

1112 Manatee Ave. West Bradenton, FL 34205 purchasing@mymanatee.org

#### **Solicitation Addendum**

Addendum No.:	4
Solicitation No.:	18-TA002593SR
Project No.:	404-6028386
Solicitation Title:	Force Main 12A Replacement
Addendum Date:	March 26, 2018
Procurement Contact:	Stacia Raposa, stacia.raposa@mymanatee.org

IFBC NO. 18-TA002593SR IS AMENDED AS SET FORTH HEREIN. RESPONSES TO QUESTIONS POSED BY PROSPECTIVE BIDDERS ARE PROVIDED BELOW. THIS ADDENDUM IS HEREBY INCORPORATED IN AND MADE A PART OF IFBC NO. 18-TA002593SR.

Change to:

#### SECTION A, ITEM A.01, BID DUE DATE

The Due Date and Time for submission of Bids in response to this Invitation for Bid (IFBC) March 27, 2018 at 3:00 P.M. ET. April 3, 3018 at 3:30 P.M. E.T. Bids must be delivered to the following location: Manatee County Administration Building, 1112 Manatee Ave. W., Suite 803, Bradenton, FL 34205 prior to the Due Date and Time.

Change to:

#### SECTION A, ITEM A.49, SOLICITATION SCHEDULE

The following schedule has been established for this Solicitation process. Refer to the County's website (www.mymanatee.org > Online Services > *Bids & Proposals*) for meeting locations and updated information pertaining to any revisions to this schedule.

Non-Mandatory Solicitation Information Conference at 1112 Manatee Ave West, Suite 803 Bradenton, FL 34205

**Question and Clarification Deadline** 

February 14, 2018 at 10:00AM

March 1, 2018 at 5:00 PM

Final Addendum Posted

Bid Response Due Date and Time

Due Diligence Review Completed

Project Award

March 19, 2018 March 26, 2018

March 27, 2018 at 3:00 PM April 3, 2018 at 3:30 PM

April 3, 2018 April 6, 2018

April 2018 May 2018

Replace:

#### **TECHNICAL SPECIFICATIONS- SECTION 01150, MEASUREMENT AND PAYMENT**

Replace Section 01150, Measurement and Payment revised per Addendum 3, with the attached Section 01150, revised per this Addendum 4.

Replace:

#### **APPENDIX J, BID FORM**

Replace Appendix J, Bid Form revised per Addendum 3 with the attached Appendix J, Bid Form revised per this Addendum 4.

#### **Clarifications of Engineer's Changes:**

#### SPECIFICATIONS:

Section 01150 Measure and Payment: Item description revised for items number 22, 23 and 24

#### **BID FORM:**

Changed: Item No. 660-2-106, Quantity changed from 3 to 5

Added: Item No. 17.08 Description 30", QTY 1

#### **QUESTIONS AND RESPONSES:**

Q1. Reference Addendum Three, R36 to Q36, the Contractor should not have to be responsible for the design of the deadman thrust blocks, the County has a staff of engineers and they should design them. Besides, what will the County have to compare our design to when the design plans and calculations are submitted?

R1. Item is lump sum. Bid accordingly per your means and methods and engineers advice.

Q2. Reference Addendum Three, R36 to Q36, third sentence "The Contractor must require its engineer to have Errors and Omissions Insurance for this project in an amount approved by the County", the County needs to tell us what this amount is so we can let a design consultant know. Please provide amount.

R2. No Errors and Omissions required since the contractor will carry all liability.

Q3. Reference Addendum Three, SECTION 01150, MEASUREMENT AND PAYMENT, page 45/270, BID ITEM 43 – DEADMAN THRUST BLOCKS, second sentence, "Concrete specifically included under any other Bid Item will not be measured or paid for under this Bid Item.", at this time we do not have a design for each of the thrust blocks and cannot quantify the volume of concrete needed for each block, how can we commit to a price for the concrete thrust block and include it in these bid items? Payment for the concrete needs to come from Bid Item 42, Miscellaneous Concrete, 3000 psi. Please remove second sentence from this Bid Item's description.

R3. Item is lump sum including design and concrete.

Q4. Reference bid form, Bid Item 24, Master Lift Station Temporary Bypass, the unit of measure needs to be changed from Day to Lump Sum, reason being if the quantity underruns and we do not get paid for the fourteen (14) days, the current bid quantity, we will not fully recuperate our costs for materials, crew time and sub-contractor costs. Please change unit of measure for this item to Lump Sum. R4. Bid item 24 has been changed to lump Sum (LS).

Q5. Please provide data with pump running times at Lift Station 12-A. We are interested in when low flows occur.

R5. Flow data was previously provided; they run 24 hours a day. Low flows occur from 9pm to 5am.

#### Q6. How many other pump stations pump into the gravity collection system that feeds Lift Station 12-A, what are their locations, and can they be shut down in order to minimize volume of flow to Lift Station 12-A and if so for how long?

R6. There are numerous upstream pump stations that cannot be shut down, some are private. All work must be contained at LS12A.

# Q7. Please postpone the bid date for at least an additional one (1) week, the additional time is needed to solicit by-pass pumping sub-contractors.

R7. The bid date has been extended with this Addendum 4.

Q8. After review of the piping set up in the field it was discovered there is no valve on the south side of the tee at the bypass riser location. Without this valve to isolate the sewage flow from the station it renders the bypass set up as shown on plan sheet 24 basically useless. In order to make the connection we must either pump from the wet well or manhole into the line stop. Please review this issue and advise accordingly.

R8. There is an existing line stop assembly with blind flange at the location you reference. The internal stop will need to be reinserted.

# Q9. Also, there appears to be some newly constructed electrical equipment that will be in direct conflict with the force main alignment. Will field adjustment of the force main alignment be allowed to avoid conflicts?

R9. Field adjustment will be acceptable.

NOTE: Items that are struck through are deleted. Items that are <u>underlined</u> have been added or changed. All other terms and conditions remain as stated in the 18-TA002593SR.

#### End of Addendum

#### INSTRUCTIONS:

Receipt of this addendum must be acknowledged as instructed in the solicitation document. Failure to acknowledge receipt of this Addendum may result in the response being deemed non-responsive.

AUTHORIZED FOR RELEASE:

(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
	SIGNALIZATION PAY ITEMS (REFER TO FDOT SPEC'S)				
660-2-106	Loop Assembly (F&I), Type F, 6'x40'	AS	5		
		Signaliz	zation Subtotal		
	UTILITY PAY ITEMS				
1	Clearing and Grubbing	AC	4.2		
2	DIP (CL 350) (Direct Bury), Waterline				
2.01	6"	LF	40		
2.02	8"	LF	75		
2.03	16"	LF	65		
3	Ductile Iron Fittings, Waterline				
3.01	6" 45° Bend	EA	2		
3.02	8" 11.25° Bend	EA	2		
3.03	8" 45° Bend	EA	8		
3.04	16" 45° Bend	EA	2		
3.05	16"x8" Tee	EA	1		
4	16" Sleeve Coupling, Romac	EA	6		
5	Tapping Sleeve incl. Valve, 16"x6"	EA	1		
6	New Services, complete				
6.01	Water, single	EA	4		
6.02	Water, double	EA	14		
6.03	Reclaim, single	EA	6		
6.04	Reclaim, double	EA	12		
7	Reduced Pressure Backflow Prevention Assembly /w Pressure Relief Valve	EA	9		
8	Vacuum Breakers	EA	18		
9	DIP (CL 350) (Direct Bury), Force Main				
9.01	20" Flex Ring Joint, RJ	LF	1,145		
9.02	24"	LF	12		
10	20" DIP (CL 350) Flex Ring Joint (Aerial Crossing), Force Main	LS	1		
11	PVC (C900-16) DR 18 (Direct Bury), Force Main				
11.01	4"	LF	85		
11.02	10"	LF	10		
11.03	16"	LF	45		
11.04	20"	LF	2,140		
11.05	24"	LF	6,405		
12	24" HDPE (C-906) DR 11 (Directional Drill), Force Main	LF	565		
13	HDPE MJ Pipe Adapter				
13.01	8"	EA	1		
13.02	24"	EA	2		

Bidder:\_\_\_\_\_

(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

# Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
14	Ductile Iron Fittings, Wastewater				
14.01	4" Cap	EA	2		
14.02	6"x4" Reducer	EA	2		
14.03	8" Plug	EA	2		
14.04	10" Cap	EA	1		
14.05	16" 45° Bend	EA	5		
14.06	16"x10" Reducer	EA	1		
14.07	20" Sleeve	EA	2		
14.08	20" 11.25° Bend	EA	6		
14.09	20" 22.5° Bend	EA	9		
14.10	20" 45° Bend	EA	19		
14.11	24"x20" Reducer	EA	7		
14.12	24" 11.25° Bend	EA	12		
14.13	24" 22.5° Bend	EA	3		
14.14	24" 45° Bend	EA	28		
14.15	24"x6" Tee	EA	2		
14.16	24"x10" Tee	EA	1		
14.17	24"x16" Tee	EA	1		
14.18	30"x24" Reducer	EA	1		
15	Valve				
15.01	4" Plug, force main	EA	1		
15.02	6" Plug, force main	EA	1		
15.03	10" Plug, force main	EA	1		
15.04	24" Plug, force main	EA	10		
15.05	8" Gate, waterline	EA	1		
15.06	16" Gate, force main	EA	1		
15.07	20" Gate, force main	EA	1		
15.08	16" Butterfly, waterline	EA	2		
16	Connection to Existing Force Main	EA	6		
17	Pipe Restraints				
17.01	10" & under	EA	8		
17.02	16" Bell Type	EA	5		
17.03	16"	EA	25		
17.04	20" Bell Type	EA	39		
17.05	20"	EA	63		
17.06	24" Bell Type	EA	157		
17.07	24"	EA	112		
17.08	30"	EA	1		
18	Manhole for Below Ground ARV Assembly, 6 ft Dia.	EA	9		
19	ARV Assembly, Below Ground	EA	9		
20	ARV Assembly, Above Ground	EA	4		

