

921 FM 517 Road East | Dickinson, Texas 77539

MARCUS J. MICHNA

## **Engineer's Summary of Infrastructure Cost**

Name of Project: The Lakes in Bay Colony, Section 7

Owner of Project: BC Lakes LLC, c/o Galveston County MUD No. 14

Owner's Address: Wheeler & Associates

1300 Post Oak Blvd., Suite 1400

Houston, Texas 77571

## General description of infrastructure improvements:

Construction of public infrastructure to service Bay Colony Section 7 including water, sanitary sewer, storm sewer and paving facilities.

**Date of Construction Completion:** 04/20/17

**Summary of Construction Costs:** 

Municipal Water System: \$165,803.20

Construction: 6" water line: 480 LF; 8" water line: 1,700 LF; 12" water line: 2,220 LF

Municipal Sanitary Sewer System: \$231,304.13

Construction: 6" Force Main: 764 LF; 8" Sanitary Line: 1,690 LF.

Municipal Storm System: \$366,205.85

Construction: 24" RCP: 2,671 LF; 30" RCP: 493 LF; 36" RCP: 444 LF.

**Municipal Paving:** \$846,193 (\$831,368.35 + Bonds)

Construction: 28' wide concrete paving including curbs; 13,300 SY

**Engineering Services:** \$109,100

I certify that to the best of my knowledge the above information represents the final costs of

Infrastructure improvements within the project

Signature and Title: \

Date: 4-20-20

Attachments: spread sheet of final unit quantities and unit costs of construction

Phone: 409-935-9986 | FAX: 409-938-8706 | Email: info@shelmark.net www.shelmark.net

BIDDER will complete the Work in accordance with the Contract Documents for the following price(s):

No		Units	Onty	Unit Price	Total Pr
SI	TE WORK			- Oliver 110	10tal Fr
1	Performance and Payment Bonds	LS	1		
		1 143	1 1	212.22.22	[ ]
				\$15, 390.00	\$15,390.0
2	Mobilization/Demobilization	LS	1		-
	<u>†</u>			\$11, 515.63	\$11,515.6
3	Site Stripping and Stockpiling; Complete-In-Place.	AC	10		
	The state of the s	AC	18	0202.00	
				\$393.00	\$7, 074.00
1	Bxcavation/Expansion of Proposed Detention Pond	CÝ	41,539		
	For Section 7 (Tight Yards) To Line And Grade As				
	Shown On Section 7 Detention Plans; Complete-In- Place,			\$2.32	\$96, 370.48
_					
İ	Onsite Fill Placement (Tight Yards) Of Excavated Material From Section 7 Detention Pond; Complete-	CY	21,121		
	In-Place.			\$0.57	\$12, 038.97
	Haul Bxcess Cut Material From Section 7 Detention	C21	20.440	.DU.J/	\$12, U38.97
- 1	Pond & Stockpile In Section 8, Distance Less Than	CY	20,418		
	0.5 Mile; Complete-In-Place.	1		\$0.57	\$11, 638.26
$\neg$	Temporary Coffer Dam Including Installation,	BA	2		
	Removal And Dewatering To Excavate Additional	*-72 %	-		
	Detention; Complete-In-Place,	<b>!</b>		\$4, 150.00	\$8, 300.00
	Type III Barricades; Complete-In-Place.	BA	2		
			-	\$973.00	\$1, 946.00
+	Traffic Control Plan; Complete-In-Place			07/5/00	<b>31, 940.00</b>
	Tranic Control Fixin; Complete-In-Place	EA	1		
$\perp$			1	\$1,000.00	\$1,000.00
Т	Hydro mulch R.O.W, Frontage Area, Detention Pond	AC	5		
- [ ]	Embankment Areas And Reserves; Complete-In-		*	\$1,709.00	\$8, 545.00
_	Place.	}	- 1	\$1,703.00	46, 343.VV
	Final Lot Grading; Complete-In-Place	AC	9	<del></del>	<del></del>
				\$611.00	5, 499.00
otoi	tal - Site Work				
	/ T Territoria				
				\$179, 317.3	34

