the existing undersized culverts, expand the existing ditch sections to allow for an increased flow of stormwater drainage, re-grass all disturbed areas and the excavation and reshaping of the Caney Retention Pond to accept and retain a significant amount of stormwater from future significant rain events.

Proposed Work to Be Completed

The project will consist of removing of the aged stormwater culverts and replacing them with new culverts property sized for expected stormwater events for the area. Existing ditch sections will be excavated to a uniform section for ease of maintenance and maintaining consist stormwater flow. Caney Stormwater Retention Pond Basin will also be excavated to a uniform grade and section to allow stormwater storage during a major rain event. The discharge ditch section to Highway 231 will also be shaped and grade to allow the continuous flow of stormwater.

Stormwater inlets, junction boxes, headwall flumes and other needed appurtenance will be place throughout the project to help with the proper drainage of the basin.

Community Value of the Project

Hurricane Michael showed that the Carney Basin was prone to flood hazards and the impact that it had on the community. Roads was closed, homes was flooded, sewer system overflowed, and inundate property became holding ponds.

With the proposed project, the threat of flooding will no longer be a major concern. Ditch sections will be able to be maintained by the City and/or local citizens where the ditch is located. Sanitary sewer system will not be subject to inundating from rainfall thus eliminating sewer overflow. Local citizens yard will no longer become stormwater holding basins.

Implementation Timeline

24 Month Work Plan Beginning After Grant Application Approved and DEO Contract Execution

➤ HUD Environmental & Release of Funds	6	Months
➤ Surveying and Preliminary Design	2	Months
➤ 60% Bid Documents	2	Months
➤ Final Bid Documents & Permits to DEO for Review	2	Months
➤ Bid & Award Project	2	Months
➤ Construction Phase	8	Months
➤ Project Closeout	<u>2</u>	<u>Months</u>
TOTAL	24	Months

Project Budget Area #1

Preliminary Cost Estimate				
Hurricane Michael Storm Drainage Improvements				
AREA I - North Street & Front Street				
November 2020				
		Quantity	Unit Price	Total \$
1. Erosion Control		1 L.S.	\$24,958.00	\$24,958.00
2. Clearing & Grubbing		3 Acres	\$6,500.00	\$19,500.00
3. Removal of Existing Storm Drain		470 L.F.	\$32.00	\$15,040.00
4. Channel Excavation		6,200 Cu. Yd.	\$25.00	\$155,000.00
5. 18" Storm Drain Pipe		80 L.F.	\$55.00	\$4,400.00
6. 24" Storm Drain Pipe		260 L.F.	\$65.00	\$16,900.00
7. 36" Storm Drain Pipe		80 L.F.	\$105.00	\$8,400.00
8. 48" Storm Drain Pipe		90 L.F.	\$175.00	\$15,750.00
9. 59"x36" Storm Drain Pipe		60 L.F.	\$235.00	\$14,100.00
10. 65"x40" Storm Drain Pipe		80 L.F.	\$320.00	\$25,600.00
11. 48" Storm Drain Pipe-Steel Cased Bored under Railroad		60 L.F.	\$320.00	\$19,200.00

Project Budget Area #1(cont'd)

12. Concrete Slope Paving	1,500 S.Y.	\$85.00	\$127,500.00
13. 18" Headwall	4 EA.	\$1,700.00	\$6,800.00
14. 24" Headwall	10 EA.	\$2,200.00	\$22,000.00
15. 36" Headwall	4 EA.	\$3,500.00	\$14,000.00
16. 48" Headwall	2 EA.	\$4,000.00	\$8,000.00
17. 59"x36" Headwall	2 EA.	\$5,200.00	\$10,400.00
18. 65"x40" Headwall	2 EA.	\$6,500.00	\$13,000.00
19. Junction Box	2 EA.	\$12,500.00	\$25,000.00
20. Riprap	350 Ton	\$42.00	\$14,700.00
21. Paving Replacement Including Base	610 S.Y.	\$52.00	\$31,720.00
22. Topsoil & Grassing	3 Acres	\$6,590.00	\$21,088.00
23. Sodding	7,500 S.Y.	\$9.50	\$71,250.00
Subtotal Area I - North Street & Front Street			\$684,306.00

Project Budget Area #1(cont'd)

Total Construction Cost	\$ 684,306.00
Property & Easement Survey	\$ 12,000.00
Planning/Engineering Design	\$ 89,800.00
Construction Technical Services & Project Inspection	\$ 50,990.00
Program Delivery Fees	\$ 18,325.00
Project Administration	\$ 37,184.00
AREA 1 - Total Project Cost	\$ 892,605.00

Project Budget Area #2

Preliminary Cost Estimate				
Hurricane Michael Storm Drainage Improvements				
AREA II - Caney Pond Drainage and Stabilization				
November 2020				
		Quantity	Unit Price	Total \$
1. Erosion Control		1 L.S.	\$25,000.00	\$25,000.00
2. Clearing & Grubbing		25 Acres	\$7,000.00	\$175,000.00
3. Removing Bridge Structure		1 L.S.	\$17,000.00	\$17,000.00
4.				
Retention Pond Excavation (5' Average Depth)		110,000 Cu. Yd.	\$9.00	\$990,000.00
5. Channel Excavation		25,000 Cu. Yd.	\$25.00	\$625,000.00
6. 60" Storm Drain Pipe		160 L.F	\$390.00	\$62,400.00
7. 73"x45" Storm Drain Pipe		80 L.F	\$420.00	\$33,600.00
8. 60" Multi Pipe Headwall Structure		2 EA.	\$18,000.00	\$36,000.00
9. 73"x45" Dual Headwall Structure		2 EA.	\$12,000.00	\$24,000.00
10. Concrete Slope Paving		2,500 S.Y.	\$85.00	\$212,500.00
11. Topsoil & Grassing		25 Acres	\$6,500.00	\$162,500.00
12. Sodding		35,000 S.Y.	\$9.50	\$332,500.00
Subtotal Area II - Caney Pond Drainage and Stabilization				\$2,695,500.00