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Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
21	Line Stop				
21.01	20"	EA	4		
21.02	30"	EA	1		
22	Temporary Force Main Bypass at Canal	LS	1		
23	Temporary Force Main Bypass at 60th Ave.	LS	1		
24	Master Lift Station Temporary Bypass	LS	1		
25	Grout Abandoned Pipes	CY	978		
26	Erosion and Sediment Control	LS	1		
27	Silt Fence	LF	6,925		
28	Inlet Protection	EA	41		
29	Performance Turf (Bahia Sod)	SY	5,750		
30	Asphalt Road Restoration (Base)				
30.01	8" thick, crushed conc.	SY	11,379		
30.02	10" thick, crushed conc.	SY	3,691		
31	Asphalt Road Restoration (Resurface), 2" S III	SY	15,655		
32	Asphalt Road Restoration, (Mill )	SY	11,138		
33	Asphalt Road Restoration (Overlay), 1.5" S III	SY	11,138		
34	Stabilized Sub Base, (12" LBR 60 )	SY	8,900		
35	Concrete Curb & Gutter				
35.01	Miami	LF	480		
35.02	Type AB	LF	2,089		
36	Remove Curb & Gutter	LF	2,569		
37	Driveway Restoration Shell 6" Thick	SY	300		
38	Traffic Control, Signing & Barricades to FDOT Stds.	Days	350		
39	Thermoplastic Striping				
39.01	Std White Skip 6" (10'-30')	GM	0.5		
39.02	Std White Solid 6"	NM	0.5		
39.03	Std Yellow Solid 6"	NM	3.0		
40	Thermoplastic Markings and RPM's	LS	1		
41	Remove & Replace Chain Link Fence	LF	78		
42	Miscellaneous Concrete, 3000 psi	СҮ	60		
43	Deadman Thrust Blocks				
43.01	20"	EA	4		
43.02	30"	EA	1		
			Utility Subtotal		
	SIDEWALK PAY ITEMS				
44	Relocate Sewer Cleanout	EA	10		
45	Adjust Manhole Lid	EA	4		
46	Flume Sidewalk, FDOT Index 282 Modified	LS	1		
47	Remove Sidewalk/Driveways	SY	1,333		
48	Preparation for Sidewalk (grade shape incl. 6" cut or fill)	SY	4,233		

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# Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
49	Sidewalk, Concrete 8' wide 4" Thick	SY	2,600		
50	Driveway, Concrete 6" Thick (incl. Ped. ADA Ramps)	SY	1,633		
51	Detectable Warnings	SF	108		
52	Handrail, FDOT Index 850	LF	60		
53	Tree Removal				
53.01	4.1"-6"	EA	7		
53.02	6.1"-12"	EA	6		
53.03	12.1"-24" or Cluster Equivalent	EA	1		
54	Service, relocate				
54.01	Water, single	EA	6		
54.02	Water, double	EA	8		
54.03	Reclaim, double	EA	4		
55	Mailbox, F&I Single	EA	5		
		Side	ewalk Subtotal		
56	Mobilization	LS	1		
57	Miscellaneous Work & Clean Up	LS	1		
		Sub	ototal Base Bid		
58	Contract Contigency Work (Used Only w/ County Approval)			10% OF SUBTOTAL BASE BID	
	TOTAL OFFER FOR BID "A" with Contract Contingency - Based on Completion Time of <u>390</u> Calendar Days				

Bidder:\_\_\_\_\_

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# FORCE MAIN 12A REPLACEMENT

Alternate Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
	SIGNALIZATION PAY ITEMS (REFER TO FDOT SPEC'S)				
660-4-11	Vehicle Detection System (F&I), Video, Cabinet Equipment				
	ITERIS Vantage Edge 2 Processor (Dual Channel)	EA	2		
	ITERIS Edge Connect module (MPEG 4)	EA	1		
	ITERIS Vantage Edge2 TS2 I/O module	EA	1		
660-4-12	Vehicle Detection System (F&I), Video, Above Ground Equipment				
	ITERIS Vantage RZ4 Advanced Wide Dynamic Range Color	EA	4		
	cameras	LA	4		
			Signali	zation Subtotal	
	UTILITY PAY ITEMS				
1	Clearing and Grubbing	AC	4.2		
2	DIP (CL 350) (Direct Bury), Waterline				
2.01	6"	LF	40		
2.02	8"	LF	75		
2.03	16"	LF	65		
3	Ductile Iron Fittings, Waterline				
3.01	6" 45° Bend	EA	2		
3.02	8" 11.25° Bend	EA	2		
3.03	8" 45° Bend	EA	8		
3.04	16" 45° Bend	EA	2		
3.05	16"x8" Tee	EA	1		
4	16" Sleeve Coupling, Romac	EA	6		
5	Tapping Sleeve incl. Valve, 16"x6"	EA	1		
6	New Services, complete		-		
6.01	Water, single	EA	4		
6.02	Water, double	EA	14		
6.03	Reclaim, single	EA	6		
6.04	Reclaim, double	EA	12		
7	Reduced Pressure Backflow Prevention Assembly /w Pressure Relief Valve	EA	9		
8	Vacuum Breakers	EA	18		
9	DIP (CL 350) (Direct Bury), Force Main				
9.01	20" Flex Ring Joint, RJ	LF	1,145		
9.02	24"	LF	12		
10	20" DIP (CL 350) Flex Ring Joint (Aerial Crossing), Force Main	LS	1		
11	PVC (C900-16) DR 18 (Direct Bury), Force Main				
11.01	4"	LF	85		
11.02	10"	LF	10		
11.02	16"	LF	45		
11.04	20"	LF	2,140		
11.04	24"	LF	6,405		

Bidder:\_\_\_\_\_

Authorized Signature:\_\_\_\_\_

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# FORCE MAIN 12A REPLACEMENT

# Alternate Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
12	24" HDPE (C-906) DR 11 (Directional Drill), Force Main	LF	565		
13	HDPE MJ Pipe Adapter				
13.01	8"	EA	1		
13.02	24"	EA	2		
14	Ductile Iron Fittings, Wastewater				
14.01	4" Cap	EA	2		
14.02	6"x4" Reducer	EA	2		
14.03	8" Plug	EA	2		
14.04	10" Cap	EA	1		
14.05	16" 45° Bend	EA	5		
14.06	16"x10" Reducer	EA	1		
14.07	20" Sleeve	EA	2		
14.08	20" 11.25° Bend	EA	6		
14.09	20" 22.5° Bend	EA	9		
14.10	20" 45° Bend	EA	19		
14.11	24"x20" Reducer	EA	7		
14.12	24" 11.25° Bend	EA	12		
14.13	24" 22.5° Bend	EA	3		
14.14	24" 45° Bend	EA	28		
14.15	24"x6" Tee	EA	2		
14.16	24"x10" Tee	EA	1		
14.17	24"x16" Tee	EA	1		
14.18	30"x24" Reducer	EA	1		
15	Valve				
15.01	4" Plug, force main	EA	1		
15.02	6" Plug, force main	EA	1		
15.03	10" Plug, force main	EA	1		
15.04	24" Plug, force main	EA	10		
15.05	8" Gate, waterline	EA	1		
15.06	16" Gate, force main	EA	1		
15.07	20" Gate, force main	EA	1	1	
15.08	16" Butterfly, waterline	EA	2		
16	Connection to Existing Force Main	EA	6		
17	Pipe Restraints				
17.01	10" & under	EA	8		
17.02	16" Bell Type	EA	5	1	
17.03	16"	EA	25	1	
17.04	20" Bell Type	EA	39	1	
17.05	20"	EA	63		
17.06	24" Bell Type	EA	157	1	
17.07	24"	EA	112		

Bidder:\_\_\_\_\_

Authorized Signature:\_\_\_\_\_

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# FORCE MAIN 12A REPLACEMENT

### Alternate Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
17.08	30"	EA	1		
18	Manhole for Below Ground ARV Assembly, 6 ft Dia.	EA	9		
19	ARV Assembly, Below Ground	EA	9		
20	ARV Assembly, Above Ground	EA	4		
21	Line Stop				
21.01	20"	EA	4		
21.02	30"	EA	1		
22	Temporary Force Main Bypass at Canal	LS	1		
23	Temporary Force Main Bypass at 60th Ave.	LS	1		
24	Master Lift Station Temporary Bypass	LS	1		
25	Grout Abandoned Pipes	CY	978		
26	Erosion and Sediment Control	LS	1		
27	Silt Fence	LF	6,925		
28	Inlet Protection	EA	41		
29	Performance Turf (Bahia Sod)	SY	5,750		
30	Asphalt Road Restoration (Base)				
30.01	8" thick, crushed conc.	SY	11,379		
30.02	10" thick, crushed conc.	SY	3,691		
31	Asphalt Road Restoration (Resurface), 2" S III	SY	15,655		
32	Asphalt Road Restoration, (Mill )	SY	11,138		
33	Asphalt Road Restoration (Overlay), 1.5" S III	SY	11,138		
34	Stabilized Sub Base, (12" LBR 60 )	SY	8,900		
35	Concrete Curb & Gutter				
35.01	Miami	LF	480		
35.02	Type AB	LF	2,089		
36	Remove Curb & Gutter	LF	2,569		
37	Driveway Restoration Shell 6" Thick	SY	300		
38	Traffic Control, Signing & Barricades to FDOT Stds.	Days	350		
39	Thermoplastic Striping				
39.01	Std White Skip 6" (10'-30')	GM	0.5		
39.02	Std White Solid 6"	NM	0.5		
39.03	Std Yellow Solid 6"	NM	3.0		
40	Thermoplastic Markings and RPM's	LS	1		
41	Remove & Replace Chain Link Fence	LF	78		
42	Miscellaneous Concrete, 3000 psi	CY	60		
43	Deadman Thrust Blocks				
43.01	20"	EA	4		
43.02	30"	EA	1		
			Utility Subtotal		
	SIDEWALK PAY ITEMS				
44	Relocate Sewer Cleanout	EA	10		

Bidder:\_\_\_\_\_

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# FORCE MAIN 12A REPLACEMENT

