Document 00911

NOTICE OF
ADDENDUM NO. 1

Date of Addendum: 12/19/14

PROJECT NAME: Lift Station Renewal/Replacement Project

PROJECT NO: WBS No. R-000267-111B-4

BID DATE: January 15th, 2015 (There is a change to the Bid Date.)

FROM: J. Timothy Lincoln, P.E., City Engineer
City of Houston, Department Of Public Works and Engineering
611 Walker Street
Houston, Texas 77002
Attn: Tanu Hiremath, P.E., Project Manager

TO: Prospective Bidders

CHANGE IN BID DATE

The Bid Date for this Project has been changed from 01/08/2015 (Date) to 01/15/2015 (Date).
Time of day and place for submittal of bid remains the same. The place for submittal remains the same.

The referenced Addendum forms a part of the Bidding Documents and will be incorporated into the Contract documents, as applicable.

Written questions regarding this Addendum may be submitted to the Project Manager following the procedures specified in Document 00200 – Instructions to Bidders. Immediately notify the City Engineer through the named Project Manager upon finding discrepancies or omissions in the Bid Documents.

This Addendum includes:

ADDENDUM SYNOPSIS

Changes to Project Manual
Contract Forms
Clarifications

DATED: Ravi Kaleyatodi

Ravi Kaleyatodi, P.E.
Senior Assistant Director
Department of Public Works and Engineering

END OF DOCUMENT

Document 00910

ADDENDUM NO. 1

Date of Addendum: 12/19/14

PROJECT NAME: Lift Station Renewal/Replacement Project

PROJECT NO: WBS No. R-000267-111B-4

BID DATE: January 15th, 2015 (There is a change to the Bid Date.)

FROM: J. Timothy Lincoln, P.E., City Engineer
City of Houston, Department of Public Works and Engineering
611 Walker
Houston, Texas 77002
Attn: Tanu Hiremath, P.E., Project Manager

TO: Prospective Bidders

This Addendum forms a part of the Bidding Documents and will be incorporated into the Contract documents, as applicable. Insofar as the original Project Manual and Drawings are inconsistent, this Addendum governs.

CHANGE IN BID DATE

The Bid Date for this Project has been changed from 01/08/2015 to 01/15/2015. Time of day and place for submittal of bid remains the same. The place for submittal remains the same.

This Addendum uses the change page method: remove and replace or add pages, or Drawing sheets, as directed in the change instructions below. Change bars (|) are provided in the outside margins of pages from the Project Manual to indicate where changes have been made; no change bars are provided in added Sections. Reissued Drawing Sheets show the Addendum number below the title block and changes in the Drawing are noted by a revision mark and enclosed in a revision cloud.

CHANGES TO PROJECT MANUAL

CONTRACT FORMS

1. Document 00410A - Replace in its entirety
2. Document 00410B - Replace in its entirety
3. Document 01110 - Replace in its entirety
4. Document 16010 – Add pages 16010-7 and 16010-8.

CLARIFICATIONS

5. Question from Bidder: Can the Bid Date be extended?

   Response: Yes, The Bid Date has been changed from 01/08/2015 to 01/15/2015

6. Question from Bidder: Can the Contract Time be extended?

   Response: Yes, Contract time has been extended from 442 days to 633 days.

7. Question from Bidder: Can additional information be provided on the existing lift Stations?

   Response: Yes, Attached are select Record Drawings sheets from Construction Job No. 3807-1, Drawing Set No. 27936 applicable to the existing Dairy Ashford and Harvest Moon Lift Stations

8. Question from Bidder: Can a site visit be scheduled for the Harvest Moon Lift Station Site?

   Response: A site visit has been scheduled for 9:00 A.M., Tuesday, December 23rd, 2014. Bidder(s) interested in viewing the site shall arrive no later than 9:00 am to the Harvest Moon Project site. The address to the Harvest Moon project site is as follows:

   Harvest Moon Lift Station (FN 482)
   709 Harvest Moon Lane
   Houston, Texas, 77077
   (GIMS Map No. 4857c / Key Map No. 488M)

All visitors to the site shall be equipped with hard hats, safety shoes, and safety glasses. The Harvest Moon site is accessible through a long narrow driveway with the access gate recess from the cul-de-sac. See bid drawings for additional details. A site visit has been scheduled for 9:00 A.M., Tuesday, December 23rd, 2014. Address: 709 Harvest Moon Lane, Houston, TX 77077

9. Question from Bidder: At which station number does the open cut portion of the 30-inch force main begin as the alignment approaches the Harvest Moon Lift Station?

