CITY OF CORPUS CHRISTI CONTRACTS AND PROCUREMENT DEPARTMENT



<u>LAGUNA SHORES RD – GRAHAM DR TO SPID</u> <u>PROJ. NO. 18026A</u>

CONTRACT NO. 3127

Project Specifications and Drawings available at:

Y:\00 LEGISTAR CONST PLANS SPECS\Item No 20 0938 Laguna Graham to SPID



00 52 23 AGREEMENT

This Agreement is between the City of Corpus Christi (Owner) and Mako Contracting, LLC (Contractor).

Owner and Contractor agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as:

<u>Laguna Shores Road – Graham to SPID (Bond 2018)</u> Project Number 18026A

ARTICLE 2 – DESIGNER AND OWNER'S AUTHORIZED REPRESENTATIVE

2.01 The Project has been designed by:

<u>LJA Engineering, Inc. – Jeff Coym, PE – Vice President</u>
5350 South Staples Street, Suite 425
Corpus Christi, Texas 78411
jcoym@lja.com

2.02 The Owner's Authorized Representative for this Project is:

Brett Van Hazel, PM – Asst. Director of Construction
City of Corpus Christi – Engineering Services
4917 Holly Rd, Bldg #5
Corpus Christi, TX 78411

ARTICLE 3 – CONTRACT TIMES

- 3.01 Contract Times
 - A. The Work is required to be substantially completed within <u>220</u> days after the date when the Contract Times commence to run as provided in the Notice to Proceed and is to be completed and ready for final payment in accordance with Paragraph 17.16 of the General Conditions within <u>250</u> days after the date when the Contract Times commence to run.
 - B. Performance of the Work is required as shown in Paragraph 7.02 of the General Conditions.

C. Milestones, and the dates for completion of each, are as defined in Section 01 35 00 SPECIAL PROCEDURES.

3.02 **Liquidated Damages**

- A. Owner and Contractor recognize that time limits for specified Milestones, Substantial Completion, and completion and readiness for Final Payment as stated in the Contract Documents are of the essence of the Contract. Owner and Contractor recognize that the Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.01 and as adjusted in accordance with Paragraph 11.05 of the General Conditions. Owner and Contractor also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - Substantial Completion: Contractor shall pay Owner \$1,400 for each day that expires after the time specified in Paragraph 3.01 for Substantial Completion until the Work is substantially complete.
 - Completion of the Remaining Work: Contractor agrees to pay Owner \$1,400 for each day that expires after the time specified in Paragraph 3.01 for completion and readiness for final payment until the Work is completed and ready for final payment in accordance with Paragraph 17.16 of the General Conditions.
 - Liquidated damages for failing to timely attain Substantial Completion and Final Completion are not additive and will not be imposed concurrently.
 - 4. Milestones: Contractor agrees to pay Owner liquidated damages as stipulated in SECTION 01 35 00 SPECIAL PROCEDURES for failure to meet Milestone completions.
 - The Owner will determine whether the Work has been completed within the Contract Times.
- B. Owner is not required to only assess liquidated damages, and Owner may elect to pursue its actual damages resulting from the failure of Contractor to complete the Work in accordance with the requirements of the Contract Documents.

ARTICLE 4 – CONTRACT PRICE

4.01 Owner will pay Contractor for completion of the Work in accordance with the Contract Documents at the unit prices shown in the attached BID FORM. Unit prices have been computed in accordance with Paragraph 15.03 of the General Conditions. Contractor acknowledges that estimated quantities are not guaranteed, and were solely for the purpose of comparing Bids, and final payment for all unit price items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 5 – PAYMENT PROCEDURES

5.01 Submit Applications for Payment in accordance with Article 17 of the General Conditions. Applications for Payment will be processed by the OAR as provided in the General Conditions.