### Alternate Bid "A" Based on Completion Time of 390 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE
NO.				(\$)	(\$)
45	Adjust Manhole Lid	EA	4		
46	Flume Sidewalk, FDOT Index 282 Modified	LS	1		
47	Remove Sidewalk/Driveways	SY	1,333		
48	Preparation for Sidewalk (grade shape incl. 6" cut or fill)	SY	4,233		
49	Sidewalk, Concrete 8' wide 4" Thick	SY	2,600		
50	Driveway, Concrete 6" Thick (incl. Ped. ADA Ramps)	SY	1,633		
51	Detectable Warnings	SF	108		
52	Handrail, FDOT Index 850	LF	60		
53	Tree Removal				
53.01	4.1"-6"	EA	7		
53.02	6.1"-12"	EA	6		
53.03	12.1"-24" or Cluster Equivalent	EA	1		
54	Service, relocate				
54.01	Water, single	EA	6		
54.02	Water, double	EA	8		
54.03	Reclaim, double	EA	4		
55	Mailbox, F&I Single	EA	5		
		Side	walk Subtotal		
56	Mobilization	LS	1		
57		LS	1		
57	Miscellaneous Work & Clean Up		total Base Bid		
		Sub	lotal Dase Dia		
58	Contract Contigency Work (Used Only w/ County Approval)			10% OF SUBTOTAL BASE BID	
	TOTAL OFFER FOR ALTERNATE BID "A" with Contract Contingency - Based on Completion Time of <u>390</u> Calendar Days				

Bidder:\_\_\_\_\_

(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
	SIGNALIZATION PAY ITEMS (REFER TO FDOT SPEC'S)				
660-2-106	Loop Assembly (F&I), Type F, 6'x40'	AS	5		
		Signaliz	zation Subtotal		
	UTILITY PAY ITEMS				
1	Clearing and Grubbing	AC	4.2		
2	DIP (CL 350) (Direct Bury), Waterline				
2.01	6"	LF	40		
2.02	8"	LF	75		
2.03	16"	LF	65		
3	Ductile Iron Fittings, Waterline				
3.01	6" 45° Bend	EA	2		
3.02	8" 11.25° Bend	EA	2		
3.03	8" 45° Bend	EA	8		
3.04	16" 45° Bend	EA	2		
3.05	16"x8" Tee	EA	1		
4	16" Sleeve Coupling, Romac	EA	6		
5	Tapping Sleeve incl. Valve, 16"x6"	EA	1		
6	New Services, complete				
6.01	Water, single	EA	4		
6.02	Water, double	EA	14		
6.03	Reclaim, single	EA	6		
6.04	Reclaim, double	EA	12		
7	Reduced Pressure Backflow Prevention Assembly /w Pressure Relief Valve	EA	9		
8	Vacuum Breakers	EA	18		
9	DIP (CL 350) (Direct Bury), Force Main				
9.01	20" Flex Ring Joint, RJ	LF	1,145		
9.02	24"	LF	12		
10	20" DIP (CL 350) Flex Ring Joint (Aerial Crossing), Force Main	LS	1		
11	PVC (C900-16) DR 18 (Direct Bury), Force Main				
11.01	4"	LF	85		
11.02	10"	LF	10		
11.03	16"	LF	45		
11.04	20"	LF	2,140		
11.05	24"	LF	6,405		
12	24" HDPE (C-906) DR 11 (Directional Drill), Force Main	LF	565		
13	HDPE MJ Pipe Adapter				
13.01	8"	EA	1		
13.02	24"	EA	2		

Bidder:\_\_\_\_\_

(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

# Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION		EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
14	Ductile Iron Fittings, Wastewater				
14.01	4" Cap	EA	2		
14.02	6"x4" Reducer	EA	2		
14.03	8" Plug	EA	2		
14.04	10" Cap	EA	1		
14.05	16" 45° Bend	EA	5		
14.06	16"x10" Reducer	EA	1		
14.07	20" Sleeve	EA	2		
14.08	20" 11.25° Bend	EA	6		
14.09	20" 22.5° Bend	EA	9		
14.10	20" 45° Bend	EA	19		
14.11	24"x20" Reducer	EA	7		
14.12	24" 11.25° Bend	EA	12		
14.13	24" 22.5° Bend	EA	3		
14.14	24" 45° Bend	EA	28		
14.15	24"x6" Tee	EA	2		
14.16	24"x10" Tee	EA	1		
14.17	24"x16" Tee	EA	1		
14.18	30"x24" Reducer	EA	1		
15	Valve				
15.01	4" Plug, force main	EA	1		
15.02	6" Plug, force main	EA	1		
15.03	10" Plug, force main	EA	1		
15.04	24" Plug, force main	EA	10		
15.05	8" Gate, waterline	EA	1		
15.06	16" Gate, force main	EA	1		
15.07	20" Gate, force main	EA	1		
15.08	16" Butterfly, waterline	EA	2		
16	Connection to Existing Force Main	EA	6		
17	Pipe Restraints				
17.01	10" & under	EA	8		
17.02	16" Bell Type	EA	5		
17.03	16"	EA	25		
17.04	20" Bell Type	EA	39		
17.05	20"	EA	63	l	
17.06	24" Bell Type	EA	157		
17.07	24"	EA	112	l	
17.08	30"	EA	1		
18	Manhole for Below Ground ARV Assembly, 6 ft Dia.	EA	9	1	
19	ARV Assembly, Below Ground	EA	9	İ	
20	ARV Assembly, Above Ground	EA	4		

Bidder:\_\_\_\_\_

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# FORCE MAIN 12A REPLACEMENT

Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
21	Line Stop				
21.01	20"	EA	4		
21.02	30"	EA	1		
22	Temporary Force Main Bypass at Canal	LS	1		
23	Temporary Force Main Bypass at 60th Ave.	LS	1		
24	Master Lift Station Temporary Bypass	LS	1		
25	Grout Abandoned Pipes	CY	978		
26	Erosion and Sediment Control	LS	1		
27	Silt Fence	LF	6,925		
28	Inlet Protection	EA	41		
29	Performance Turf (Bahia Sod)	SY	5,750		
30	Asphalt Road Restoration (Base)				
30.01	8" thick, crushed conc.	SY	11,379		
30.02	10" thick, crushed conc.	SY	3,691		
31	Asphalt Road Restoration (Resurface), 2" S III	SY	15,655		
32	Asphalt Road Restoration, (Mill )	SY	11,138		
33	Asphalt Road Restoration (Overlay), 1.5" S III	SY	11,138		
34	Stabilized Sub Base, (12" LBR 60 )	SY	8,900		
35	Concrete Curb & Gutter		0,200		
35.01	Miami	LF	480		
35.02	Type AB	LF	2,089		
36	Remove Curb & Gutter	LF	2,569		
37	Driveway Restoration Shell 6" Thick	SY	300		
38	Traffic Control, Signing & Barricades to FDOT Stds.	Days	350		
39	Thermoplastic Striping	Days	550		
39.01	Std White Skip 6" (10'-30')	GM	0.5		
39.02	Std White Solid 6"	NM	0.5		
39.02	Std Yellow Solid 6"	NM	3.0		
40	Thermoplastic Markings and RPM's	LS	1		
40	Remove & Replace Chain Link Fence	LS	78		
41	Miscellaneous Concrete, 3000 psi	CY	60		
42	Deadman Thrust Blocks		00		
43.01	20"	EA	4		
43.01	30"	EA	4	}	
45.02	50		Utility Subtotal		
	SIDEWALK PAY ITEMS				
44	Relocate Sewer Cleanout	EA	10		
45	Adjust Manhole Lid	EA	4		
46	Flume Sidewalk, FDOT Index 282 Modified	LS	1		
47	Remove Sidewalk/Driveways	SY	1,333	Ì	

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(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

## Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
48	Preparation for Sidewalk (grade shape incl. 6" cut or fill)	SY	4,233		
49	Sidewalk, Concrete 8' wide 4" Thick	SY	2,600		
50	Driveway, Concrete 6" Thick (incl. Ped. ADA Ramps)	SY	1,633		
51	Detectable Warnings	SF	108		
52	Handrail, FDOT Index 850	LF	60		
53	Tree Removal				
53.01	4.1"-6"	EA	7		
53.02	6.1"-12"	EA	6		
53.03	12.1"-24" or Cluster Equivalent	EA	1		
54	Service, relocate				
54.01	Water, single	EA	6		
54.02	Water, double	EA	8		
54.03	Reclaim, double	EA	4		
55	Mailbox, F&I Single	EA	5		
		Side	walk Subtotal		
54		T.C.	1		
56	Mobilization	LS	1		
57	Miscellaneous Work & Clean Up	LS	1		
		Sub	Subtotal Base Bid		
58	Contract Contigency Work (Used Only w/ County Approval)			10% OF SUBTOTAL BASE BID	
	TOTAL OFFER FOR BID ''B'' with Contract Cont Based on Completion Time of <u>490</u> Calendar Days	ingency -			

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(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

Alternate Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
	SIGNALIZATION PAY ITEMS (REFER TO FDOT SPEC'S)				
660-4-11	Vehicle Detection System (F&I), Video, Cabinet Equipment				
	ITERIS Vantage Edge 2 Processor (Dual Channel)	EA	2		
	ITERIS Edge Connect module (MPEG 4)	EA	1		
	ITERIS Vantage Edge2 TS2 I/O module	EA	1		
660-4-12	Vehicle Detection System (F&I), Video, Above Ground Equipment				
	ITERIS Vantage RZ4 Advanced Wide Dynamic Range Color cameras	EA	4		
			Signali	zation Subtotal	
	UTILITY PAY ITEMS				
1	Clearing and Grubbing	AC	4.2		
2	DIP (CL 350) (Direct Bury), Waterline	110	1.2		
2.01	6"	LF	40		
2.01	8"	LF	75		
2.02	16"	LF	65		
3	Ductile Iron Fittings, Waterline	121	05		
3.01	6" 45° Bend	EA	2		
3.02	8" 11.25° Bend	EA	2		
3.02	8" 45° Bend	EA	8		
3.04	16" 45° Bend	EA	2		
3.05	16" x8" Tee	EA	1		
4	16" Sleeve Coupling, Romac	EA	6		
5	Tapping Sleeve incl. Valve, 16"x6"	EA	1		
6	New Services, complete		-		
6.01	Water, single	EA	4		
6.02	Water, double	EA	14		
6.03	Reclaim, single	EA	6		
6.04	Reclaim, double	EA	12		
7	Reduced Pressure Backflow Prevention Assembly /w Pressure Relief Valve	EA	9		
8	Vacuum Breakers	EA	18		
9	DIP (CL 350) (Direct Bury), Force Main				
9.01	20" Flex Ring Joint, RJ	LF	1,145		
9.02	24"	LF	12		
10	20" DIP (CL 350) Flex Ring Joint (Aerial Crossing), Force Main	LS	1		
11	PVC (C900-16) DR 18 (Direct Bury), Force Main				
11.01	4"	LF	85		
11.02	10"	LF	10		
11.03	16"	LF	45		
11.04	20"	LF	2,140		
11.05	24"	LF	6,405		

