

TOWN OF SOUTHWEST RANCHES, FLORIDA
Southwest Ranches Drainage Project
IFB No. 19-002
Thursday, March 28, 2019

ADDENDUM 1

1. **Question:** Is there any soil contamination?

Answer: Not that we are aware of.

2. **Question:** What kind of license do you require?

Answer: Broward County Underground Utility & Excavation Contractor—Class "1A-A" or a General Contractor License

3. **Question:** Do you have an engineer's estimate / budget for this project?

Answer: See the attached Engineer's estimates.



PRELIMINARY ESTIMATE OF PROBABLE CONSTRUCTION COST

Project: Town of Southwest Ranches Drainage Improvements - FDEP Funded (Agreement #LP06012)

Work Element 1

Drainage Improvements for SW 136th Avenue north of SW 55th Street

KEITH Project No.: 08711.09

Client: Town of Southwest Ranches

Date: 6/12/2018

Type of Estimate:

1. Order of Magnitude (+30% - 50%)
2. Budget Estimate (+20% - 30%)
3. <100% Construction Plans (+10% - 20%)
4. 100% Construction Plans (+5% - 10%)

	- No detail, pre-schematic
	- Post schematic approval
X	- Preliminary plans / Not Permitted
	- Construction plans

Source	Line & Item No.	Item Description	Unit Price	Quantity	Units	Amount
SW 55th St	6	INLETS, DITCH BOT, TYPE C, <10'	\$2,573.00	2	EA	\$5,146.00
FDOT Average	430173124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24"S/CD	\$90.00	50	LF	\$4,500.00
FDOT Average	0570 1 2	PERFORMANCE TURF, SOD	\$2.13	7	SY	\$14.91
FDOT Average	0104 11	FLOATING TURBIDITY BARRIER	\$9.70	11	LF	\$106.70
FDOT Average	0104 18	INLET PROTECTION SYSTEM	\$99.35	2	EA	\$198.70
SW 55th St	12	PAVEMENT RESTORATION	\$39.82	15	SY	\$597.30
FDOT Average	0430 94 1	DESILTING PIPE, 0 - 24"	\$7.78	36	LF	\$280.08
FDOT Average	0530 1	RIP RAP SAND / CEMENT	\$540.95	4.92	CY	\$2,661.47
		Subtotal				\$13,505.16
		Mobilization (9%)				\$1,215.46
		Maintenance of Traffic (7%)				\$945.36
		Construction Testing & Misc (2%)				\$270.10
		Clearing and Grubbing (3%)				\$405.15
		Contingency (15%)				\$2,025.77
		Total Cost				\$18,367.02

*Estimate based on bid for Town of SouthWest Ranches winning bid for Southwest 55th street revised October-31-2016

* Estimate based on FDOT Item Average Unit Cost from 2017/10/01 to 2018/03/31



PRELIMINARY ESTIMATE OF PROBABLE CONSTRUCTION COST

Project: Town of Southwest Ranches Drainage Improvements - FDEP Funded (Agreement #LP06012)

Work Element 3

Drainage Improvements for SW 54th Place west of SW 188th Avenue

KEITH Project No.: 08711.09

Client: Town of Southwest Ranches

Date: 6/12/2018

Type of Estimate:

1. Order of Magnitude (+30% - 50%)
2. Budget Estimate (+20% - 30%)
3. <100% Construction Plans (+10% - 20%)
4. 100% Construction Plans (+5% - 10%)

<input type="checkbox"/>	- No detail, pre-schematic
<input type="checkbox"/>	- Post schematic approval
<input checked="" type="checkbox"/>	- Preliminary plans / Not Permitted
<input type="checkbox"/>	- Construction plans