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5.02 Progress Payments; Retainage:

- The Owner will make progress payments on or about the 25th day of each month during performance of the Work. Payment is based on Work completed in accordance with the Schedule of Values established as provided in the General Conditions.
- Progress payments equal to the full amount of the total earned value to date for completed Work minus the retainage listed below and properly stored materials will be made prior to Substantial Completion.
 - 1. The standard retainage is 5 percent.
- Payment will be made for the amount determined per Paragraph 5.02.B, less the total of payments previously made and less set-offs determined in accordance with Paragraph 17.01 of the General Conditions.
- D. At the Owner's option, retainage may be increased to a higher percentage rate, not to exceed ten percent, if progress on the Project is considered to be unsatisfactory. If retainage in excess of the amount described above is held prior to Substantial Completion, the Owner will place the additional amount in an interest bearing account. Interest will be paid in accordance with Paragraph 6.01.
- E. At the Owner's option, Owner may pay Contractor 100 percent of the Work completed, less amounts withheld in accordance with Paragraph 17.01 of the General Conditions and less 200 percent of OAR's estimate of the value of Work to be completed or corrected to reach Substantial Completion. Owner may, at its sole discretion, elect to hold retainage in the amounts set forth above for progress payments prior to Substantial Completion if Owner has concerns with the ability of the Contractor to complete the remaining Work in accordance with the Contract Documents or within the time frame established by this Agreement. Release or reduction in retainage is contingent upon and consent of surety to the reduction in retainage.
- 5.03 Owner will pay the remainder of the Contract Price as recommended by OAR in accordance with Paragraph 17.16 of the General Conditions upon Final Completion and acceptance of the Work.

ARTICLE 6 – INTEREST ON OVERDUE PAYMENTS AND RETAINAGE

- 6.01 The Owner is not obligated to pay interest on overdue payments except as required by Texas Government Code Chapter 2251. Invoices must comply with Article 17 of the General Conditions.
- 6.02 Except as specified in Article 5, the Owner is not obligated to pay interest on moneys not paid except as provided in Texas Government Code Chapter 2252.

ARTICLE 7 – CONTRACTOR'S REPRESENTATIONS

- 7.01 The Contractor makes the following representations:
 - A. The Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - The Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

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- C. The Contractor is familiar with Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. The Contractor has carefully studied the following Site-related reports and drawings as identified in the Supplementary Conditions:
 - Geotechnical Data Reports regarding subsurface conditions at or adjacent to the Site;
 - 2. Drawings of physical conditions relating to existing surface or subsurface structures at the Site:
 - Underground Facilities referenced in reports and drawings; 3.
 - Reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site; and
 - Technical Data related to each of these reports and drawings.
- The Contractor has considered the:
 - 1. Information known to Contractor:
 - Information commonly known to contractors doing business in the locality of the Site;
 - Information and observations obtained from visits to the Site; and
 - The Contract Documents.
- The Contractor has considered the items identified in Paragraphs 7.01.D and 7.01.E with respect to the effect of such information, observations, and documents on:
 - 1. The cost, progress, and performance of the Work;
 - 2. The means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and
 - Contractor's safety precautions and programs.
- G. Based on the information and observations referred to in the preceding paragraphs, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- H. The Contractor is aware of the general nature of Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- ١. The Contractor has correlated the information known to the Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- The Contractor has given the OAR written notice of all conflicts, errors, ambiguities, or discrepancies that the Contractor has discovered in the Contract Documents, and the written resolution provided by the OAR is acceptable to the Contractor.
- K. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

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- L. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
- M. CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER'S INDEMNITEES IN ACCORDANCE WITH PARAGRAPH 7.14 OF THE GENERAL CONDITIONS AND THE SUPPLEMENTARY CONDITIONS.

ARTICLE 8 – ACCOUNTING RECORDS

8.01 Accounting Record Availability: The Contractor shall keep such full and detailed accounts of materials incorporated and labor and equipment utilized for the Work consistent with the requirements of Paragraph 15.01 of the General Conditions and as may be necessary for proper financial management under this Agreement. Subject to prior written notice, the Owner shall be afforded reasonable access during normal business hours to all of the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and the Contractor's fee. The Contractor shall preserve all such documents for a period of 3 years after the final payment by the Owner.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents:

- A. The Contract Documents consist of the following:
 - 1. Exhibits to this Agreement:
 - Contractor's Bid Form.
 - b. List as necessary.
 - Specifications, forms, and documents listed in SECTION 00 01 00 TABLE OF CONTENTS.
 - Drawings listed in the Sheet Index.
 - 4. Solicitation documents and Contractor's response, which are incorporated by reference.
 - Addenda, which are incorporated by reference.
 - Documentation required by the Contract Documents and submitted by Contractor prior to Notice of Award, which is incorporated by reference.
- There are no Contract Documents other than those listed above in this Article.
- The Contract Documents may only be amended, modified, or supplemented as provided in Article 11 of the General Conditions.