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# FORCE MAIN 12A REPLACEMENT

Alternate Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
12	24" HDPE (C-906) DR 11 (Directional Drill), Force Main	LF	565		
13	HDPE MJ Pipe Adapter				
13.01	8"	EA	1		
13.02	24"	EA	2		
14	Ductile Iron Fittings, Wastewater				
14.01	4" Cap	EA	2		
14.02	6"x4" Reducer	EA	2		
14.03	8" Plug	EA	2		
14.04	10" Cap	EA	1		
14.05	16" 45° Bend	EA	5		
14.06	16"x10" Reducer	EA	1		
14.07	20" Sleeve	EA	2		
14.08	20" 11.25° Bend	EA	6		
14.09	20" 22.5° Bend	EA	9		
14.10	20" 45° Bend	EA	19		
14.11	24"x20" Reducer	EA	7		
14.12	24" 11.25° Bend	EA	12		
14.13	24" 22.5° Bend	EA	3		
14.14	24" 45° Bend	EA	28		
14.15	24"x6" Tee	EA	2		
14.16	24"x10" Tee	EA	1		
14.17	24"x16" Tee	EA	1		
14.18	30"x24" Reducer	EA	1		
15	Valve				
15.01	4" Plug, force main	EA	1		
15.02	6" Plug, force main	EA	1		
15.03	10" Plug, force main	EA	1		
15.04	24" Plug, force main	EA	10		
15.05	8" Gate, waterline	EA	1		
15.06	16" Gate, force main	EA	1		
15.07	20" Gate, force main	EA	1	1	
15.08	16" Butterfly, waterline	EA	2	1	
15.00	Connection to Existing Force Main	EA	6	1	
10	Pipe Restraints		0		
17.01	10" & under	EA	8		
17.01	16" Bell Type	EA	5	1	
17.02	16"	EA	25	1	
17.04	20" Bell Type	EA	39	1	
17.04	20" Den Type	EA	63	1	<u> </u>
17.06	24" Bell Type	EA	157	1	<u> </u>
17.07	24" Den Type 24"	EA	112		

Bidder:\_\_\_\_\_

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# FORCE MAIN 12A REPLACEMENT

Alternate Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	Alternate Bid "B" Based on Complete DESCRIPTION	U/M		UNIT PRICE (\$)	EXTENDED PRICE (\$)
17.08	30"	EA	1		
18	Manhole for Below Ground ARV Assembly, 6 ft Dia.	EA	9		
19	ARV Assembly, Below Ground	EA	9		
20	ARV Assembly, Above Ground	EA	4		
21	Line Stop				
21.01	20"	EA	4		
21.02	30"	EA	1		
22	Temporary Force Main Bypass at Canal	LS	1		
23	Temporary Force Main Bypass at 60th Ave.	LS	1		
24	Master Lift Station Temporary Bypass	LS	1		
25	Grout Abandoned Pipes	CY	978		
26	Erosion and Sediment Control	LS	1		
27	Silt Fence	LF	6,925		
28	Inlet Protection	EA	41		
29	Performance Turf (Bahia Sod)	SY	5,750		
30	Asphalt Road Restoration (Base)				
30.01	8" thick, crushed conc.	SY	11,379		
30.02	10" thick, crushed conc.	SY	3,691		
31	Asphalt Road Restoration (Resurface), 2" S III	SY	15,655		
32	Asphalt Road Restoration, (Mill )	SY	11,138		
33	Asphalt Road Restoration (Overlay), 1.5" S III	SY	11,138		
34	Stabilized Sub Base, (12" LBR 60 )	SY	8,900		
35	Concrete Curb & Gutter				
35.01	Miami	LF	480		
35.02	Type AB	LF	2,089		
36	Remove Curb & Gutter	LF	2,569		
37	Driveway Restoration Shell 6" Thick	SY	300		
38	Traffic Control, Signing & Barricades to FDOT Stds.	Days	350		
39	Thermoplastic Striping				
39.01	Std White Skip 6" (10'-30')	GM	0.5		
39.02	Std White Solid 6"	NM	0.5		
39.03	Std Yellow Solid 6"	NM	3.0		
40	Thermoplastic Markings and RPM's	LS	1		
41	Remove & Replace Chain Link Fence	LF	78		
42	Miscellaneous Concrete, 3000 psi	CY	60		
43	Deadman Thrust Blocks				
43.01	20"	EA	4		
43.02	30"	EA	1		
			Utility Subtotal		
	SIDEWALK PAY ITEMS				
44	Relocate Sewer Cleanout	EA	10		

Bidder:\_\_\_\_\_

Authorized Signature:\_\_\_\_\_

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(Submit in Triplicate)

# FORCE MAIN 12A REPLACEMENT

### Alternate Bid "B" Based on Completion Time of 490 Calendar Days

BID ITEM NO.	DESCRIPTION	U/M	EST. QTY.	UNIT PRICE (\$)	EXTENDED PRICE (\$)
45	Adjust Manhole Lid	EA	4		
46	Flume Sidewalk, FDOT Index 282 Modified	LS	1		
47	Remove Sidewalk/Driveways	SY	1,333		
48	Preparation for Sidewalk (grade shape incl. 6" cut or fill)	SY	4,233		
49	Sidewalk, Concrete 8' wide 4" Thick	SY	2,600		
50	Driveway, Concrete 6" Thick (incl. Ped. ADA Ramps)	SY	1,633		
51	Detectable Warnings	SF	108		
52	Handrail, FDOT Index 850	LF	60		
53	Tree Removal				
53.01	4.1"-6"	EA	7		
53.02	6.1"-12"	EA	6		
53.03	12.1"-24" or Cluster Equivalent	EA	1		
54	Service, relocate				
54.01	Water, single	EA	6		
54.02	Water, double	EA	8		
54.03	Reclaim, double	EA	4		
55	Mailbox, F&I Single	EA	5		
		Side	walk Subtotal		
56	Mobilization	LS	1		
57	Miscellaneous Work & Clean Up	LS	1		
		Subtotal Base B			
58	Contract Contigency Work (Used Only w/ County Approval)			10% OF SUBTOTAL BASE BID	
	TOTAL OFFER FOR ALTERNATE BID "B" with Contingency - Based on Completion Time of <u>490</u> Ca				

Bidder:\_\_\_\_\_

Authorized Signature:\_\_\_\_\_

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#### SECTION 01150 MEASUREMENT AND PAYMENT

#### PART 1 GENERAL

#### 1.01 SCOPE

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.
- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

#### 1.02 ESTIMATED QUANTITIES

The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. The County does not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding because of such estimate of quantities. Final payment will be made only for satisfactorily completed quantity of each item.

#### 1.03 WORK OUTSIDE AUTHORIZED LIMITS

No payment will be made for work constructed outside the authorized limits of work.

#### 1.04 MEASUREMENT STANDARDS

Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

#### 1.05 AREA MEASUREMENTS

In the measurement of items to be paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

#### 1.06 LUMP SUM ITEMS

Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items. Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a break-down of the lump sum totals.

#### 1.07 UNIT PRICE ITEM

Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the

work shall be considered to be included in the scope of the appropriate listed work items.

No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the County until as-built (record) drawings have been submitted and approved by the County.

- 1. Shop Drawings, Working Drawings.
- 2. Clearing, grubbing and grading except as hereinafter specified.
- 3. Trench excavation, including necessary pavement removal and rock removal, except as otherwise specified.
- 4. Dewatering and disposal of surplus water.
- 5. Structural fill, backfill, and grading.
- 6. Replacement of unpaved roadways, and shrubbery plots.
- 7. Cleanup and miscellaneous work.
- 8. Foundation and borrow materials, except as hereinafter specified.
- 9. Testing and placing system in operation.
- 10. Any material and equipment required to be installed and utilized for the tests.
- 11. Pipe, structures, pavement replacement, asphalt and shell driveways and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
- 12. Maintaining the existing quality of service during construction.
- 13. Maintaining or detouring of traffic.
- 14. Appurtenant work as required for a complete and operable system.
- 15. Seeding and hydromulching.
- 16. As-built Record Drawings.

### UTILITY ITEMS

#### BID ITEM 1 - CLEARING AND GRUBBING

Payment for all work included in this Bid Item shall be at the applicable Contract unit price bid per acre for all clearing and grubbing work outside roadway paved areas necessary to complete construction as shown on the Contract Drawings, and where directed by the Project Representative. Measurement shall be per acre of surface area cleared and grubbed, which shall be limited to a maximum width of 15 feet where the force main is outside road pavement. and 20 feet width for the proposed sidewalk area. Payment shall represent full compensation for all labor, material, and equipment required to complete this Bid Item, including excavation, removal, and disposal offsite of all items located within the project limits of construction as necessary for construction, including but not limited to demolition, removal and disposal offsite of, all trees up to 4" diameter (except trees noted on the Drawings to be protected or as directed by the Project Representative), all shrubs, curbs, and sidewalks except as specifically included in other bid items. Clearing and Grubbing and disposal of all waste offsite shall be performed in accordance with FDOT, federal, state, and County standards, specifications, and requirements. The Contractor shall confirm and mark which curbs, pavement, and sidewalks shall be removed with the Project Representative prior to starting Clearing and Grubbing in any area.