1	Subtotal - SWPPP				
,	Inlet Protection; Complete-In-Place.	BA	25	\$19.00	\$475.00
5 5	Furnish and Install Trash Rack At Existing Detention Pond Outfall; Complete-In-Place (To Be Used Only By Direction Of Engineer), Complete-In-Place.	BA	1	\$7,000.00	\$7, 000.00
5	Install, Maintain and Removal of Reinforced Filter Fabric Fence; Complete-In-Place.	LF	9,350	\$1.27	\$11, 874.50
3	Concrete truck wash out; Complete-In-Place.	BA	1	\$200.00	\$200.00
2	Stabilized Construction Access, Including Removal of Stabilized Construction Exit; Complete-In-Place.	EA	2	\$3,000.00	\$6,000.00
1	Bnforcement And Maintenance Of SWPPP Including NOIs, Inspection Reports, And NOTs; Complete-In-Place.	ĹS	1	\$999.00	\$999.00

W	ATER DISTRIBUTION SYSTEM				
1	Furnish And Install Trench Safety System For Water Line Construction; Complete-In-Place.	Th	4,400	\$0.09	\$396.00
2	Dewatering For The Water Line Including All Equipment, Materials And Labor; Complete-In-Place.	LF	4,400	\$0.11	\$484.00
3	Removal and Disposal of Existing Plug & Clamp, (All Sizes), 2" Blow-Off Valve And Connect Proposed 12" Water Line To Existing Water Line, Additionally Includes All Necessary Adapters And Connectors, And Disinfection of Existing Water Line As Applicable; Complete-In-Place.	EA	2	\$513.00	\$1,026.00
	8" MJ 45° Bends; ANSI A21.11 (AWWA C-10) Pressure Rated At 250 PSI; Include Joint Restraint Devices and Concrete Thrust Blocking; Complete-In- Place.	BA	8	\$150.00	\$1, 200.00

5	Pressure Rated At 250 PSI; Include Joint Restraint Devices and Concrete Thrust Blocking; Complete-In-Place.	BA	1	\$250.00	\$250.00
6	Pressure Rated At 250 PSI; Include Joint Restraint Devices and Concrete Thrust Blocking; Complete-In-Place.	BA	9	\$245.00	\$2, 205.00
.7	12" Coupling; Complete-In-Place.	BA	1	\$400.00	\$400.00
8	8" x 6" Reducer; Complete-In-Pace.	EA	1	\$195.00	\$195.00
9	12" x 8" Reducer; Complete-In-Pace.	EA	2	\$195.00	\$390.00
10	12" Cross, Complete-In-Place.	BA	1	\$600.00	\$600.00
11	8" x 6" Tee; Complete-In-Pace.	BA	1	\$195.00	\$195.00
12	8" x 8" Tee; Complete-In-Pace.	BA	2	\$220.00	\$440.00
13	12" x 8" Tee; Complete-In-Pace,	EA	1	\$220.00	\$220.00
14	6" Gate Valve & Box And Adjustments as Necessary; Complete-In-Place.	EA	1	\$774.00	\$774.00
15	8" Gate Valve & Box And Adjustments as Necessary; Complete-In-Place.	EA	9	\$1, 116.00	\$10, 044.00
16	12" Gate Valve & Box And Adjustments as Necessary; Complete-In-Place.	EA	2	\$1, 974.00	\$3,948.00
	6-Inch PVC DR 18 (AWWA C-900) Water Line (All Depths) (Including Bedding And Backfill, Bends, Tees, Plugs, Reducers, Gate Valves, And All Fittings); Complete-Iu-Place.	L,F	480	\$14.93	\$7, 166.40
	8-Inch PVC DR 18 (AWWA C-900) Water Line (All Depths) (Including Bedding And Backfill, Bends, Tees, Plugs, Reducers, Gate Valves, And All Pittings); Complete-In-Place.	LF	1,700	\$17.48	\$29, 716.00
,	12-Inch PVC DR 18 (AWWA C-900) Water Line (All Depths) (Including Redding And Backfill, Bends, Tees, Plugs, Reducers, Gate Valves And All Fittings); Complete-In-Place.	LF	2,220	\$25.69	\$57, 031.80