   Response: The open cut portion of the 30-inch force main begins at station 36+48

10. Question from Bidder: Can you confirm the quantities of Bid Item No.40, 24-inch Sanitary Sewer by trenchless method.

    Response: The quantity for Bid Item No.40, 24-inch Sanitary Sewer by trenchless methods has been reduced to 4,010 linear feet from 4,234 linear feet. Documents 00410B and 01110 have been changed to reflect these changes

STATE OF TEXAS
EDUARDO QUIROZ
85559
LICENSED
PROFESSIONAL ENGINEER
12/18/14

END OF ADDENDUM NO. _1___

DATED: Ravi Kaleyatodi

Ravi Kaleyatodi, P.E.
Senior Assistant Director
Department of Public Works
and Engineering

END OF DOCUMENT

Document 00410A

BID FORM – PART A

To: **The Honorable Mayor and City Council of the City of Houston**
City Hall Annex
900 Bagby Street
Houston, Texas 77002

Project: Lift Station Renewal/Replacement Project, Hardy Temp Lift Station (FN 595) Harvest Moon Lift Station (FN 236), and Dairy Ashford Lift Station (FN 347)

Project No.: WBS No. R-000267-111B-4

Bidder: _____

(Print or type full name of business entity, such as corporation, LLC, etc)

OFFER

A. Total Bid Price: Having examined the Project location and all matters referred to in Bid Documents for the Project, we, the undersigned, offer to enter into a Contract to perform the Work for the Total Bid Price shown on the signature page of this Document

B. Security Deposit: Included with the Bid is a Security Deposit in the amount of 10 percent of the Total Bid Price subject to terms described in Document 00200 – Instructions to Bidders.

C. Period for Bid Acceptance: This offer is open to acceptance and is irrevocable for 90 days from Bid Date. That period may be extended by mutual written agreement of the City and Bidder.

D. Addenda: All Addenda have been received. Modifications to Bid Documents have been considered and all related costs are included in the Total Bid Price.

E. Bid Supplements: The following documents are attached:

[X] Security Deposit *(as defined in Document 00200 – Instructions to Bidders)*

[X] Document 00450 - Bidder's Statement of MWSBE Status

[X] Document 00452 - Contractor's Submission List - Fair Campaign Ordinance Form A

[X] Document 00453 – Bidder's Statement of Residency *(not required for AIP funded project)*

[X] Document 00454 - Affidavit of Non-interest

Revised by ARCADIS
12-18-2014

[X] Document 00455 - Affidavit of Ownership or Control
[ ] Document 00456 - Bidder's Certificate of Compliance with Buy American Program *(required for AIP funded project)*
[X] Document 00457 – Conflicts of Interest Questionnaire (CIQ)
[ ] Document 00458 - Bidder's Certificate Regarding Foreign Trade Restriction *(required for AIP funded project)*
[ ] Document 00459 - Contractor's Statement Regarding Previous Contracts Subject to EEO *(required for AIP funded project)*
[X] Document 00460 – (POP 1) Pay or Play Acknowledgement Form
[X] Document 00470 – Bidder's MWSBE Participation Plan *(required unless no MWSBE participation goal is provided in Document 00800* (the "Goal")).
[X] Document 00471 – Pre-bid Good Faith Efforts *(required if the goal in Bidder's Participation Plan–Document 00470 is lower than the Goal).*
[X] Document 00472 – Bidder's Goal Deviation Request *(required if the goal in Bidder's Participation Plan–Document 00470 is lower than the Goal).*
[ ] Others as listed: _____

_____

CONTRACT TIME

A. If offer is accepted, Contractor shall achieve Date of Substantial Completion within **663** days after the Date of Commencement of the Work, subject to adjustments of Contract Time as provided in the Contract.