#### BID ITEM 2 - DIP (CL 350) DIRECT BURY, WATERLINE

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per linear foot for furnishing and installing the listed diameter, joint type, and class of ductile iron water main (AWWA C-151, CL-350) pipe as shown on the Contract Drawings or where directed by the Project Representative. Measurement and Payment shall be made for

the actual length of the listed diameter pipe installed and will represent full compensation for all labor, materials, excavation, removal and disposal off site of all waste, including rock, 10 gage copper tracer wire, polyethylene encasement, detectable tape, dewatering, thrust blocking, coordination with utility agencies, bedding, backfill, compaction, pigging, testing and disinfection and equipment required to complete these Bid Items. No additional compensation will be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill materials, or for repair of any trench settlement. The cost of all restraints and thrust blocking shall be included except for restraints specifically listed on the Bid Form. The cost of concrete for thrust blocks is not included in the miscellaneous concrete pay item. The cost of removing and disposing existing Asbestos waterline as necessary to complete all construction in accordance with state and federal requirements for asbestos shall also be included in this item.

#### BID ITEM 3 - DUCTILE IRON FITTINGS, WATERLINE

Payment for all work included in these Bid Items will be made at the applicable Contract unit price bid per each fitting for furnishing and installing ductile iron fittings (cement lined) as shown on the Contract Drawings, as listed on the bid form by size and type, and where directed by the Project Representative. Payment will be made for each fitting installed and will represent full compensation for all labor, materials, equipment, excavation, including rock, bedding, backfill, compaction, testing, and disinfection, required to complete these Bid Items.

### BID ITEM 4 - 16" SLEEVE COUPLING, ROMAC

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per each coupling for furnishing and installing Romac Sleeve Couplings as shown on the Contract Drawings, and where directed by the Project Representative. The sleeves shall have EPDM gaskets, stainless steel bolts & nuts, and fusion bonded epoxy lining and coating. Measurement and Payment will be made for each sleeve installed and will represent full compensation for all labor, materials, equipment, excavation, including rock, bedding, backfill, compaction, testing, and disinfection required to complete this Bid Item.

#### BID ITEM 5 - TAPPING SLEEVE INCL. VALVE

Payment for all work included in this Bid Item shall be at the applicable Contract unit price bid per each tapping sleeve including tapping valve for furnishing and installing the listed diameter tapping sleeve and tapping valve, box, cover and concrete pad as shown on the Contract Drawings and listed on the Bid Form. Prior to the tapping operation, the Contractor will contact the County as to the date and time of the proposed work at least 5 work days prior to starting work. The tapping operation itself up to 12-inches in diameter will be performed by the County. All tapping operations larger than 12 inches in diameter shall be performed by the Contractor with the County's Representative present. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction testing, disinfection and equipment required to complete these Bid Items. Tapping Sleeve shall be stainless steel with stainless steel hardware and EPDM rubber.

#### BID ITEM 6 - NEW SERVICES, COMPLETE

The existing water and reclaimed water services shall be protected during construction. It is expected that some service line connects shall be fully replaced and some services may require a backflow prevention assembly and vacuum breakers to be installed. All existing water and reclaim water services encountered that cross under the roadway and are damaged/severed or otherwise affected by the construction shall be fully replaced from the

main to the meter box. Existing water service lines that are not in a casing; shall be fully replaced. All service line replacements that require a plumbing permit shall require the installation of a backflow prevention assembly and vacuum breakers. All services shall be verified with the Utility Department (Claude Jones 941-792-8811 x5055 or appointed representative) prior to replacement. Backflow prevention assembly and vacuum breakers are to be paid under a separate bid item.

Measurement and Payment shall be for each type of service as listed on the Bid Form furnished, installed, and accepted. Payment shall represent full compensation for all labor, material and equipment required to complete the work.

It shall be the Contractor's responsibility to install or reinstall meters. New meters are to be provided by Manatee County. Long services shall be installed using an open-cut, directional bore or jack and bore method under the existing roadway using the appropriate size PVC casing pipe under the roadway.

The unit bid price shall include, but is not limited to, dewatering, excavation, including rock excavation, service lines per current standards, directional bore or jack and bore, casing pipe, stainless steel tapping saddles & hardware, corporation stops, curb stops, meter yokes, meter boxes, backflow prevention assembly (water services only), vacuum breakers (water services only), ball valves, concrete slabs, test cocks and sleeves, detector wire, all necessary fittings, all service connections, backfill, compaction, testing, disinfection (water services only) and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 7 - REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY W/ PRESSURE RELIEF VALVES

It is expected that some service line connections shall require installation of a backflow prevention assembly with a pressure relief valve, per Manatee County Utility Standards UW-12 and UW-13. A licensed plumbing contractor registered with Manatee County shall performed all work on private property per the Florida Building Code - Building and Plumbing and the Manatee County Building Department. After the backflow prevention assembly is installed, tested and inspected the contractor shall be responsible to register backflow prevention assembly using the Manatee County Utility Department on-line registration system.

Measurement and Payment shall be based on each complete backflow prevention assembly with pressure relief valve installed and properly functioning.

This Bid Item includes the installation of all backflow prevention assembly furnished and installed at the locations required by the Florida Plumbing Code or where directed by the Project Representative. The work shall include, but is not limited to, permits, backflow preventer, ball valves, concrete slabs, test cocks and sleeves, all necessary fittings, all service connections, disinfection and all other related and necessary materials, work and equipment associated with this item ready for approval and acceptance by the County.

#### **BID ITEM NO. 8 - VACUUM BREAKERS**

All homes receiving a new water service line shall have brass vacuum breakers installed on all hose bibbs. A licensed plumbing contractor registered with Manatee County shall performed all work on private property per the Florida Building Code - Building and Plumbing and the Manatee County Building Department.

Measurement and Payment shall be based on each vacuum breaker furnished, installed and properly functioning.

This Bid Item includes the installation of all brass vacuum breakers and all labor, materials and equipment required to complete these bid items ready for approval and acceptance by the County.

#### BID ITEM 9 - DIP (CL 350) DIRECT BURY, FORCE MAIN

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per linear foot for furnishing and installing the listed diameter, joint type and class of ductile iron force main (AWWA C-151, CL-350) pipe as shown on the Contract Drawings or where directed by the Project Representative. Measurement and Payment shall be made for the actual length of the listed diameter pipe installed and will represent full compensation for all labor, materials, equipment, coatings and Protecto 401 epoxy lining, coordination with utility agencies, excavation, including rock, 10 gage copper tracer wire, detectable tape, polyethylene encasement, dewatering, bedding, backfill, blocking, compaction, testing and equipment required to complete these Bid Items. No additional compensation will be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill materials, or for repair of any trench settlement.

#### BID ITEM 10 - 20" DIP (CL 350) FLEX RING JOINT (AERIAL CROSSING) FORCE MAIN

Payment for all work included under this Bid Item shall be made at the applicable Contract lump sum bid for installing the Aerial Crossing Force Main with DIP CL 350 RJ Flex Ring Pipe at the location shown on the Contract Drawings.

Payment shall represent full compensation for all labor, equipment and materials for removal of existing DI pipe, furnish and install RJ ductile iron CL 350 Flex Ring pipe, replacement of structural steel support members as shown on the Contract Drawings and as necessary to match and restore existing supports (to original dimensions, steel type, and welds), surface preparation and painting of pipe and supports with epoxy coatings suitable for marine environment and submersion (submit color for approval), Protecto 401 epoxy pipe lining, testing, all fittings, blocking, and restraints. The aerial crossing pipe segment shall be tested separately from other force main piping. Also included shall be all other appurtenances and incidentals required or specified to complete the aerial pipe crossing and support system in accordance with FDEP and Army Corps requirements. All costs to protect the existing pedestrian bridge, foundations, pipe supports, and adjacent improvements during construction shall also be included in this pay item. Contractor shall not remove, replace, or modify any part of existing steel supports until site meeting held with Engineer and Project Representative to review and confirm original member dimensions, steel type, and welds. Payment shall be made in accordance with the approved Schedule of Values.

The work shall include, but is not limited to, all connectors, restraints, fittings, adapters, gaskets, removal and installation of thrust blocks, temporary thrust blocks, plugs, caps, wastewater pumping and disposal, and all related and necessary materials, tasks and equipment required or associated with this item.

#### BID ITEM 11 - PVC (C900-16) DR 18 (DIRECT BURY) FORCE MAINS

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per linear foot for furnishing and installing the listed diameter DR 18 PVC force main (AWWA C900-16, CL-150 or C-905, CL-235) pipe as shown on the Contract Drawings or as

directed by the Project Representative. Measurement and Payment shall be made for the actual length of the listed diameter pipe furnished and installed and will represent full compensation for all labor, materials, equipment, excavation removal and disposal off site of all waste, including rock, 10 gage copper tracer wire, dewatering, bedding, backfill, compaction, pigging, coordination with utility agencies, and testing required to complete these Bid Items. No additional compensation shall be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill material, or for repair of any trench settlement. The cost of all restraints and thrust blocking shall be included except for restraints specifically listed on the Bid Form. The cost of concrete for thrust blocks is not included in the miscellaneous concrete pay item.

#### BID ITEM 12 - HDPE C-906 DR 11 (DIRECTIONAL DRILL) FORCE MAIN

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per linear foot for furnishing and installing the listed diameter HDPE force main (AWWA C-906) DR 11 pipe as shown on the Contract Drawings or as directed by the Project Representative. Measurement and Payment shall be made for the actual length of the listed diameter pipe furnished and installed and will represent full compensation for all labor, materials, equipment, excavation removal and disposal off site of all waste, including rock and asphalt pavement, directional drilling, dewatering, bedding, backfill, compaction, #10 copper clad high strength steel tracing wire, pigging, cleanup of drilling mud spills, repair and restoration of any damage due to frackout, and testing including pulling a mandrel thru the force main to prove no reduction in diameter, required to complete this Bid Item. No additional compensation shall be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill material, or for repair of any trench settlement at entry or exit pits or any other location.