20	Installation of Single "Long Side" Water Service	EA	1 9 1	1	1
	Connection (Per City of League City Standard				1
1	Details) Including All Fittings, Hardware, Meter Box,	ľ		\$870.00	\$7, 830.00
	and Trench Safety; Complete-In-Place.			L	.1
21	Installation of Double "Long Side" Water Service	BA	1		
	Connection (Per City of League City Standard			\$970.00	\$970.00
	Details) Including All Fittings, Hardware, Meter Box,		}	\$570.00	\$970.00
	and Trench Safety; Complete-In-Place.	i	1	ĺ	
22	Installation of Double "Short Side" Water Service	BA	14		
	Connection (Per City of League City Standard			1	Ì
[	Details) Including All Fittings, Hardware, Meter Box,	í	- 1	\$490.00	\$6, 860.00
	and Trench Safety; Complete-In-Place.	ļ			
23	Fire Hydrant Assemblies; Included MJ Tee, 6-Inch	EA	9		
	Gate Valve With Box, 6-Inch Lead, Thrust Blocking			\$3, 718.00	\$33, 462.00
	and Fire Hydrant; All Depths; Complete-In-Place.		}	45, 716.60	\$33,402,00
	Subtotal - Water				
1		\$165, 8	03.20		
					{

1	Furnish And Install Trench Safety System for Sanitary Sewer Construction; Complete-In-Place.	LF	1,690	\$0.09	\$152.10
2	Dewatering For Sanitary Sewer Main Including All Equipment, Materials And Labor; Complete-In- Place.	LF	728	\$29.00	\$21, 112.00
3	6" Forcemain; Complete-In-Place	LF	764	\$15.04	\$11, 490.56
4	Remove Existing 6" Force main As Shown On Sheet C 2.01; Complete-In-Place	LF	728	\$11.00	\$8,008.00
5	Post-Television Inspection, Complete-In-Place	LF	1,690	\$4.97	\$8, 399.30
6	4 Feet Diameter Precast Concrete Manhole; All Depths; Including Corrosion Resistant Coating And Wet Construction; Complete-In-Place.	BA	21	\$2, 544.00	\$53, 424.00
7	8-Inch PVC SDR 26 (ASTM D-3034) Sanitary Sewer Line; With Standard Bedding And Backfill, All Depths; Complete-In-Place.	LF	1,690	\$33.29	\$56, 260.10
3	"Short Side" Single 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, And Any Necessary Pittings; Complete-In- Place.	BA	2	\$1, 150.00	\$2,300.00

SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, And Any Necessary Fittings; Complete-In-Place.	EA	8	,	\$1, 322.00	\$10, 576.00
26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wyo, Plug Marker, and Any Necessary Fittings; Complete-In- Place.	EA	7		\$2, 110.01	\$14, 770.07
26, All Depths, Including Trench Safety, Coment Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Pittings; Complete-In- Place.	BA	7		\$2, 282.00	\$15, 974.00
Wet Sand Construction As Required; Complete-In- Place.	LF	1,690		\$12.00	\$20, 280.00
Sanitary Sewer Drop Structure, All Depths, Includes Dewatering And Wet Construction Stabilization; Complete-In-Place.		3		\$900.00	\$2,700.00
Proposed 8" Sanitary Sewer To Existing Sanitary Sewer System, Includes Dewatering and Wet Construction Stabilization; Complete-In-Place.	EA	3		\$1, 911.00	\$5, 733.00
	BA	1		\$125.00	\$125.00
Subtotal - Sanitary Sower				\$231, 304	1.13
	SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, And Any Necessary Fittings; Complete-In-Place.  "Long Side" Single 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  "Long Side" Double 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  Crushed Stone Bedding And All Appurtenances For Wet Sand Construction As Required; Complete-In- Place.  Sanitary Sewer Drop Structure, All Depths, Includes Dewatering And Wet Construction Stabilization; Complete-In-Place.  Core Into Bxisting Sanitary Manhole and Connect Proposed 8" Sanitary Sewer To Existing Sanitary Sewer System, Includes Dewatering and Wet Construction Stabilization; Complete-In-Place.  8" Sanitary Sewer Plug; Complete-In-Place	SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, And Any Necessary Fittings; Complete-In-Place.  "Long Side" Single 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  "Long Side" Double 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  Crushed Stone Bedding And All Appurtenances For Wet Sand Construction As Required; Complete-In- Place.  Sanitary Sewer Drop Structure, All Depths, Includes Dewatering And Wet Construction Stabilization; Complete-In-Place.  Core Into Existing Sanitary Manhole and Connect Proposed 8" Sanitary Sewer To Existing Sanitary Sewer System, Includes Dewatering and Wet Construction Stabilization; Complete-In-Place.  8" Sanitary Sewer Plug; Complete-In-Place.  8" Sanitary Sewer Plug; Complete-In-Place.	SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, And Any Necessary Fittings; Complete-In-Place.  "Long Side" Single 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  "Long Side" Double 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  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"Long Side" Single 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  "Long Side" Double 6" PVC Pipe Service Leads, SDR 26, All Depths, Including Trench Safety, Cement Stabilized Backfill, Drop And Riser, Stack, Wye, Plug Marker, and Any Necessary Fittings; Complete-In- Place.  Crushed Stone Bedding And All Appurtenances For Wet Sand Construction As Required; Complete-In- Place.  Crushed Stone Bedding And All Appurtenances For Wet Sand Construction As Required; Complete-In- Place.  Sanitary Sewer Drop Structure, All Depths, Includes Devatering And Wet Construction Stabilization; Complete-In-Place.  Core Into Bxisting Sanitary Manhole and Connect Proposed 8" Sanitary Sewer To Existing Sanitary Sewer System, Includes Dewatering and Wet Construction Stabilization; Complete-In-Place.  8" Sanitary Sewer Plug; Complete-In-Place  \$125.00		

ST	ORM SEWER SYSTEM	<del></del>			
1	Furnish And Install Trench Safety System for Storm Sewer Construction; Complete-In-Place.	LF	3,608	\$0.11	\$396.88
2	24-Inch RCP Storm Sewer; Class III; Rubber Gasket; Wall B With Compound Joint Material); All Depths; Complete-In-Place.	LF	2,671	\$60.31	\$161, 088.01
3	30-Inch RCP Storm Sewer; Class III; Rubber Gasket; Wall B With Compound Joint Material); All Depths; Complete-In-Place.	LF	493	\$79.28	\$39, 085.04
	36-Inch RCP Storm Sewer; Class III; Rubber Gasket; Wall B With Compound Joint Material); All Depths; Complete-In-Place.	LF	444	\$95.43	\$42, 370.92

5	Storm Outfall Structure At Detention Pond Including 5:1 Precast S.B.T., Slope Paving And Rip Rap; Complete-In-Place	BA	2	\$5, 040.00	\$10, 080.00
6	Type "H-2" Inlet; Complete-In-Place.	BA	25	\$1, 752.00	\$43, 800.00
7	Type "C" Precast Or Cast-In-Place Manhole For 42" Storm Sewers And Smaller, All depths, Including Final Rim Adjustments, Complete-In-Place.	EA	30	\$2, 034.00	\$61, 020.00
8	Temporary Drainage Swale, 3:1 Side Slopes With "V" Bottom, Includes Excavation And Material; Complete-In-Place.	LF	787	\$3.00	\$2, 361.00
9	Storm Outfail Structure At Temporary Ditch Including Rip Rap; Complete-In-Place	BA	1	\$4,000.00	\$4, 000.00
10	24" Brick Plug; Complete-In-Place	EA	3	\$343.00	\$1, 029.00
11	Remove And Dispose Of Existing Culvert As Shown On Sheet C2.01; Complete-In-Place	EA	1	\$975.00	\$975.00
	Subtotal - Storm Sewer	\$366, 20	5.85		