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ARTICLE 10 – CONTRACT DOCUMENT <u>SIGNATURES</u>

ATTEST	CITY OF CORPUS CHRISTI						
Rebecca Huerta City Secretary	Michael Rodriguez Chief of Staff						
		AUTHORIZED					
APPROVED AS TO LEGAL FORM:	BY COUNCIL						
Assistant City Attorney							
ATTEST (IF CORPORATION)	CONTRACTOR						
	Mako Contracting, LLC						
(Seal Below)	By: DocuSigned by:	8/14/2020					
Note: Attach copy of authorization to sign if	Title: CD3AD7D22F4949D President						
person signing for CONTRACTOR is not President, Vice President, Chief Executive Officer, or Chief	3636 S Alameda, Ste B153						
Financial Officer	Address						
	Corpus Christi, TX 78411						
	City	State Zip					
	361/561-6256						
	Phone	Fax					
	gg@makocontracting.com	n					
	EMail						

END OF SECTION

Project	Laguna Shores Road - Graham to SPID (Box	nd 2018)
Name:	Lagaria Silores Nead Cranami to Srib (Ser	
Project Number:	18026A	
Owner:	City of Corpus Christi	
Bidder:	Mako Contracting	
OAR:		
Designer:	LJA Engineering, Inc	
of all Adde	ature below, Bidder accepts all of the terms and conditions of tenda to the Bid and agrees, if this Bid is accepted, to enter into accordance with the Contract Documents for the Bid price.	
Bidder:	Mako Contracting	full legal name of Bidder)
Signature:		signature of person with authority to bind the Bidder)
Name:	Cabriel Goodman	printed name of person signing Bid Form)
Title:	President	title of person signing Bid Form)
Attest:	Sancha Mongales ('signature)
State of Re	sidency: TEXCS	
	ID No. 36-4717006	
Address for	r Notices: 3636 S. Alameda Ste B13 Corpus Christi TX 78411	53
Phone: 30	61 567-6256 Email: 66 @ make cont	racting.com.

Basis of Bid

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
	Base Bid No. 1 - HMAC	Pavemer	nt		
art 1A - Ge	eneral (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)				
1A1	Mobilization (Max. 5% of Part 1A)	LS	1	4000.00	4000€
1A2	Bonds & Insurance (Base Bid 1)	AL	1	51,000.00	51,0000
1A3	Traffic Control Mobilization/Adjustments	LS	1	8,000.00	8000.00
1A4	Traffic Control Items (Signs, Barricades, Channelizing Devices, LPCB, etc.)	МО	7	1,080.5	7,560.00
1A5	Message Boards for Traffic Control	EA	5	12,000.00	60,000.00
1A6	Ozone Advisory Day	DAYS	3	1,00	3.00
1A7	Storm Water Pollution Prevention Plan	LS	1	5,000.00	5,000.00
1A8	Inlet Protection	EA	2	125.00	250.6
1A9	Rock Filter Dam	EA	14	800.00	11, 340,00
1A10	Silt Fence	LF	3,290	4.25	13,982.5
1A11	Revegetation (Hydromulch)	SY	3,532	1.50	5,298.0
1A12	Contingency Allowance for Unanticipated Disposal of Contaminated Groundwater	AL	1	\$ 5,000.00	5,000. e
	SUBTOTAL	PART 1A -	GENERAL (Item	s 1A1 thru 1A12)	171, 433.50