#### BID ITEM 13 - HDPE MJ PIPE ADAPTERS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per each adapter of the specified size required to connect the HDPE piping to other types of pipe as shown on the Contract Drawings or where directed by the Project Representative. Measurement will be based on each complete adapter furnished and installed. Payment shall represent full compensation for all labor, material, equipment, excavation, including rock, bedding, backfill, compaction, and testing required to complete this Bid Item. The work shall include, but is not limited to, all bolts, nuts, washers, gaskets, stainless steel inserts, hardware, and all other related and necessary materials, work and equipment required or associated with this item.

#### BID ITEMS 14 - DUCTILE IRON FITTINGS, WASTEWATER

Payment for all work included in these Bid Items will be made at the applicable Contract unit price bid per each fitting for furnishing and installing ductile iron fittings (epoxy lined) as shown on the Contract Drawings, as listed on the bid form by size and type, and where directed by the Project Representative. Payment will be made for each fitting installed and will represent full compensation for all labor, material, equipment, excavation, including rock, bedding, backfill, compaction, and testing required to complete these Bid Items.

#### **BID ITEM 15 - VALVES**

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per each valve for furnishing and installing the listed diameter valve per the current County standards, box, cover and concrete pad as shown on the Contract Drawings and listed

on the Bid Form. Payment shall represent full compensation for all labor, material, equipment, excavation including rock as necessary, bedding, backfill, compaction, testing and disinfection required to complete these Bid Items.

#### BID ITEM 16 - CONNECT TO EXISTING FORCE MAIN

Payment for all work included under this Bid Item shall be made at the applicable Contract unit price bid per each permanent connection for connecting the proposed force main to the existing force mains at the locations shown on the Contract Drawings.

Payment shall represent full compensation for all labor, materials, equipment, excavation, including rock as necessary, dewatering, removal of existing pipe and fittings and thrust blocks as necessary, bedding, backfill, compaction, sheeting, testing, and handling, pumping and disposal of sewage. Also included shall be all other appurtenances, coordination, and incidentals required or specified to complete the connections except as specifically included in other pay items, and asphalt road restoration. No additional compensation will be made by the Owner for excavation performed below the bottom of the pipe, for rock removal or for repair of any trench settlement.

This pay item includes but is not limited to temporary bypass piping as necessary, line stops as necessary, tapping sleeves and valves, provision and operation of tanker trucks (minimum of one truck required), all necessary fittings, connectors, plugs, thrust blocks, restraints, adapters, gaskets, caps, and all labor, equipment, and materials necessary to divert wastewater flows to allow each connection to be performed and completed.

#### **BID ITEM 17 - PIPE RESTRAINTS**

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per each restraint of the size and type specified in the Bid Form required to restrain the piping shown on the Contract Drawings. Measurement will be based on each complete restraint furnished and installed except where specifically included in another pay item. Payment shall represent full compensation for all labor, material, equipment, excavation, including rock, bedding, backfill, compaction, and testing required to complete this Bid Item. This Bid Item includes the installation of restraints (EBAA Iron or equal) used in restraining HDPE, PVC, and ductile iron pipe of the specified type acceptably furnished and installed as shown on the Drawings or where directed by the Project Representative. The work shall include, but is not limited to, all bolts, nuts, washers, gaskets, and all other related and necessary materials, work and equipment required or associated with this item. The costs for stainless steel nuts, bolts, and rods for pipe restraints at the lift station 12A area as indicated on the Contract Drawings at Bay Drive shall be included in this pay item. Restrained joints which are contained in RJ pipe are specifically excluded from this pay item.

#### BID ITEM 18 - MANHOLE for ARV ASSEMBLY, 6 FT DIAMETER

Payment for work under this Bid Item shall be made at the Contract unit price bid for each manhole for air release valve assembly including 6ft diameter manhole furnished and installed complete including frame and cover, fittings, adapters, all protective coatings, sealing of lift holes, rainwater protector, and other components as shown on the Contract Drawings.

Measurement shall be for each manhole installed complete and accepted. Excavation, including rock as necessary, bedding, backfill, dewatering, sheeting, concrete, testing and all other items necessary for a completed manhole in accordance with the Contract Documents

shall be included. Payment shall represent full compensation for all labor, materials, equipment and incidental items necessary to complete each manhole, ready for operation and approval by the Engineer and Owner.

#### BID ITEM 19 - AIR RELEASE VALVE ASSEMBLY, BELOW GROUND

Payment for work under this Bid Item shall be made at the Contract unit price bid for each below ground air release valve assembly furnished and installed complete including, fittings, adapters, restraints, valves, all protective coatings, stainless steel saddle, and other components as shown on the Contract Drawings.

Measurement shall be for each ARV assembly installed complete and accepted. Excavation, including rock as necessary, bedding, backfill, dewatering, sheeting, concrete, tracer wire, testing and all other items necessary for a completed system in accordance with the Contract Documents shall be included. Payment shall represent full compensation for all labor, materials, equipment and incidental items necessary to complete each ARV, ready for operation and approval by the Engineer and Owner.

#### BID ITEM 20 - AIR RELEASE VALVE ASSEMBLY, ABOVE GROUND

Payment for work under this Bid Item shall be made at the Contract unit price bid for each above ground air release valve assembly furnished and installed complete including fiberglass enclosure, fittings, adapters, restraints, valves, stainless steel saddle, and other components as shown on the Contract Drawings.

Measurement shall be for each ARV assembly installed complete and accepted. Excavation, including rock as necessary, bedding, backfill, dewatering, sheeting, concrete, tracer wire, testing and all other items necessary for a completed system in accordance with the Contract Documents shall be included. Payment shall represent full compensation for all labor, materials, equipment and incidental items necessary to complete each ARV, ready for operation and approval by the Engineer and Owner.

#### **BID ITEM 21 - LINE STOP**

Payment for all work included in this Bid Item shall be at the applicable Contract unit price bid for each line stop of the size specified on the Bid Form and as shown on the Contract Drawings including all analysis, preparatory work, coordination with County staff, excavation, backfill, compaction, thrust restraint facilities, labor, materials, installation, equipment, pumping, removal of line stop, and repair of pipe, associated with each line stop at locations as shown on the Contract Drawings. Permanent saddles and sleeves shall be stainless steel with stainless steel bolts and hardware. The method, schedule, and procedures, including emergency spill plan for the line stop shall be provided to the Engineer of Record as a submittal and is subject to the approval of the County. The line stops shall not be commenced until the Contractor obtains approval of the full Submittal from the County. Payment shall represent full compensation for all labor, materials, and equipment required to complete this Bid Item. The deadman thrust blocks shall be paid under a separate bid item.

#### BID ITEM 22 - TEMPORARY FORCE MAIN BYPASS AT CANAL

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum price bid for providing temporary force main bypass facilities at the Canal (Bridge) as shown on the Drawings. This pay item includes coordination with County staff, 18" HDPE bypass pipe, two 20 x18" tapping sleeves and 18" valves, pumping and disposal of wastewater as

necessary, provision and operation of tanker trucks (minimum of one truck required) all necessary fittings, connections, plugs, thrust blocks, restraints, and all labor, equipment, and materials necessary to divert and maintain wastewater flows to allow construction to be performed and completed. Prior to the tapping operation, the Contractor shall contact the County as to the date and time of the proposed work with at least 5 days notice. All tapping operations larger than 12 inches in diameter shall be performed by the Contractor with the County's Representative present. Also included is removal of bypass piping after the bypass is no longer required. All necessary new line stops shall be paid for under a separate bid item. The deadman thrust blocks shall be paid under a separate bid item.

#### BID ITEM 23 - TEMPORARY FORCE MAIN BYPASS AT 60TH AVE

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum price bid for providing temporary force main bypass facilities at 60th Avenue as shown on the Drawings. This pay item includes coordination with County staff, 18" HDPE bypass pipe, 30" x18" and 20" x18" tapping sleeves and 18" valves, pumping and disposal of wastewater as necessary, provision and operation of tanker trucks (minimum of one truck required), all necessary fittings, connections, plugs, **thrust blocks**, restraints, and all labor, equipment, and materials necessary to divert and maintain wastewater flows to allow construction to be performed and completed. The tapping saddles and sleeves for this bypass (including line stops) are permanent and shall be stainless steel with stainless steel nuts and bolts. Prior to the tapping operation, the Contractor will contact the County as to the date and time of the proposed work with at least 7 days notice. All tapping operations larger than 12 inches in diameter shall be performed by the Contractor with the County's Representative present. Also included is removal of bypass piping after the bypass is no longer required. All necessary new line stops shall be paid for under a separate bid item. The deadman thrust blocks shall be paid under a separate bid item.

#### BID ITEM 24 - MASTER LIFT STATION TEMPORARY BYPASS

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum price bid for providing temporary lift station bypass facilities as necessary for construction, including the handling & maintaining of wastewater flows during construction. This pay item includes coordination with County staff, bypass pipe, pumping and disposal of wastewater (as needed), provision and operation of tanker trucks (minimum of one truck), temporary fittings, re-instating an existing 20" line stop, connections, plugs, thrust blocks, restraints, and all other labor, equipment, and materials necessary to divert wastewater flows to allow construction to be performed and completed, except as specifically included in other pay items. Also included is removal of bypass piping after the bypass is no longer required. All necessary new line stops shall be paid for under a separate bid item. The deadman thrust blocks shall be paid under a separate bid item.

#### BID ITEM 25 - GROUT ABANDONED PIPES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per cubic yard for grouting the existing force main and other pipes to be abandoned as required to complete the work, as shown on the Contract Drawings, and as directed by the Project Representative. The work includes plugging and grouting the existing force mains and piping to be abandoned with cement as required by the County. Measurement and Payment shall be made when completed and will represent full compensation for all labor, materials, equipment, cement grout, excavation including rock, dewatering, pumping and wastewater disposal, backfill, compaction, disposal of all waste, incidentals, and fittings required to complete this Bid Item. No additional compensation shall be made for excavation below the

bottom of the pipe, for rock removal or bedding and backfill material, or for repair of any settlement.