Source	Line & Item No.	Item Description	Unit Price	Quantity	Units	Amount
SW 55th St	6	INLETS, DITCH BOT, TYPE C, <10'	\$2,572.69	4	EA	\$10,290.76
FDOT Average	0425 1541	INLETS, DITCH BOT, TYPE D, <10'	\$3,982.92	1	EA	\$3,982.92
FDOT Average	430175118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18"/S/CD	\$62.75	182	LF	\$11,420.50
FDOT Average	430175124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24"/S/CD	\$69.92	42	LF	\$2,936.64
FDOT Average	0400 1 2	CONC CLASS I, ENDWALLS	\$1,116.48	3.83	CY	\$4,276.12
FDOT Average	0570 1 2	PERFORMANCE TURF, SOD	\$2.60	115	SY	\$299.00
FDOT Average	0104 11	FLOATING TURBIDITY BARRIER	\$9.70	30	LF	\$291.00
FDOT Average	0104 12	STAKED TURBIDITY BARRIER	\$4.88	30	LF	\$146.40
FDOT Average	0104 18	INLET PROTECTION SYSTEM	\$99.35	5	EA	\$496.75
KEITH Civil		Minimum for Thermoplastic	\$1,500.00	1	LS	\$1,500.00
FDOT Average	0102912 2	PAVT MARKING REMOVABLE TAPE, YELLOW, SOLID	\$1.53	25	LF	\$38.25
FDOT Average	0350 3 5	PLAIN CEMENT CONC PAVT, 8"	\$89.18	34.7	SY	\$3,094.55
Keith Landscape		TREE PROTECTION FENCING	\$4.50	1005	LF	\$4,522.50
SW 55th St	11	CONSTRUCT ROADSIDE SWALE	\$14.86	114.5	LF	\$1,701.47
SW 55th St	12	PAVEMENT RESTORATION	\$39.82	14.5	SY	\$577.39
		Subtotal				\$45,574.24
		Mobilization (9%)				\$4,101.68
		Maintenance of Traffic (7%)				\$3,190.20
		Construction Testing & Misc (2%)				\$911.48
		Clearing and Grubbing (3%)				\$1,367.23
		Contingency (15%)				\$6,836.14
		Total Cost				\$61,980.97

*Estimate based on bid for Town of SouthWest Ranches winning bid for Southwest 55th street revised October-31-2016

* Estimate based on FDOT Item Average Unit Cost from 2017/10/01 to 2018/03/31

* Estimate based on Keith and Associates, Inc (Keith) Civil department historic project Data



PRELIMINARY ESTIMATE OF PROBABLE CONSTRUCTION COST

Project: Town of Southwest Ranches Drainage Improvements - FDEP Funded (Agreement #LP06012)

Work Element 4

Drainage Improvements for SW 178th Avenue at SW 46th Street

KEITH Project No.: 08711.09

Client: Town of Southwest Ranches

Date: 6/12/2018

Type of Estimate:

1. Order of Magnitude (+30% - 50%)
2. Budget Estimate (+20% - 30%)
3. <100% Construction Plans (+10% - 20%)
4. 100% Construction Plans (+5% - 10%)

	- No detail, pre-schematic
	- Post schematic approval
X	- Preliminary plans / Not Permitted
	- Construction plans

Source	Line & Item No.	Item Description	Unit Price	Quantity	Units	Amount
SW 55th St	6	INLETS, DITCH BOT, TYPE C, <10'	\$2,572.69	3	EA	\$7,718.07
FDOT Average	0425 11	DRAINAGE STRUCTURE MODIFY	\$3,262.63	1	EA	\$3,262.63
SW 55th St	4	INSTALL 18" RCP	\$48.29	94	EA	\$4,539.26
FDOT Average	430175124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24"S/CD	\$69.92	18	LF	\$1,258.56
Keith Civil		TIDEFLEX CHECKMATE ULTRAFLEX INLINE CHECK VALVE	\$3,500.00	1	EA	\$3,500.00
FDOT Average	0570 1 2	PERFORMANCE TURF, SOD	\$2.13	431	SY	\$918.03
FDOT Average	0104 18	INLET PROTECTION SYSTEM	\$99.35	8	EA	\$794.80
Keith Landscape		TREE PROTECTION FENCING	\$4.50	1005	LF	\$4,522.50
SW 55th St	11	CONSTRUCT ROADSIDE SWALE	\$14.86	450	LF	\$6,687.00
FDOT Average	0110 4 10	REMOVAL OF EXIST CONC	\$18.10	29	SY	\$524.90
FDOT Average	0210 2	LIMEROCK-NEW MATERIAL FOR REWORKING BASE	\$82.70	2	CY	\$165.40
SW 55th St	12	PAVEMENT RESTORATION	\$39.82	29	SY	\$1,154.78
		Subtotal				\$35,045.93
		Mobilization (9%)				\$3,154.13
		Maintenance of Traffic (7%)				\$2,453.22
		Construction Testing & Misc (2%)				\$700.92
		Clearing and Grubbing (3%)				\$1,051.38
		Contingency (15%)				\$5,256.89
		Total Cost				\$47,662.46