Part 1B - S1	REET IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS	S FOR PAY	MENT)		
1B1	Mobilization (Max. 5% of Part 1B)	LS	1	25,000,00	25,000.0=
1B2	Remove Curb and Gutter	LF	92	3.50	322.9
1B3	Removal of Sign and Sign Support Assembly	EA	10	114.00	1140.00
1B4	Remove Existing Metal Beam Guard Rail	LF	390	5.00	1,950.0
1B5	Pulverize & Recompact Existing Roadway Pavement	SY	2,280	25.00	57,000.00
1B6	Street Excavation (1' Beyond E.O.P.)	SY	9,428	10.2	94,280.00
1B7	Subgrade Preparation (1' Beyond E.O.P.)	SY	11,708	3. 550	35,124.0
1B8	TX-5 Geogrid (1' Beyond E.O.P.)	SY	11,708	4.00	46,832 9
189	8" Type A, Grade 1-2 Crushed, Limestone Base per TxDOT Std. Spec. Item No. 247 (1' Beyond E.O.P.)	SY	11,708	22.00	257,576.00
1B10	One Course Surface Treatment Underseal	SY	11,708	2.53	29,621.24
1B11	3" Type 'D' HMAC	SY	11,024	24.26	268,511.52

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1812	Level Up Mill (0"-1") & 1 1/2" HMAC Type D Overlay	SY	2,180	19.46	42,418.99
1B13	Full Depth Pavement Repair	SY	190	11288	22,396. 25
1B14	6" Curb and Gutter	LF	139	25.00	3,475.€
1B15	Concrete Driveway (Incl. Existing Driveway Removal)	SF	3,292	12.50	41,150,0
1B16	Pavement Markings (24" Wide, White, Type C Hear Applied, 125 mil, Preformed Thermoplastic "Stop Bar" Marking Lines)	LF	39	21.50	842.40
1B17	Pavement Markings (Crosswalk Markings - Total LF of 24" Wide, White, Type C Heat Applied, 125 mil, Preformed Thermoplastic)	LF	38	21.50	80.00
1B18	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – Yellow 4" Solid	LF	4,666	. 46	3,079.80
1B19	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – Yellow 4" Broken	LF	150	1. 50	225 00
1B20	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – White 4" Solid	LF	6,006	. 66	3,9 68. 96
1B21	TYII-A-A Raised Pavement Marker (Reflectorized)	EA	66	6. 00	396.≃
1B22	TYII-B-B Raised Pavement Market (Reflectorized)	EA	2	18.5	34.00
1B23	Type 2 Object Marker with Flexible Post (OM-2Z) (FLX)	EA	7	114. =	798.00
1B24	Chevron Alignment (W1-8L) (18"x24") (Incl. Metal Pole and Foundation)	EA	5	528.00	2,40.%
1B25	Chevron Alignment (W1-8R) (18"x24") (Incl. Metal Pole and Foundation)	EA	5	528.0	2,640.5
1B26	Combo Stop Sign (R1-1) (30"x30") / Street Name Sign (Incl. Metal Pole and Foundation)	EA	4	750.00	3,000.00
1B27	Stop Ahead (W3-1) (30"x30") (Incl. Metal Pole and Foundation)	EA	2	570.=	1,140.0
1B28	Speed Limit Sign (R2-1) (24"x30") (Incl. Metal Pole and Foundation)	EA	4	540.00	2,160.00
1B29	Reverse Curve (W1-4L) (30"x30") (Incl. Metal Pole and Foundation)	EA	2	570.0	1,140.0
1B30	Merge (W4-1R) (30"x30") (Incl. Metal Pole and Foundation)	EA	1	570.0	570.w
1B31	One Way (R6-1R) (36"x12") (Incl. Metal Pole and Foundation)	EA	1	510.9	2 اه اع
1B32	Traffic Rail - Type 631LS	LF	625	69.≅	43,125.00
1B33	Guardrail Terminal	EA	4	3450.00	13, 800.00
1B34	Erosion Control Matting (TRM)	SY	7,751	19.44	150, 640.69
1B35	Temporary Cofferdam	EA	2	10,000.00	20,00.00
1B36	Select Fill Embankment	CY	1,216	32.°	38,912.