#### BID ITEM 26 - EROSION AND SEDIMENT CONTROL

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum price bid for furnishing, installing and maintaining erosion and sediment control facilities as required by County and State regulations and as shown on the Contract Drawings or as directed by the Project Representative, excluding silt fence and inlet protection. Payment shall represent full compensation for all labor, materials, equipment, permitting and related costs, documents and compliance, and incidentals necessary to complete the work. Measurement shall be according to the approved Schedule of Values submitted by the Contractor.

#### BID ITEM 27 - SILT FENCE

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per linear foot for furnishing, installing and maintaining silt fence. This Bid Item includes the construction of staked silt fence as specified acceptably furnished and installed as shown on the Drawings or where directed by the Project Representative. Measurement will be according to the number of linear feet of staked silt fence installed and accepted.

#### **BID ITEM 28 - INLET PROTECTION**

This Bid Item includes all labor, equipment, and materials for the construction and maintenance of all inlet protection devices for erosion and sediment control as shown on the Contract Drawings, acceptably furnished and installed where directed by the Project Representative and as required by State Regulations. Measurement will be per each inlet protected.

Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid for protection of each inlet.

#### BID ITEM 29 - PERFORMANCE TURF (BAHIA SOD)

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per square yard for furnishing and installing sod as shown on the Contract Drawings and as directed by the Project Representative. Measurement shall be per square yard of sod installed and accepted. Payment shall represent full compensation for all labor, materials, equipment, watering, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

#### BID ITEM 30 - ASPHALT ROAD RESTORATION (BASE)

Payment for all work included under this Bid Item will be made at the Contract unit price bid per square yard of asphalt road restoration (base), for furnishing, installing and testing the road restoration base section of the thickness and type specified in the Bid Form (8" or 10" thick FDOT certified crushed concrete, LBR 150) in accordance with FDOT Standard Specifications for Road and Bridge Construction and Manatee County Public Works Standards. Measurement will be based on the actual number of square yards of base installed, tested, complete and approved. Measurement will be as shown on the Contract Plans or where directed by the Project Representative, but not greater than the width of the existing roadway prior to construction. Payment will include complete restoration of the roadway section up to the bottom of the asphalt pavement in accordance with the applicable details on the Contract

Drawings, including the necessary base, all in accordance with these Specifications. No payment for restoration of a private driveway within or outside the right-of-way shall be made under this Bid Item. Payment shall be full compensation for all labor, equipment, and materials, including removal and disposal of all excess soil, spoil and waste offsite to create room for the new road base, and all items and incidentals necessary to complete the road base in accordance with the requirements of Manatee County ready for approval and acceptance by the Engineer/Owner.

#### BID ITEM 31 - ASPHALT ROAD RESTORATION (RESURFACE) 2" S-III

Payment for all work included under this Bid Item will be made at the Contract unit price bid per square yard of asphalt road resurfacing, for furnishing, installing and testing all asphalt pavement required to restore the pavement section in accordance with the Specifications and Contract Drawings, excluding Overlay which is paid under a separate item. Finished grade of asphalt roadway shall match the existing grade prior to construction, unless approved otherwise by the Engineer or Project Representative. Measurement will be based on the actual number of square yards of asphalt road resurfacing installed, tested, complete and approved. The measurement will be as shown on the Contract Plans or where directed by the Project Representative, but not greater than the width of the existing roadway prior to construction. Payment will include complete restoration of the roadway section in accordance with the applicable details on the Contract Drawings, including not less than 2 inches of FDOT Type S-III asphaltic concrete in accordance with these Specifications. No payment for restoration of a private driveway within or outside the right-of-way shall be made under this Bid Item. Payment shall be full compensation for all labor, equipment, and materials, including sawcutting, removal of existing pavement, disposal of all waste offsite, and all items and incidentals necessary to complete the road restoration in accordance with the requirements of Manatee County ready for approval and acceptance by the Engineer/Owner.

#### BID ITEM 32 - ASPHALT ROAD RESTORATION (MILL)

Payment for all work included under this Bid Item will be made at the Contract unit price bid per square yard of asphalt milling, in accordance with these Specifications and the Contract Drawings. The entire area to be overlaid shall be milled. Measurement will be based on the actual number of square yards of asphalt milled, complete and approved. The measurement will be as shown on the Contract Plans or where directed by the Project Representative, but not greater than the width of the existing roadway prior to construction. Payment shall include milling of the roadway section in accordance with the applicable details in the Contract Drawings and disposal of all waste offsite. Payment shall include all items and incidentals necessary to complete the asphalt milling in accordance with the requirements of Manatee County ready for approval and acceptance by the Engineer/Owner.

#### BID ITEM 33 - ASPHALT ROAD RESTORATION (OVERLAY) 1.5" S-III

Payment for all work included under this Bid Item will be made at the Contract unit price bid per square yard of asphalt Overlay, for furnishing, installing and testing the asphalt road restoration overlay in accordance with these Specifications. Finished grade of all asphalt roadway shall match the existing grade prior to construction unless approved otherwise by the Engineer or Project Representative. Measurement will be based on the actual number of square yards of overlay installed, tested, complete and approved. The measurement will be as shown on the Contract Plans or where directed by the Project Representative, but not greater than the width of the existing roadway prior to construction. Payment shall include not less than **1.5 inches** of FDOT Type S- III asphaltic concrete including tack coat, and shall include all items and incidentals necessary to complete the road restoration in accordance with the

requirements of Manatee County ready for approval and acceptance by the Engineer/Owner.

#### BID ITEM 34 - STABILIZED SUB BASE (12" LBR 60)

Payment for all work included under this Bid Item will be made at the Contract unit price bid per square yard for furnishing, installing, preparing and testing the stabilized sub base in accordance with FDOT Standard Specifications for Road and Bridge Construction and Manatee County Public Works Standards. Measurement will be based on the actual number of square yards of stabilized sub base installed, tested, complete and approved. Stabilized sub base shall be installed on Florida Boulevard as directed by the Project Representative, but not greater than the width of the existing roadway prior to construction. Payment shall represent full compensation for all labor, equipment and materials to install not less than 12 inches of stabilized sub base to meet LBR 60, and shall include removal and disposal offsite of excess soil and materials, and all items and incidentals necessary to complete the sub base in accordance with the requirements of Manatee County ready for approval and acceptance by the Engineer/Owner.

#### BID ITEM 35 - CONCRETE CURB & GUTTER

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per linear foot for furnishing and installing curb & gutter as listed on the Bid Form and as shown on the Drawings or where directed by the Project Representative. Measurement will be per actual number of linear feet of curb and gutter installed. Payment shall represent full compensation for installing curb & gutter including all labor, material and equipment for compacting subgrade, base, forming, furnishing, placing the concrete, disposal of all waste, finishing as specified, and all incidentals necessary for completion of this Bid Item, ready for approval and acceptance by the County. Replacement curb shall match existing curb except where specified otherwise.

#### BID ITEM 36 - REMOVE CURB & GUTTER

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per linear foot for removing and disposing offsite all curb & gutter as shown on the Drawings or where directed by the Project Representative. Measurement will be per actual number of linear feet of curb and gutter removed. Payment shall represent full compensation for all labor, materials, and equipment for carefully removing and disposing of all curb and gutter as specified, and all incidentals and associated tasks necessary for completion of this Bid Item.

#### **BID ITEM 37 - DRIVEWAY RESTORATION, SHELL 6" THICK**

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per square yard of shell driveway restoration as listed on the Bid Form. Measurement of driveway restoration will be per the actual number of square yards replaced. Payment shall represent full compensation for all labor, materials and equipment for removing and disposing existing material to make room for the shell, compacting subgrade, furnishing and installing the shell, compaction, testing, and all incidentals necessary to complete the driveway restoration as shown on the Contract Drawings and included in the Specifications, all ready for approval and acceptance by the County.

#### BID ITEM 38 - TRAFFIC CONTROL, SIGNING & BARRICADES TO FDOT STDS.

Payment for all work included in this Bid Item will be made at the applicable Contract unit price

bid per Day for Traffic Control, Signing, and Barricades to FDOT Standards. This item includes but is not limited to furnishing, installing, and maintaining all vehicular and pedestrian traffic control, corridors, detours, temporary signing, MOT devices, barricades, flaggers, coordination with County staff and residents, temporary concrete safety barriers (FDOT type K Index 415) with end treatment as required by FDOT standards during trench excavation, restoration of signal detector loops & leads, removal of existing thermoplastic markings and striping as required, temporary lighting, temporary striping and markings, temporary signal re-timing and adjustments, preparation of MOT plans and Detour Plans by an individual with advanced FDOT certification, all as required by FDOT standards and as shown on the Drawings or where directed by the Project Representative. Measurement shall be according to the Days that traffic control is required, in place, and maintained to FDOT and County standards. Payment shall represent full compensation for all traffic control, and all associated tasks, including but not limited to all labor, materials and equipment and all incidentals necessary for completion of this Bid Item. Refer to the Drawings and Specs section 01030 Special Project Procedures for additional project-specific traffic control requirements. The County will pay for a minimum of 200 days of this item in the event that MOT is needed for less than the Bid Form quantity of days, however any days over the bid quantity will only be paid if the Engineer approves the additional days due to circumstances beyond the Contractor's control.

#### BID ITEM 39 - THERMOPLASTIC STRIPING.

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per Gross Mile or Net Mile to replace existing thermoplastic striping of the types indicated on the Bid Form, to FDOT standards, as shown on the Drawings or where directed by the Project Representative. Measurement and Payment shall be according to the Gross Mile or Net Mile as shown on the Bid Form. Payment shall represent full compensation for replacement of existing thermoplastic striping, including but not limited to all labor, material and equipment and all incidentals necessary for completion of this Bid Item, ready for approval and acceptance by the Engineer/Owner..