* Estimate based on bid for Town of SouthWest Ranches winning bid for Southwest 55th street revised October-31-2016

* Estimate based on FDOT Item Average Unit Cost from 2017/10/01 to 2018/03/31

* Estimate based on Keith and Associates, Inc (Keith) Landscape department historic project Data



PRELIMINARY ESTIMATE OF PROBABLE CONSTRUCTION COST

Project: Town of Southwest Ranches Drainage Improvements - FDEP Funded (Agreement #LP06012)

Work Element 5

Drainage Improvements for SW 202nd Avenue north of SW 48th Street

KEITH Project No.: 08711.09

Client: Town of Southwest Ranches

Date: 6/12/2018

Type of Estimate:

1. Order of Magnitude (+30% - 50%)
2. Budget Estimate (+20% - 30%)
3. <100% Construction Plans (+10% - 20%)
4. 100% Construction Plans (+5% - 10%)

	- No detail, pre-schematic
	- Post schematic approval
X	- Preliminary plans / Not Permitted
	- Construction plans

Source	Line & Item No.	Item Description	Unit Price	Quantity	Units	Amount
SW 55th St	6	INLETS, DITCH BOT, TYPE C, <10'	\$2,573.00	3	EA	\$7,719.00
FDOT Average	0425 11	DRAINAGE STRUCTURE MODIFY	\$3,262.63	1	EA	\$3,262.63
FDOT Average	430175124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24"S/CD	\$69.92	97	LF	\$6,782.24
FDOT Average	0570 1 2	PERFORMANCE TURF, SOD	\$2.13	230	SY	\$489.90
FDOT Average	0104 18	INLET PROTECTION SYSTEM	\$99.35	3	EA	\$298.05
SW 55th St	12	PAVEMENT RESTORATION	\$39.82	17.7	SY	\$704.81
SW 55th St	11	CONSTRUCT ROADSIDE SWALE	\$14.86	100	LF	\$14.86
		Subtotal				\$19,271.49
		Mobilization (9%)				\$1,734.43
		Maintenance of Traffic (7%)				\$1,349.00
		Construction Testing & Misc (2%)				\$385.43
		Clearing and Grubbing (3%)				\$578.14
		Contingency (15%)				\$2,890.72
		Total Cost				\$26,209.23

*Estimate based on bid for Town of SouthWest Ranches winning bid for Southwest 55th street revised October-31-2016