Revised by ARCADIS
12-18-2014

Document 00410B

BID FORM – PART B

1.0 TOTAL BID PRICE HAS BEEN CALCULATED BY BIDDER, USING THE FOLLOWING COMPONENT PRICES AND PROCESS (PRINT OR TYPE NUMERICAL AMOUNTS):

A. STIPULATED PRICE: $ "N/A"

(Total Bid Price; minus Base Unit Prices, Extra Unit Prices, Cash Allowances and All Alternates, if any)

B1. BASE UNIT PRICE TABLE (HARVEST MOON LIFT STATION):

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
1	01502	Mobilization See Footnote (1)	LS	1	$165,000.00 (1)	$165,000.00 (1)
2	01506	Diversion Pumping (including pumping items)	LS	1		
3	01555	Flagmen See Footnote (2)	LS	1	$ (500.00)(2)	$ (500.00)(2)
4	01555	Traffic Control & Regulation	LS	1		
5	01562	Tree and plant protection	LS	1		
6	01570	Inlet Protection Barrier	LF	130		
7	01570	Sandbag barrier	LF	4100		
8	01570	Filter Fabric Fence (reinforced)	LF	2970		
9	01575	Stabilized Construction Exit	SY	89		
10	01740	Site restoration	LF	8468		
11	02082	4-ft Dia. Precast Concrete Type C Storm Sewer Manhole	EA	1		
12	02082	6-ft Dia. Precast Concrete Type C Storm Sewer Manhole	EA	1		
13	02082	4-ft Dia. Precast Concrete Sanitary Manhole	EA	5		
14	02082	5-ft Dia. Precast Concrete Sanitary Manhole	EA	8		
15	02082	6-ft Dia. Precast Concrete Sanitary Manhole	EA	3		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
16	02082	8-ft Dia. Precast Concrete Sanitary water tight & corrosion resistant Sanitary Manhole	EA	4		
17	02082	6-Inch Air Release Valves in 6-ft Dia. Precast Concrete Sanitary Manhole	EA	3		
18	02082	8-foot diameter forcemain bypass precast concrete manhole with hatch, valve, and miscellaneous accessories & appurtenances	EA	2		
19	02082	Extra depth, 4-foot diameter precast concrete manhole	VF	79		
20	02082	Extra depth, 5-foot diameter precast concrete manhole	VF	185		
21	02082	Extra depth, 6-foot diameter precast concrete manhole	VF	38		
22	02082	Extra depth, 8-foot diameter precast concrete corrosion resistant manhole	VF	96		
23	02082	18 inch diameter external drop for Manhole	EA	1		
24	02082	12 inch diameter external drop for Manhole	EA	1		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
25	02220, 02221, 02222, 16060	Harvest Moon Lift Station - Demolition of existing lift structure, manholes, forcemains, sanitary sewer lines, all existing equipment, includes removal and disposal of miscellaneous debris and concrete, asbestos abatement and other materials from site to 4 feet below the surface and backfill area to ground surface. Salvage & Demolition of Existing Pumps, Piping, Valves, Electrical and Instrumentation Devices	LS	1		
26	02220, 02221, 02222, 16060	Dairy Ashford Lift Station - Demolition of existing lift structure, manholes, forcemains, sanitary sewer lines, all existing equipment, includes removal and disposal of miscellaneous debris and concrete, asbestos abatement and other materials from site to 4 feet below the surface and backfill area to ground surface. Salvage & Demolition of Existing Pumps, Piping, Valves, Electrical and Instrumentation Devices	LS	1		
27	02221	Remove & dispose of reinforced concrete pavement with or without overlay, with or with or base, all thicknesses	SY	1620		
28	02221	Remove & dispose of existing manhole	EA	1		
29	02221	Remove & dispose of existing inlet	EA	1		
30	02221	Remove & dispose of pipe culverts	LF	70		
31	02233	Clearing & Grubbing	AC	1		
32	02260	Trench Safety	LF	1700		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
33	02315	Reconstruction of roadside ditch	LF	14		
34	02315	Excavation for Mitigation Pond and Pad Site	CY	2753		
35	02316	Backfill for Structures	CY	2666		
36	02319	Borrow	CY	2666		
37	02338	Cement Stabilized Subgrade, 8-Inch	SY	1176		
38	2338	Portland Cement	TON	25		
39	02441, 02448	18-inch Sanitary Sewer by trenchless method	LF	60		