#### BID ITEM 40 - THERMOPLASTIC MARKINGS AND RPM's

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum price bid to replace all existing road markings (with thermoplastic) and RPM's to FDOT standards where disturbed as necessary to complete all construction as shown on the Drawings or where directed by the Project Representative. Measurement shall be according to the approved Schedule of Values. Payment shall represent full compensation for replacement of existing road markings (with thermoplastic) and RPM's, disturbed as necessary to complete construction, including but not limited to all labor, material and equipment and all incidentals necessary for completion of this Bid Item, ready for approval and acceptance by the Engineer/Owner. Prior to starting construction, the Contractor shall prepare a list of the location and type of all existing road markings and provide it to the Project Representative for approval.

#### BID ITEM 41 - REMOVE & REPLACE CHAIN LINK FENCE

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per linear foot for removing and replacing the existing chain link fence as shown on the Drawings to match the existing type and size of fence, as necessary for construction. This pay item includes coordination with fence owners, and all other labor, equipment, and materials necessary to allow construction to be performed and completed.

#### BID ITEM 42 - MISCELLANEOUS CONCRETE

Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid per cubic yard of concrete as shown on the Bid Form for furnishing, placing and installing the miscellaneous concrete, measured in place, within the lines and grades as shown on the Contract Drawings and as directed by the Project Representative. All concrete placed outside these lines and grades to fill unauthorized excavation and all concrete for replacing defective work shall be at the expense of the Contractor. Concrete specifically included under any other Bid Item will not be measured or paid for under this Bid Item.

Measurement for miscellaneous concrete shall be per actual cubic yard of concrete furnished, placed and installed as shown on the Contract Drawings or as ordered by the County in writing. This Bid Item includes encasements, non-reinforced pipe cradles, and like work. Payment shall represent full compensation for all labor, materials, and equipment for mixing, placing, forming and curing of the concrete and all incidentals necessary to complete the concrete work, ready for approval and acceptance by the County.

#### **BID ITEM 43 - DEADMAN THRUST BLOCKS**

Measurement and Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid per each deadman thrust block furnished and installed as shown on the Bid Form and as shown on the Contract Drawings or as directed by the Project Representative. Concrete specifically included under any other Bid Item will not be measured or paid for under this Bid Item. The Contractor shall provide detailed design plans and calculations for deadman thrust blocks sealed by a licensed Florida Professional Engineer to the County for review and approval. The cost for the design plans and calculations shall be included in the cost of each thrust block.

Payment shall represent full compensation for all labor, materials, and equipment for excavation, backfill, compaction, shoring, dewatering, furnishing, mixing, placing, forming, reinforcing and curing of the concrete and all incidentals necessary to complete the deadman thrust blocks per the provided design.

#### SIDEWALK ITEMS

#### BID ITEM 44 - RELOCATE SEWER CLEANOUT EA

This item includes the relocation of a sewer cleanout from within the work area to an area outside the travel path as directed by the field inspector. Work and materials shall include the cut out removal of the existing cleanout and repair of same with SCH 40 PVC or similar existing materials as determined by the field inspector. Couplings may be rigid or flexible banded as determined by the field inspector. New / relocated cleanouts shall be in accordance with Manatee County Utilities Standards using new materials including new PVC cleanout tees with threaded caps and new cast iron ring and cover labeled appropriately at finish grade.

#### BID ITEM 45 - ADJUST MANHOLE LID EA

Cut down or extend existing manholes, catch basins, inlets, valve boxes, etc., within the limits of the proposed work, to meet the finished grade of the proposed pavement, or if outside of the proposed pavement area, to the finished grade designated in the Plans for such structures. Use materials and construction methods which meet the requirements

listed in the Manatee County Public Works Standards. The Contractor may extend manholes needing to be raised using adjustable extension rings of the type which do not require the removal of the existing manhole frame. Use an extension device that provides positive locking action and permits adjustment in height as well as diameter and meets the approval of the Engineer. Payment shall include all incidental work necessary for the completed assembly.

#### BID ITEM 46 - FLUME SIDEWALK, FDOT INDEX 282 MODIFIED LS

This item includes the construction of an under sidewalk drainage flume. The proposed flume shall be field adjusted to provide positive drainage from the roadway edge to the back of sidewalk and include necessary field modifications to match existing condition at the flume outlet. Curbing along the roadway edge will be paid separately. Hand rail will be paid separately. All work for this item shall be in accordance with sections 02220, Division 3 and other sections as appropriate.

#### BID ITEM 47 - REMOVE SIDEWALK/DRIVEWAYS SY

This item includes all work necessary for the removal and disposal of concrete (flat, structure and curbs) necessary for the proposed work. The depth of existing concrete may be variable and depths up to 18" thick are included in this pay item. Thicker masses of concrete must be brought to the Manatee County inspector's attention for further direction in the event additional compensation is requested for removal of same. Payment shall include all incidental work necessary for the complete removal and disposal.

# BID ITEM 48 - PREPARATION FOR SIDEWALK (GRADE SHAPE INCL. 6" CUT OR FILL) SY

This item supplements and is in addition to standard clearing and grubbing specifically as it relates to the construction of sidewalks, driveways and other similar flat concrete work. Subsequent to standard clearing and grubbing this item addresses the necessary cut and fill to bring the proposed flat work to required grades including the immediate 6" of cut excavation or fill placement. All fill shall be properly compacted and tested in accordance with section 02220 and other sections as appropriate.

#### BID ITEM 49 - SIDEWALK, CONCRETE 8' WIDE 4" THICK SY

This item shall include the construction of 4" thick concrete in accordance with Manatee County Public Works standards.

#### BID ITEM 50 - DRIVEWAY, CONCRETE 6" THICK (INCL. PED. ADA RAMPS) SY

This item shall include the construction of 6" thick concrete in accordance with Manatee County Public Works standards.

#### BID ITEM 51 - DETECTABLE WARNINGS SF

All work shall be in accordance with Manatee County Public Works Standards and 2017 FDOT specification 527.

#### BID ITEM 52 - HANDRAIL, FDOT INDEX 850 LF

All work shall be in accordance with Manatee County Public Works Standards and 2017

FDOT specification 515.

#### BID ITEM 53 - TREE REMOVAL EA

This item supplements and is in addition to standard clearing and grubbing specifically as it relates to the removal and disposal of trees greater than 4" DBH for the construction of sidewalks, driveways and other similar flat concrete work. This item addresses the necessary removal of trees of the size indicated in the bid item name including all tree portions above grade and the root ball portion within work area. Also included is necessary cut and fill to remove the tree and to restore the surface to required grades. All fill shall be properly compacted and tested in accordance with section 02220 and other sections as appropriate.

#### BID ITEM 54 - SERVICE, RELOCATE EA

This Bid Item includes the relocation of potable or reclaim water services including, but not limited to, service line, new meter box (lockable if located in sidewalk), new backflow prevention assembly & vacuum breakers (paid under separate bid item), concrete pads and all necessary appurtenances of the specified acceptably furnished and installed as shown on the Drawings or where directed by the Project Representative.

The work includes removal and disposal of the existing meter box and appurtenances, connection of the new water service to the existing water service line, and installation of new service line as required on private property from the existing box to the meter box installed by the Contractor. The Project Representative may require a plumber licensed in Manatee County to install the portions of the work on private property, including backflow prevention assembly, and vacuum breakers (water services only) on all exterior hose bibbs. Measurement will be according to the type of services, single or double.

Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid according to the each type of services. The work shall include, but is not limited to; service piping, excavation, directional drilling, restoration, compaction, casing pipe, meter box, tapping saddles, corporation stops, curb stops, curb or pavement location disks, 10 gauge copper clad steel tracer wire, complete meter assembly & yoke, all necessary fittings, all service connections, disinfection, coordination with service customers, removal and reinstallation of meters, and all other related and necessary materials, work and equipment associated with this item.

#### BID ITEM 55 - MAILBOX, F&I SINGLE EA

This item shall include all work necessary for the removal of existing mail boxes and the installation of a new mail box with support. All new mail boxes shall be standard aluminum or galvanized steel, white in color and include retro reflective address numbers, 2"-3" in height on both sides of the mail box (Gibraltar Mailboxes Elite Medium Galvanized Steel Post-Mount Mailbox or similar). Supports shall be made of 4"x4" pressure treated lumber extending approximately 4" above the box and flush with the front of the box assembled in accordance with the box manufactures recommendations. Relocation of existing mailboxes will not be paid separately but considered incidental to the related work.

#### **BID ITEM 56- MOBILIZATION**

Measurement and payment for this Bid Item shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, all required

insurance for the project and the Contractor's mobilization and demobilization costs as shown in the Bid Form. Mobilization includes, but it not limited to: preparation and movement of personnel, equipment, supplies and incidentals such as safety and sanitary supplies/ facilities

Payment for mobilization shall not exceed 10 percent (10%) of the total Contract cost unless the Contractor can prove to the County that his actual mobilization cost exceeds 10 percent (10%).

Partial payments for this Bid Item will be made in accordance with the following schedule:

Percent of Original Contract Amount:	Percent Allowable Payment of Mobilization/Demobilization Bid Item Price:
5	25
10	35
25	45
50	50
75	75
100	100

These payments will be subject to the standard retainage provided in the Contract. Payment of the retainage will be made after completion of the work and demobilization.

#### **BID ITEM 57 - MISCELLANEOUS WORK AND CLEANUP**

Payment for all work included under this Bid Item shall be made at the Contract lump sum price bid listed in the Bid Form for any other miscellaneous work not specifically included for payment under other Bid Items obviously necessary to complete the Contract. Partial payments will be based on the breakdown of the Bid Item in accordance with the approved Schedule of Values submitted by the Contractor and approved by the County. Payment shall also include, but is not limited to, full compensation for project photographs, as-built record drawings, project signs, rubbish and spoil removal, repair, replacement or relocation of all signs, walls, private irrigation systems and related items and any and all other items required to complete the project in accordance with Contract Documents.

#### **BID ITEM 58 - CONTRACT CONTINGENCY WORK**

Payment for all work under this Bid Item shall be made only at the County's discretion. This Bid Item shall not exceed 10% of the Bidders Total Base Bid. The Bidder shall calculate and enter a dollar amount for this Bid Item.

#### PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION (NOT USED)

#### END OF SECTION