* Estimate based on FDOT Item Average Unit Cost from 2017/10/01 to 2018/03/31

Florida Department of Transportation

Item Average Unit Cost

From 2017/10/01 to 2018/03/31

Contract Type: CC STATEWIDE

Displaying: VALID ITEMS WITH HITS

From: 0102 1 To: 9999999

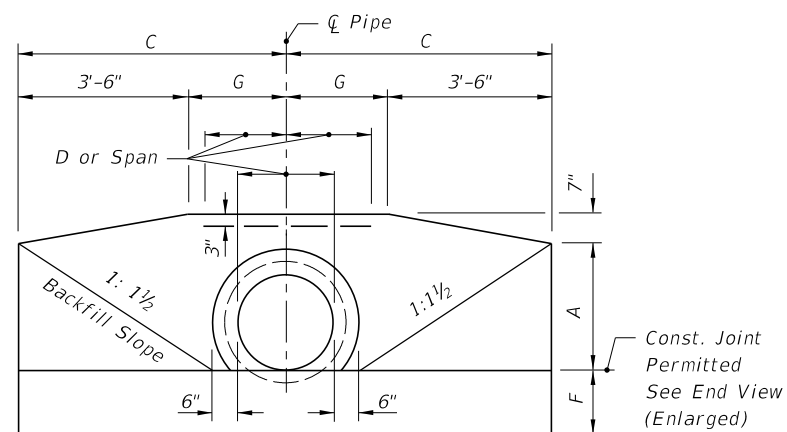
Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0104 11	25	9.7	240413.83	24791	LF	N	FLOATING TURBIDITY BARRIER
0104 12	12	4.88	77069.52	15807	LF	N	STAKED TURBIDITY BARRIER- NYL REINF PVC
0104 18	67	99.35	303709.29	3057	EA	N	INLET PROTECTION SYSTEM
0110 4 10	58	18.1	1438205.9	79476	SY	N	REMOVAL OF EXIST CONC
0210 2	1	82.7	5193.56	62.8	CY	N	LIMEROCK-NEW MATERIAL FOR REWORKING BASE
0350 3 5	1	89.18	72770.88	816	SY	N	PLAIN CEMENT CONC PAVT, 8"
0400 1 2	15	1116.48	384627.94	344.5	CY	N	CONC CLASS I, ENDWALLS
0425 1541	11	3982.92	458035.82	115	EA	N	INLETS, DT BOT, TYPE D, <10'
0425 11	9	3262.63	61990	19	EA	N	MODIFY EXISTING DRAINAGE STRUCTURE
0430 94 1	4	7.78	67297.5	8655	LF	N	DESILTING PIPE, 0 - 24"
430175118	30	62.75	3374769.69	53780	LF	N	PIPE CULV, OPT MATL, ROUND, 18"S/CD
430175124	20	69.92	2631837.78	37643	LF	N	PIPE CULV, OPT MATL, ROUND, 24"S/CD
0530 1	7	540.95	372337.11	688.3	CY	N	RIPRAP, SAND-CEMENT
0570 1 2	78	2.13	9642611.3	4533853	SY	N	PERFORMANCE TURF, SOD
0711 11125	63	4.07	100905.01	24819	LF	N	THERMOPLASTIC, STD, WHITE, SOLID, 24"

Original.

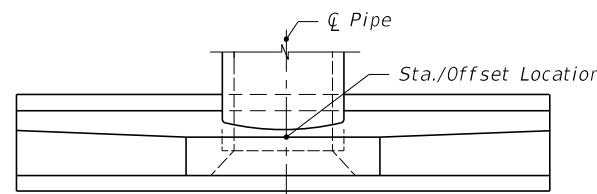
SCHEDULE OF VALUES – REVISED OCTOBER 31, 2016

The undersigned hereby proposes to furnish all labor, equipment and materials necessary to complete the work in strict accordance with the Contract Documents, schedules and plans, and all addendums, if issued, for the lump sum price shown below.