Project Budget Area #2 (cont'd)

	Total Construction Cost	\$	2,695,500.00
	Property & Easement Survey	\$	22,000.00
	Planning/Engineering Design	\$	340,077.00
Construction Technical Services & Project Inspection		\$	193,094.00
	Program Delivery Fees	\$	73,259.00
	Project		
	Adminstration	\$	130,816.00
	AREA II - Total Project Cost	\$	3,454,746.00

Project Budget Total Cost

AREA I - Total Project Cost				\$ 892,605.00
AREA II - Total Project Cost				\$ 3,454,746.00
TOTAL PROJECT				\$ 4,347,351.00

Site Flooding – Image 1

3167 West Street - Flooded



Site Flooding - Image 2

Intersection of West Street & Milton St.



Ditch Section Along West Street



Site Flooding - Image 3

Caney Basin Looking Northeast



Caney Basin Looking North



Site Flooding - Image 4

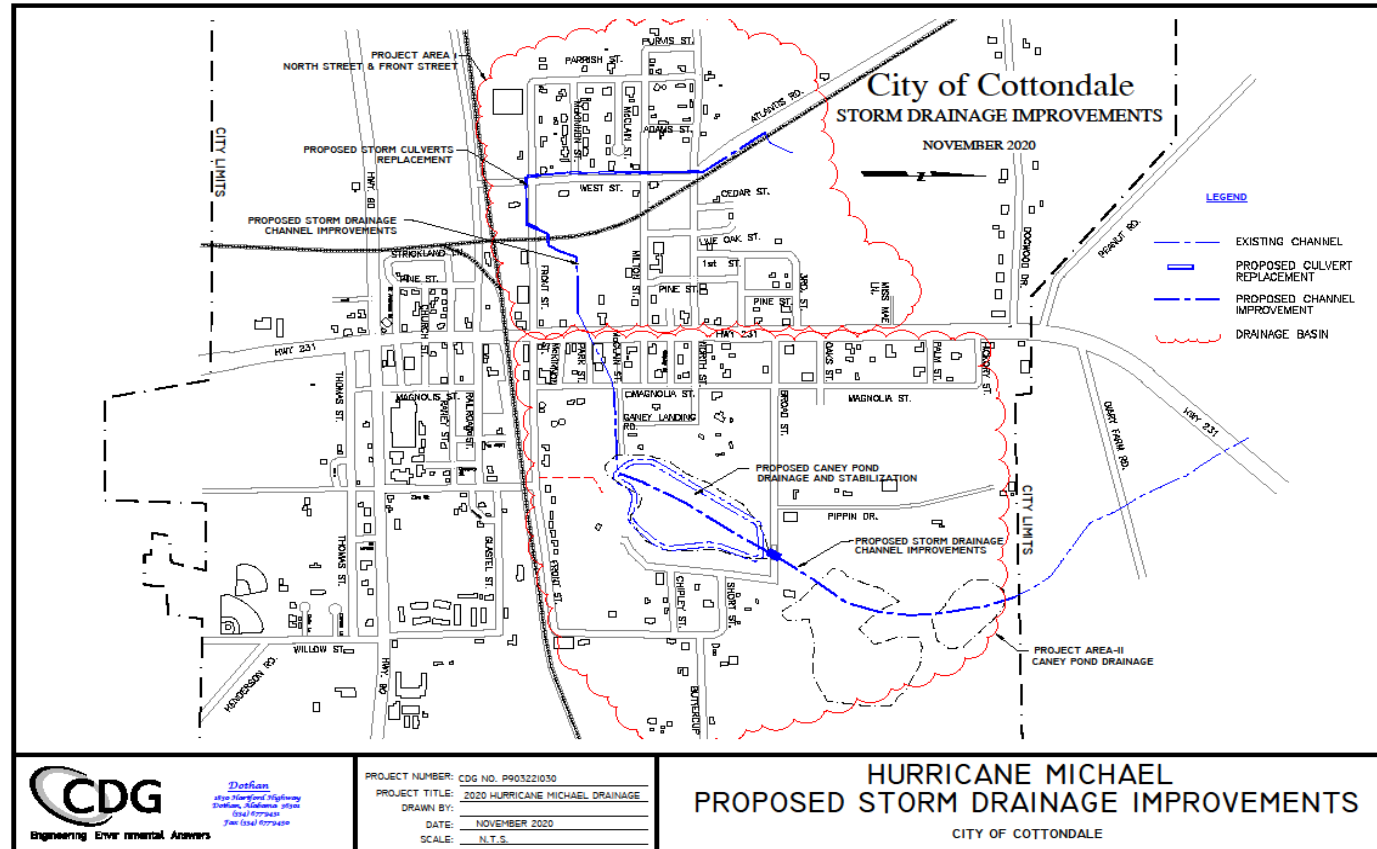
Caney Basin Looking Northeast



Caney Basin Before Flooding



Project Map



Question and Answer (10 minutes)

The Rebuild Florida Infrastructure team will proceed with a 10-minute question and answer session where we will discuss areas in the presentation and application.

Please feel free to reach out to us if you have any questions for DEO:

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