Total Bid Price \$ \$969, 179.02

BIDDER acknowledges that quantities are not guaranteed and final payment will be based on actual quantities determined as provided in the Contract Documents.

Bach Bid must be accompanied by Bid security made payable to OWNER in an amount of five (5) percent of the BIDDER'S maximum Bid price, but not less than fifteen hundred dollars (\$1,500.00) and in the form of a certified or bank check or a Bid Bond.

The Bid security of the Successful BIDDER will be retained until such BIDDER has executed the Agreement, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful BIDDER fails to execute and deliver the Agreement and furnish the required contract security within fifteen days after the Notice of Award, OWNER may annul the Notice of Award and the Bid security of that BIDDER will be forfeited. The Bid security of other BIDDERS whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of the seventh day after the Effective Date of the Agreement or the thirty-sixth (36th) day after the Bid opening, whereupon Bid security furnished by such BIDDERS will be returned. Bid security with Bids which are not competitive will be returned within seven days after the Bid opening.

5. BIDDER agrees that the Work will be substantially complete within 90 calendar days after the date when the Contract Times commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment within 120 calendar days after the date when the Contract Times commences to run.

Bid Proposal for Construction of Paving To Serve The Lakes in Bay Colony, Section 7, Within Galveston County Municipal Utility District No. 14 in League City, Texas

BIDDER will complete the work in accordance with the Contract Documents for the following price(s):

No Item Units Quty Unit Price Total Price

1	6" Reinforced Concrete Pavement, Min. 3,500 PSI Compressive Strength And 5.5 Sacks Cement Per Cubic Yard Of Mix; Complete- In-Place	SY	13,300	\$40.64	\$540, 512.00
2	6" Concrete Curbs; Complete-In-Place.	LF	7,600	\$2.43	\$18, 468.00
3	Lime Manipulation - 6-Inch Depth (Width Of Road + 2.0 feet); Complete-In-Place.	SY	15,200	\$2.39	\$36, 328.00
1	Lime Slurry (6% PERCENT); Complete-In- Place.	TON	205	\$183.75	\$37,668.75
í	Wheel Chair Ramps; Complete-In-place	EA	20	\$1, 300.00	\$26,000.00
	Signage And Striping; Complete-In-Place.	LS	1	\$17, 700.00	\$17, 700.00
	6' Sidewalk; Complete-In-Place	LF	4,040	\$38.29	\$154, 691.60

i	Total Estimated Construction Price		
1		\$831, 368.35	•
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BIDDER acknowledges that quantities are not guaranteed and final payment will be based on actual quantities determined as provided in the Contract Documents.

Each Bid must be accompanied by Bid security made payable to OWNER in an amount of five (5) percent of the BIDDER'S maximum Bid price, but not less than fifteen hundred dollars (\$1,500.00) and in the form of a certified or bank check or a Bid Bond.

The Bid security of the Successful BIDDER will be retained until such BIDDER has executed the Agreement, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful BIDDER falls to execute and deliver the Agreement and furnish the required contract security within fifteen days after the Notice of Award, OWNER may annul the Notice of Award and the Bid security of that BIDDER will be forfeited. The Bid security of other BIDDERS whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of the seventh day after the Effective Date of the Agreement or the thirty-sixth (36th) day after the Bid opening, whereupon Bid security furnished by such