40	02441, 02448	24-inch Sanitary Sewer by trenchless method	LF	4010		
41	02441, 02448	42-inch Sanitary Sewer by trenchless method	LF	14		
42	02441, 02448	48-inch Sanitary Sewer by trenchless method	LF	62		
43	02511	2-inch diameter water line by open cut	LF	700		
44	02511	3/4-inch diameter water line by open cut (to connect to hose bibb)	LF	50		
45	02512	1 1/2 inch to 2-inch diameter watertap and service line with meter box, short side	EA	1		
46	02526	3/4-inch Back Flow Preventer *(with lockable cage), Non-Freeze hose Bibb*	EA	1		
47	02531	12-inch diameter sanitary sewer, by open cut	LF	10		
48	02532, 02448	30-inch diameter force main by trenchless method	LF	3500		
49	02531	30-inch diameter force main by open cut	LF	734		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
50	02631	Stormwater Detention System (Tank) including gravel bedding and cover, compacted fill, geotextile fabric, geo-grid layer, 144 L.F. of discharge 6-inch PVC piping grouted end to end, excavation and installation including backfill	LS	1		
51	02631	24-inch diameter RCP storm sewer by open cut	LF	185		
52	02631	12-inch diameter RCP storm sewer by open cut	LF	597		
53	02632	Stormwater inlet Type A	EA	7		
54	02711	Type A hot mix asphalt base course, 6-inch	TON	388		
55	02713	Recycled crushed concrete base course, 7-inch thick	TON	495		
56	02741	Type D hot mix asphalt concrete surfacing, 1 1/2-inch thick	TON	97		
57	02751	7-inch thick reinforced concrete pavement	SY	1449		
58	02754	Concrete driveway including excavation 7-inch deep	SF	192		
59	02775	Concrete Sidewalk, 4 1/2-inch thick	SF	40		
60	02830	6-foot High Chain-Link Fence with 3-strand barb wire with PVC Slats	LF	539		
61	02830	6-foot High Wooden Fence with 3-strand barb wire (Front Entrance Only)	LF	40		
62	02830	4-foot Wide Chain-link Personnel Gate	EA	2		
63	02830	Double-Swing Wooden Gate 16' Wide	EA	1		
64	02830	Double-Swing Chain-Link Gate 20' Wide	EA	1		
65	02921	Hydro mulch seeding	AC	1		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
66	02922	Sodding	SY	530		
67	02951	Pavement repair & restoration	SY	1620		
68	03055, 03310, 05120,	Electrical & Control Bldg complete including foundation.	LS	1		
69	03055, 03310, 05120	Lift Station Structure by Cassion: Concrete structure and associated items for wetwell and valve vault including but not limited to excavation and backfill, new concrete, wet well hatches, fiberglass grating, force main and drain line connections; wet well ventilation piping with bird screen, including miscellaneous accessories and appurtenances.	LS	1		
70	09917	Install wet well protective liner	SF	5820		
71	11311, 15050, 15053, 15126	Lift Station Items: Supply and installation of three wet-well submersible pumps, cooling jackets, wet well discharge piping and brackets inside and outside of wet well, piping supports, all plug valves, check valves, air release valves, surge relief valve, valve and pipe supports, including any fittings, brackets, connections and any other miscellaneous accessories and appurtenances necessary for the operation of the lift stations	LS	1		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
72	Div 13 & 16	Supply and install Lift Station Control System, including but not limited to SCADA software engineering security and quality requirements, Primary instrumentation devices, control cabinet enclosures, power equipment, electrical and instrumentation system with devices, conduits, connections, boxes, enclosures, power poles, light pole and relocation of existing electrical utilities as needed, cathodic protection system, or any other miscellaneous accessories and appurtenances necessary for the operation of the lift station.	LS	1		
TOTAL BASE UNIT PRICES						$_____