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1B37	Articulated Concrete Block Matting (Revetment)	SY	1,205	130.00	126,650.30
1B38	Allowance for Unanticipated Street Improvements	AL	1	\$ 25,000.00	25,000. =
SUBTOTAL PART 1B - STREET IMPROVEMENTS (Items 1B1 thru 1B38)					

1C1	Mobilization (Max. 5% of Part 1C)	LS	1	250.00	250.5
1C2	Remove Existing Concrete Sidewalk	SF	73	3,55	2124
1C3	Remove Existing Curb Ramp	SF	147	લ જ	588.9
1C4	5' Concrete Pedestrian Sidewalk	SF	25	8	200.00
1C5	Sidewalk Ramp	SF	182	25.4	4,550.00

וט - טו אמ	RAINAGE IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND	BASIS FUR PA	AYMENI)		
1D1	Mobilization (Max. 5% of Part 1D)	LS	1	25.00.=	25,000.00
1D2	Remove Existing 12" RCP	LF	46	23.52	1081.92
1D3	Remove Existing 12" CPP	LF	18	23.52	423.36
1D4	Remove Existing 15" RCP	LF	292	23.52	6867. 84
1D5	Remove Existing 18" RCP	LF	250	23.52	5880.00
1D6	Remove Existing 24" RCP	LF	76	24.64	1872.64
1D7	Remove Existing 24" CPP	LF	164	30.80	5051.20
1D8	Remove Existing 8'x4' Reinforced Concrete Box Culvert	LF	183	140.0	25,620
1D9	Remove Existing Curb Inlet	EA	2	1.064.0	2128.4
1D10	Remove Existing Headwall/Wingwall	EA	2	3136.00	62-72.4
1D11	Remove Concrete Channel	LF	133	11.20	1417,00
1D12	Ditch Excavation and Regrading/Reshaping	LF	3,453	120	41436.4
1D13	13.5"x22" Class III Reinforced Concrete Arch Pipe	LF	229	204. 96	46,935.15
1D14	18"x28.5" Class III Reinforced Concrete Arch Pipe	LF	151	218.40	32,978.40
1D15	18" Class IV RCP	LF	32	60.45	1935.35

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT		
1D16	24" Class IV RCP	LF	297	78.40	23,284.50		
1D17	13.5"x22" Class IV Reinforced Concrete Arch Pipe	LF	43	220.64	9487.52		
1D18	18"x28.5" Class IV Reinforced Concrete Arch Pipe	LF	174	235. 20	40, 124. 50		
1D19	10'x4' Reinforced Concrete Box Culvert	LF	216	1120.00	241,920,0		
1D20	Pipe Trench Safety	LF	1,142	5.60	6,395.20		
1D21	Well Pointing	LF	1,142	20.5	31,976.04		
1D22	Headwall/Wingwalls for O'Neill Channel	EA	2	21.00.5	42,00.5		
1D23	5" Concrete Rip Rap for O'Neill Channel	SF	1,719	12.44	23,103, 36		
1D24	Safety End Treatment (Type II) (3:1) (24")	EA	12	2128.5	25,536.2		
1D25	Safety End Treatment (Type II) (3:1) (13.5"x22")	EA	3	2016.4	6,041.5		
1D26	Safety End Treatment (Type II) (6:1) (13.5"x22")	EA	11	2686.₩	29,568.00		
1D27	Safety End Treatment (Type II) (3:1) (18"x28.5")	EA	5	2617.5	13,440.0		
1D28	Safety End Treatment (Type II) (6:1) (18"x28.5")	EA	1	2.856.5	2856.5		
1D29	4" Concrete Slope Protection	SF	275	12.32	3388.€		
1D30	4'-8"x4" Junction Box with Grate/Frame Unit	EA	1	7616.00	7616.5		
1D31	5' Curb Inlet	EA	1	53204	5720.0		
1D32	Precast Special Junction Box w/ 5' Curb Inlet	EA	1	14000.5	1400,=		
1D33	Junction Box/Grate Inlet/Curb Inlet Trench Safety	EA	3	616.00	1848.2		
1D34	Pipe Support	EA	4	2-688.5	10752.00		
1D35	Temporary Cofferdam	EA	2	25,384.2	50,768.00		
1D36	Allowance for Unanticipated Drainage Improvements	AL	1	\$ 10,000.00	10,00.0		
	SUBTOTAL PART 1D -	DRAINAGE IN	IPROVEMENTS (1D1 THRU 1D36)	805,203		

appropries. Part 1E - WATER IMROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT) 15000 · w 15000,00 1E1 Mobilization (Max. 5% of Part 1E) LS 1 1600.€ 1680.0 1E2 Remove and Salvage Existing Fire Hydrant 1 EA 2038.40 1E3 Remove Existing 6" PVC Waterline LF 91 22-40 16,240.00 28.0 1E4 Remove Existing 6" CIP Waterline LF 580 1E5 Remove Existing 6" ACP Waterline LF 496 25.00 13,688.0