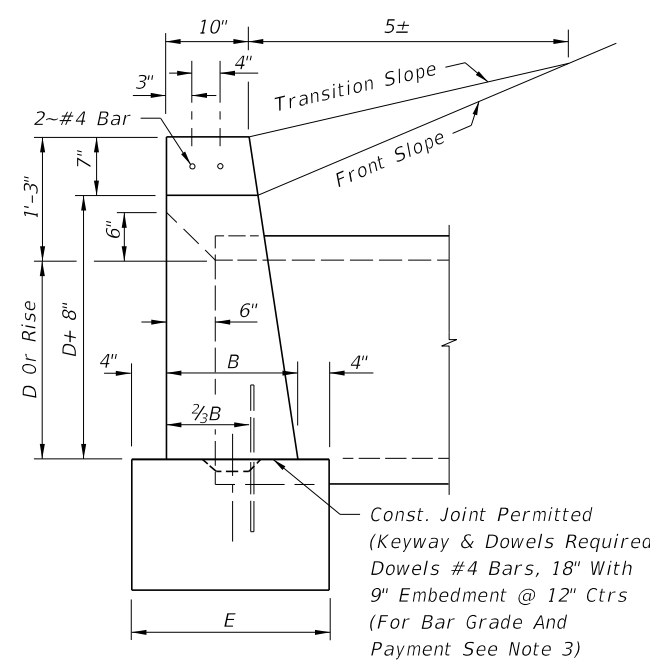
<u>Item No.</u>	<u>Item</u>	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Price</u>
1.	Mobilization	LS	1	\$ <u>12,696.00</u>	\$ <u>12,696.00</u>
2.	Select Clearing	LS	1	\$ <u>4,195.78</u>	\$ <u>4,195.78</u>
3.	Install 15" RCP	LF	403	\$ <u>44.05</u>	\$ <u>17,752.15</u>
4.	Install 18" RCP	LF	432	\$ <u>48.29</u>	\$ <u>20,861.28</u>
5.	Install 12" HDPE	LF	75	\$ <u>29.87</u>	\$ <u>2,240.25</u>
6.	Install Type "C" Drainage Structure	EA	7	\$ <u>2,572.69</u>	\$ <u>18,008.83</u>
7.	Install 5' Diameter Manhole	EA	1	\$ <u>2,875.00</u>	\$ <u>2,875.00</u>
8.	Install 5' Diameter Manhole With PRB	EA	1	\$ <u>3,349.58</u>	\$ <u>3,349.58</u>
9.	Install Yard Drain	EA	3	\$ <u>1,952.52</u>	\$ <u>5,857.56</u>
10.	Install Headwall	EA	1	\$ <u>4,352.89</u>	\$ <u>4,352.89</u>
11.	Construct Roadside Swale	LF	1140	\$ <u>14.86</u>	\$ <u>16,940.40</u>
12.	Pavement Restoration	SY	290	\$ <u>39.82</u>	\$ <u>11,547.80</u>
13.	Restoration	LS	1	\$ <u>7,990.20</u>	\$ <u>7,990.20</u>
14.	Erosion/Pollution Control	LS	1	\$ <u>3,986.59</u>	\$ <u>3,986.59</u>
15.	Maintenance of Traffic	LS	1	\$ <u>862.50</u>	\$ <u>862.50</u>
				Total Lump Sum Bid Price	\$ <u>133,516.81</u>
16.	Allowance Item for Utility Relocation	LS	1	\$ <u>5,000.00</u>	



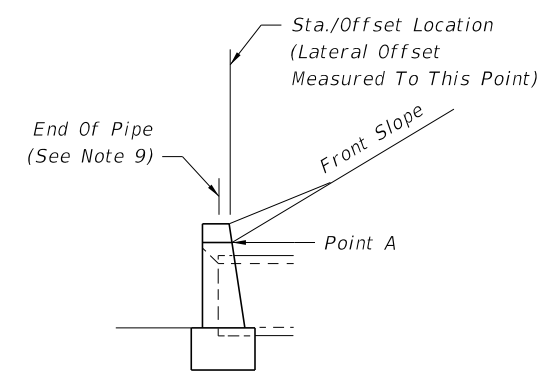
FRONT VIEW



TOP VIEW



END VIEW (ENLARGED)



END VIEW

1. Position is set by the intersection of the front slope and Point A where this intersection falls outside the clear zone.
2. Where the front slope and Point A intersects inside the clear zone, the endwall is positioned so the Station/Offset Location is at the clear zone limit. The front slope is transitioned to the endwall as shown in Index No. 280.