C1. EXTRA UNIT PRICE TABLE (HARVEST MOON LIFT STATION):

Item No.	Spec Ref.	Extra Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
73	02318	Extra hand excavation around obstructions See Footnote (3)	CY	50	$_____ (17.00)(3)	$_____ (850.00)(3)
74	02318	Extra excavations around obstructions See Footnote (3)	CY	100	$_____ (30.00)(3)	$_____ (3,000.00)(3)
75	02318	Extra machine excavation See Footnote (3)	CY	1000	$_____ (30.00)(3)	$_____ (30,000.00)(3)
76	02318	Extra replacement of backfill material See Footnote (3)	CY	1000	$_____ (6.00)(3)	$_____ (6,000.00)(3)
77	02318	Extra cement stabilized sand backfill See Footnote (3)	CY	50	$_____ (28.00)(3)	$_____ (1,400.00)(3)
78	02501	Extra ductile iron compact fittings in place See Footnote (2)	TON	1.5	$_____ (1,700.00)(2)	$_____ (2,550.00)(2)
79	02318	Extra Stabilized Sand in Lieu of Lime See Footnote (3)	SY	350	$_____ (12.00)(3)	$_____ (4,200.00)(3)
80	03310	Extra Class "A" concrete installed in place for structures See Footnote (2)	CY	5	$_____ (400.00)(2)	$_____ (2,000.00)(2)
81	03211	Extra Grade 60 reinforcing steel in place See Footnote (2)	LB	2000	$_____ (1.00)(2)	$_____ (2,000.00)(2)
TOTAL EXTRA UNIT PRICES						$_____

REST OF PAGE INTENTIONALLY LEFT BLANK

D1. CASH ALLOWANCE TABLE (HARVEST MOON LIFT STATION):

Item No.	Spec Ref.	Cash Allowance Short Title	Cash Allowance in figures (1)
82	01110	Building Permit Allowance	$30,000.00
83	01110	Lane Closure Permit Fee	$1,000.00
84	01110	Street Cut Permit	$1,000.00
85	01110	Utility Reimbursement	$25,000.00
86	01110	Demolition Permit	$10,000.00
87	01110	Floodplain Management Development Permit	$10,000.00
88	01110	HCFCD Permit	$150.00
89	01110	Contractor Reimbursement Electrical Transformer Platform	$50,000.00
TOTAL CASH ALLOWANCES			$117,150.00

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B2. BASE UNIT PRICE TABLE (HARDY TEMP LIFT STATION):

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
90	01502	Mobilization See Footnote (1)	LS	1	$5,000.00(1)	$5,000.00(1)
91	01555	Traffic Control Plan and Regulation	LS	1	$_____ (2,500.00)(2)	$_____ (2,500.00)(2)
92	01555	Uniformed Peace Officer	LS	1	$_____ (500.00)(2)	$_____ (500.00)(2)
93	01555	Flagmen	LS	1	$_____ (500.00)(2)	$_____ (500.00)(2)
94	01570	Filter Fabric Fence (reinforced)	LF	100		
95	01570	Inlet Protection Barriers	LF	50		
96	01575	Stabilized Construction Exit	SY	50		
97	01740	Site Restoration	LF	200		
98	02082	4-ft Dia. Precast Concrete Sanitary Manhole	EA	2		
99	02082	Extra depth, 4-foot diameter precast concrete manhole	VF	12		
100	02082	5-ft Dia. Precast Concrete Type "C" Manhole	EA	1		
101	02220, 02221	Lift Station Demolition	LS	1		
102	02222	Cut, Plug, Grout Fill, and Abandon existing force main	LS	1		

Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
103	02260	Trench Safety System for Trench Excavations	LF	100		
104	02441, 02448	8-inch diameter gravity sanitary sewer by trenchless methods	LF	384		
105	02441, 02448	14-inch diameter steel casing	LF	354		
106	02631	19" X 30" Elliptical RCP, Class 4, (24-in Equivalent)	LF	20		
TOTAL BASE UNIT PRICES						$_____

C2. EXTRA UNIT PRICE TABLE (HARDY TEMP LIFT STATION):

Item No.	Spec Ref.	Extra Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
107	02318	Extra Ductile Iron Compact Fittings In Place See Footnote (3)	TON	1	$_____ (1,700.00)(3)	$_____ (1,700.00)(3)
108	02318	Extra cement stabilized sand backfill See Footnote (3)	CY	50	$_____ (28.00)(3)	$_____ (1,400.00)(3)
109	02318	Extra excavations around obstructions See Footnote (3)	CY	100	$_____ (30.00)(3)	$_____ (3,000.00)(3)
110	02318	Extra machine excavation See Footnote (3)	CY	50	$_____ (10.00)(3)	$_____ (500.00)(3)
111	02318	Extra replacement of backfill material See Footnote (3)	CY	50	$_____ (5.00)(3)	$_____ (250.00)(3)
112	02318	Extra hand excavation around obstructions See Footnote (3)	CY	50	$_____ (15.00)(3)	$_____ (750.00)(3)
113	03310	Extra Class "A" concrete installed in place for structures See Footnote (2)	CY	5	$_____ (400.00)(2)	$_____ (2,000.00)(2)
114	03211	Extra Grade 60 reinforcing steel in place See Footnote (2)	LB	2000	$_____ (1.00)(2)	$_____ (2,000.00)(2)
TOTAL EXTRA UNIT PRICES						$_____

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D2. CASH ALLOWANCE TABLE (HARDY TEMP LIFT STATION):

Item No.	Spec Ref.	Cash Allowance Short Title	Cash Allowance in figures (1)
115	01110	Building Permit Allowance	$2,000.00
116	01110	Lane Closure Permit Fee	$200.00
117	01110	Street Cut Permit	$500.00
118	01110	Utility Reimbursement	$15,000.00
119	01110	Demolition Permit	$5,000.00
120	01110	Railroad Expense Allowance	$15,000.00
TOTAL CASH ALLOWANCES			$37,700.00

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E. ALTERNATES TABLE:

Item No.	Spec Ref.	Alternate Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total Price for Alternate in figures
N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL ALTERNATES						$_____

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F. TOTAL BID PRICE: $_____
(Add Totals for Items A., B1., B2., C1., C2., D1., D2., and E. above)

2.0 SIGNATURES: By signing this Document, I agree that I have received and reviewed all Addenda and considered all costs associated with the Addenda in calculating the Total Bid Price.

Bidder: _____
(Print or type full name of your proprietorship, partnership, corporation, or joint venture.*)

**By: _____
Signature Date

Name: _____
(Print or type name) Title

Address: _____
(Mailing)

_____
(Street, if different)

Telephone and Fax Number: _____
(Print or type numbers)

* If Bid is a joint venture, add additional Bid Form signature sheets for each member of the joint venture.

** Bidder certifies that the only person or parties interested in this offer as principals are those named above. Bidder has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding.

Note: This document constitutes a government record, as defined by § 37.01 of the Texas Penal Code. Submission of a false government record is punishable as provided in § 37.10 of the Texas Penal Code.

Footnotes for Tables B through E:
(1) Fixed Unit Price determined prior to Bid. Cannot be adjusted by the Bidder.
(2) Minimum Bid Price determined prior to Bid. Can be increased by the Bidder by crossing out the Minimum and noting revised price on the line above.
(3) Maximum Bid Price determined prior to Bid. Can be decreased but not increased by Bidder by crossing out the Maximum and noting revised price on the line above. A Bid that increases the Maximum Bid Price may be found non-conforming and non-responsive.
(4) Fixed Range Bid Price determined prior to Bid. Unit Price can be adjusted by Bidder to any amount within the range defined by crossing out prices noted and noting revised price on the line above.