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1E6	Remove Existing 8" Waterline	LF	40	44.10	1782.5
1E7	Remove Existing 12" Waterline	LF	43	26.50	2408. €
1E8	Remove Existing CIP Waterline to Gateway Lift Station	LF	40	78.6	1120.00
1E9	Remove Water Service	LF	196	44. 2	8780.00
1E10	Remove Water Meter	EA	9	234.5	20/6. 0
1E11	6" DIP Waterline (Class 350)	LF	101	1124	11312. 02
1E12	8" C900 PVC Waterline	LF	1,120	85. =	95,200.00
1E13	12" C900 PVC Waterline	LF	44	8r.=	3872. 4
1E14	Pipe Trench Safety	LF	1,265	2. 1.0	6957.50
1E15	Well Pointing	LF	1,265	43.4	54, 395.
1E16	6" DI 45° Bend	EA	4	66 4	2464.4
1E17	6" DI 90° Bend	EA	4	632,50	2533.0
1E18	8" DI 45° Bend	EA	2	860,00	1320.00
1E19	8" Gate Valve & Box	EA	4	1792.5	7/68.5
1E20	12" 11.25° Bend	EA	2	825.5	1630.00
1E21	12" Gate Valve & Box	EA	1	2695 =	2695.00
1E22	8" x 6" Reducer	EA	2	يه.ه ري	1100.2
1E23	8" Tee	EA	2	770.00	1540.0
1E24	12"x8" Reducer	EA	1	715.0	715.02
1E25	Adjust 8" Waterline (Includes 60 LF DIP Waterline and All Req'd Fittings)	EA	5	6944.4	34,200.4
1E26	Connect to Existing 6" PVC WL (Incl. All Required Fittings) with Omni Coupling System	EA	3	1705.00	5115.92
1E27	Connect to Existing 6" ACP WL (Incl. All Required Fittings) with Omni Coupling System	EA	1	1705.4	1705.°
1E28	Connect to Existing 8" WL (Incl. All Required Fittings) with Omni Coupling System	EA	1	2062.53	2062.50
1E29	Connect to Existing 12" WL (Incl. All Required Fittings) with Or	EA	1	2750.0	2750.0
1E30	Fire Hydrant Assembly (Type 2)	EA	1	11,700.00	11,2006
1E31	1" PE Water Service (Incl. Service Saddle, Corp Stop, PE, and Reconnection)	LF	184	142.34	26172.16
1E32	Allowance for Unanticipated Water Improvements	AL	1	\$ 10,000.00	10,000,00
	SUBTOTAL PART 1E	WATER IN	PROVEMENTS	(1E1 THRU 1E32)	351,606.3