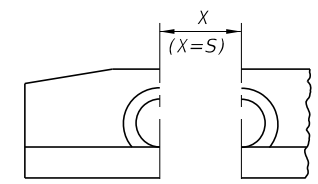
STANDARD LOCATION CONTROL

GENERAL NOTES

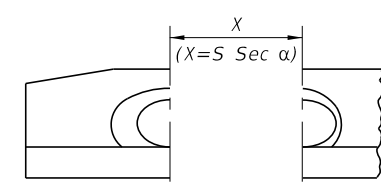
1. Endwall dimensions, locations and positions are for round and elliptical concrete pipe and for round and pipe-arch corrugated metal pipe. Round concrete pipe shown.
2. Front slope and ditch transitions shall be in accordance with Index No. 280.
3. Endwalls may be cast in place or precast concrete. Reinforcing steel shall be Grades 40 or 60. Additional reinforcement necessary for handling precast units shall be determined by the Contractor or the supplier. Cost of reinforcement shall be included in the contract unit price for Concrete, (Endwalls).
4. All exposed corners and edges of concrete are to be chamfered 3/4".
5. Concrete shall be Class I, except ASTM C478 (4000 psi) concrete may be substituted for precast items manufactured in plants meeting the requirements of Section 449 of the Specifications.
6. On outfall ditches with side slopes flatter than 1:1 1/2 provide 20' transitions from the endwall to the flatter side slopes, right of way permitting.
7. For sodding around endwalls see Index No. 281.
8. Payment for concrete quantities for endwalls skewed to the pipe shall be made on the following basis:

Endwall Skew to Pipe	Use Tabulated Value
0° to 5°	0°
6°	15°
16°	30°
31° or over	45°
9. Pipe length plan quantities shall be based on the pipe end locations shown in the standard location control end view, or lengths based on special endwall locations called for in the plans.
10. Payment for pipe in pipe culverts shall be based on plan quantities, adjusted for endwall locations subsequently established by the Engineer.
11. Endwalls to be paid for under the contract unit price for Class I Concrete (Endwalls), CY.

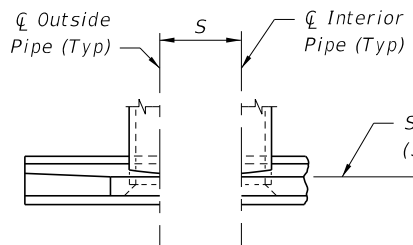
ENDWALL DIMENSIONS (EXCLUSIVE OF MULTIPLE PIPE SPACING)



FRONT VIEW

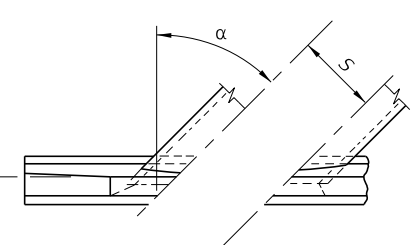


FRONT VIEW



TOP VIEW

NORMAL PIPE



TOP VIEW

SKewed PIPE

LEGEND

- α Pipe Skew
- S Center To Center Pipe Spacing
- X Centerline To Centerline Dimension At Face Of Headwall

**PIPE AND SPACING FOR MULTIPLE PIPE
ENDWALL POSITIONS FOR SINGLE AND MULTIPLE**

10/25/2016 8:16:26 AM

LAST REVISION 11/01/16	DESCRIPTION:	 FY 2017-18 DESIGN STANDARDS	STRAIGHT CONCRETE ENDWALLS SINGLE AND MULTIPLE PIPE	INDEX NO. 250	SHEET NO. 1 of 2
---------------------------	--------------	---	--	-------------------------	----------------------------

PRELIMINARY COST ESTIMATE
DYKES ROAD SWALE & DRAINAGE IMPROVEMENT PROJECT
TOWN OF SOUTHWEST RANCHES, FL
ALTERNATE "B"
11/20/2018

<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL COST</u>
<u>BASE BID - EAST SIDE SWALE</u>				
1 General Conditions	1	LS	\$0.00	\$0.00
2 Mobilization	1	LS	\$10,000.00	\$10,000.00
3 Cut Back Existing Roots and Install Root Barrier	20	LF	\$75.00	\$1,500.00
4 Remove Exist. 12" CMP	20	LF	\$10.00	\$200.00
5 Remove Existing Structure & Install 4' Dia. Catch Basin, Including all Connections	1	LS	\$5,500.00	\$5,500.00
6 Lower Exist. Rim and Replace Cover on Exist. MH Structure	1	EA	\$2,800.00	\$2,800.00
7 Install 24" RCP	112	LF	\$85.00	\$9,520.00
8 Install 18" RCP	35	EA	\$70.00	\$2,450.00
9 Extend 8 LF Exist. 15" RCP and Construct Mitered End Section	6	EA	\$4,500.00	\$27,000.00
10 Extend 8 LF Exist. 18" RCP and Construct Mitered End Section	8	EA	\$6,000.00	\$48,000.00
11 Extend 8 LF Exist. 24" RCP and Construct Mitered End Section	2	EA	\$6,500.00	\$13,000.00
12 Install Mitered End Section (No Pipe Extension)	5	LF	\$3,500.00	\$17,500.00
13 Install 12" Concrete Apron Around Exist. Catch Basin	12	LF	\$1,000.00	\$12,000.00
14 Core-Drill and Connect 24" RCP	1	EA	\$1,800.00	\$1,800.00
15 Reconstruct Swale	1,370	LF	\$10.00	\$13,700.00
16 Remove 2' Existing Grass off the Edge of Pavement	2,477	LF	\$3.00	\$7,431.00
17 Restore Exist. Asphalt Drive	20	SY	\$55.00	\$1,100.00
18 Restoration	1	LS	\$5,000.00	\$5,000.00
19 Erosion/Pollution Control	1	LS	\$5,000.00	\$5,000.00
20 MOT	1	LS	\$25,000.00	\$25,000.00
Sub-Total - Base Bid				\$208,501.00
Contingency @10%				\$20,850.10
Total - Base Bid				\$229,351.10

<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL COST</u>
<u>ALTERNATE BID - WEST SIDE SWALE</u>				
1 General Conditions	1	LS	\$0.00	\$0.00
2 Mobilization	1	LS	\$10,000.00	\$10,000.00
3 Remove Exist 12" RCP	20	LF	\$10.00	\$200.00
4 Remove Exist. 15" PVC	25	LF	\$10.00	\$250.00
5 Install Type "C" Catch Basin	9	EA	\$3,800.00	\$34,200.00
6 Remove Existing Structure & Install 4' Dia. Catch Basin, Including all Connections	1	LS	\$5,500.00	\$5,500.00
7 Install 18" RCP	10	EA	\$70.00	\$700.00
8 Install 15" RCP	408	EA	\$55.00	\$22,440.00
9 Install 12" RCP	8	EA	\$40.00	\$320.00
10 Extend 8 LF Exist. 12" RCP and Construct Mitered End Section	9	EA	\$4,000.00	\$36,000.00
11 Extend 8 LF Exist. 12" CAMP and Construct Mitered End Section	1	EA	\$4,000.00	\$4,000.00
12 Extend 8 LF Exist. 15" RCP and Construct Mitered End Section	3	EA	\$4,500.00	\$13,500.00
13 Extend 8 LF Exist. 15" HDPE and Construct Mitered End Section	1	EA	\$4,500.00	\$4,500.00
14 Install Mitered End Section (No Pipe Extension)	6	LF	\$3,500.00	\$21,000.00
15 Install 12" Concrete Apron Around Exist. Catch Basin	7	LF	\$1,000.00	\$7,000.00
16 Core-Drill and Connect 15" RCP	1	EA	\$1,800.00	\$1,800.00
17 Reconstruct Swale	517	LF	\$10.00	\$5,170.00
18 Remove 2' Existing Grass off the Edge of	2,677	LF	\$3.00	\$8,031.00
19 Restore Exist. Rock Drive	75	SY	\$20.00	\$1,500.00
20 Restore Exist. Asphalt Drive	42	SY	\$55.00	\$2,310.00
21 Restore Exist. Concrete Drive	23	SY	\$70.00	\$1,610.00
22 Restoration	1	LS	\$5,000.00	\$5,000.00
23 Erosion/Pollution Control	1	LS	\$5,000.00	\$5,000.00
24 MOT	1	LS	\$25,000.00	\$25,000.00
Sub-Total - Alternate Bid				\$215,031.00
Contingency @10%				\$21,503.10
Total - Alternate Bid				\$236,534.10

Total - Base Bid Plus Alternate Bid	\$465,885.20
Allowance for Utility Relocations (if required)	\$10,000.00
Total With Allowance	\$475,885.20