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
Part 1F -W	ASTEWATER IMROVEMENTS (per SECTION 01 29 01 MEASUREMENT A	ND BASIS F	OR PAYMENT)		
1F1	Mobilization (Max. 5% of Part 1F)	LS	1	:25,000.00	25,000,00
1F2	Rehab 8" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (10'-18')	LF	589	134.40	79,161, 60
1F3	Remove Existing 12" VCP Wastewater	LF	221	56,00	12376.5
1F4	Remove Existing 10" CIP Force Main	LF	93	560	5208.00
1F5	Remove Existing 18" PVC Force Main	LF	102	S6. w	57125
1F6	Remove Wastewater Service	LF	186	22.40	41 66.40
1F7	6" C900 (DR-18) PVC (8'-10')	LF	187	95.20	17.802.40
1F8	12" C900 (DR-18) PVC (8'-10')	LF	34	145 6	4950. 40
1F9	10" DI Force Main	LF	107	207.2	22,170, 40
1F10	18" DI Force Main	LF	117	263.72	30, 794, 40
1F11	Pipe Trench Safety	LF	445	28.2	12460.4
1F12	Well Pointing	LF	445	39.20	17,444.
1F13	16" Dia. 3/8" Steel Casing (Welded)	LF	48	218.40	10,483.20
1F14	30" Dia. 3/8" Steel Casing (Welded)	EA	48	252.20	12,096.4
1F15	10" 45° Bend	EA	2	784.00	1,567.4
1F16	10" 90° Bend	EA	4	868.5	34720
1F17	18" 45° Bend	EA	2	2576.5	5152,00
1F18	18" 90° Bend	EA	4	2576.4	10,304.
1F19	Air Release Valve	EA	2	5040.00	10,080.0
1F20	4' Diameter Manhole	VF	2	8960.9	17,920.6
1F21	Manhole Extra Depth (> 6')	EA	7	1170.4	7840.0
1F22	Manhole Trench Safety	EA	2	١١٧٥.٤	2240.4
1F23	New Wastewater Service Lateral (with C/O) (Incl. Well Pointing and Trench Safety, as Needed)	EA	9	3584.94	32,256.9
1F24	Remove Sewage and Grout Fill Bottom of Existing 4' Manhole to Flowline	EA	1	1680.00	1680.00
1F25	Rehabilitate Existing Manhole with F/G Liner and New 24" Ring and Cover	EA	3	6770.4	20,160.00
1F26	Adjust 10" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	4	13440.5	53,760.00
1F27	Adjust 18" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	4	22.980.9	91,840.0
1F28	Adjust Existing Wastewater Manhole	EA	13	1064.00	13,832.=

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1F29	Adjust Existing Valve Box	EA	1	168.4	168.50
1F30	Connect to Existing 10" CIP Force Main	EA	2	728.4	1456.=
1F31	Connect to Existing 18" PVC Force Main	EA	2	896.4	17926
1F32	Connect to Existing Wastewater Manhole	EA	4	1610.9	6720.9
1F33	Connect Existing Wastewater Line to Proposed Manhole	EA	4	1680.00	6720.9
1F34	Allowance for Unanticipated Wastewater Improvements	AL	1	\$ 25,000.00	25,00.00
	SUBTOTAL PART 1F - WA	STEWATER IN	/PROVEMENTS	(1F1 THRU 1F34)	573,784.

1G1	Mobilization (Max. 5% Part of 1G)	LS	1	5000.00	Sour 6
1G2	Silt Fence	LF	1,000	4.33	42 50.5
1G3	Rock Filter Dam	EA	3	500. 4	1500-00
1G4	Revegetation (Hydromulch)	SY	877	1.50	1315.30
1G5	Remove Existing 15" RCP	LF	6	٦٥. ٢	(50.00
1G6	Remove Existing 18" RCP	LF	706	30.00	2-1,180.
1G7	Remove Existing 30" RCP	LF	27	35.=	945.=
1G8	Remove Existing Grate Inlet & Concrete Flume	EA	1	2001.5	2001 =
1G9	Remove Existing Bollard & Cable Fence	LF	21	20.4	4200
1G10	Remove & Replace Existing Chainlink Fence	LF	22	29.35	1745.20
1G11	Ditch Excavation	CY	650	12-50	8125.4
1G12	5" Concrete Riprap	SY	516	86.90	44,376.5
1G13	Bollard & Cable Fence	LF	8	126.50	1012-2
1G14	Metal Beam Guard Fence	LF	56	17. E	4636. 50
1G15	Articulated Concrete Block Matting	SY	83	130.2	10,790.0

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
Part 1H -L/	AGUNA SHORES LIVING SHORELINE (per SECTION 01 23 10 ALTERNA	TES AND ALL	OWANCES)		
1H1	Additional Mobilization	LS	1	2500 6	2500.00
1H2	Construction Surveys	LS	1	8000 00	8000.62
1H3	Graded Riprap	LF	495	Aw. C	99,000.00
1H4	Geotextile	SY	800	ا ٥٠ هـ	8, au. =
1H5	Marsh Fill	CY	165	35.5	5775.5º
1H6	Marsh Planting	LS	1	1200.5	1200.00
SUBTOTAL PART 1H - LAGUNA SHORES LIVING SHORELINE (1H1 THRU 1H6)				135,275	

TOTAL PROJECT BASE BID NO. 1 (PARTS 1A THRU 1H)	3,549,442.40	
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