Section 01110

SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Summary of the Work including broad scope of work by Contractor, work by the City, City furnished Products, Work sequence, Contractor use of Premises and special conditions for substantial completion and City occupancy.

B. **THIS PACKAGE OF PLANS AND SPECIFICATIONS WERE FORMERLY SUBMITTED AS A COMPREHENSIVE MULTI-LIFT STATION (4 FACILITIES) PACKAGE; THEREFORE, ANY REFERENCES AND/OR NOTATIONS RELATED TO HUNTERWOOD M.U.D. (FN 482) AND NORTHBROOK (FN 330) ARE <u>NO LONGER APPLICABLE</u> TO THIS CURRENT PROJECT.**

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. Work of the Contract is for the Replacing of the ***Harvest Moon Lift Station (FN 236)*** located at 709 Harvest Moon Lane which includes:

1. Mobilize sufficient workforce, equipment, and supervision to complete work for the Contract for the construction of the FY 2012 Harvest Moon Lift Station Renewal /Replacement Project. The project consists of demolition and removal of the existing control rooms and wet well and dry pit, demolition and removal of the existing concrete pavement and fences. Construction of new wet well with valve vault, electrical and controls building, pavement, bypass manholes. Excavate and dispose of approximately 2,753 cubic yards (CY) of in situ soil, supply and compact approximately 2,666 CY of suitable borrow material. Furnish and install approximately 700 linear feet of 2-inch water line, 4,010 linear feet of 24-inch diameter gravity sanitary sewer by trenchless method, 4,200 linear feet of 30-inch diameter force main by trenchless method, three submersible pumps with associated piping, valves, controls and electrical system, discharge header and force main. Underground storm water detention tank with inlets with 597 LF of 12-inch RCP and 185 LF of 24-inch RCP, and site lighting.

2. ByPass Diversion Pumping - Furnish, install, maintain, and remove after construction, temporary pumps and piping capable of conveying approximately 216 gpm of average daily flow and 3,181 gpm estimated peak wet weather flow of waste water for the term of construction of the project, per specification 01504, 01506. Items include all labor, equipment, materials and power necessary to facilitate bypass pumping for the duration of project (as needed) including but not

limited to pumps, piping, electrical controls, equipment, instrumentation and power.

3. Provide Flagman per Traffic Control Plans and specification 01555.

4. Furnish, install, utilize during construction, and remove after construction Traffic Control & Regulation devices per the plans and COH specifications 01555.

5. Furnish, install, maintain during construction, and remove after construction tree and plant protection per the Tree Protection Plan in accordance with COH specification 01562.

6. Furnish, install, maintain during construction and remove after construction, approximately 130 linear feet of Inlet Protection Barrier per the Storm Water Pollution Prevention Plan in accordance with COH specification 01570.

7. Furnish, install, maintain during construction and remove after construction, approximately 4,100 linear feet of sandbag barrier per the Storm Water Pollution Prevention Plan in accordance with COH specification 01570.

8. Furnish, install, maintain during construction and remove after construction, approximately 2,970 linear feet of reinforced filter fabric fence per the Storm Water Pollution Prevention Plan in accordance with COH specification 01570.

9. Furnish, install, maintain during construction and remove after construction, approximately 89 square yard of stabilized construction exit per the Storm Water Pollution Prevention Plan in accordance with COH specification 01575.

10. Furnish all equipment, labor, and materials necessary to restore approximately 8,468 linear feet of the project alignment to its pre-construction condition or better per the plans and COH Specification 01740.

11. Furnish and install one 4-foot diameter Type "C" precast concrete storm sewer manholes in accordance with COH specification 02082.

12. Furnish and install one 6-foot diameter Type "C" precast concrete storm sewer manholes in accordance with COH specification 02082.

13. Furnish and install five 4-feet diameter precast concrete sanitary manholes in accordance with COH specification 02082.

14. Furnish and install eight 5-feet diameter precast concrete sanitary manholes in accordance with COH specification 02082.

15. Furnish and install four 6-feet diameter precast concrete sanitary manholes in accordance with COH specification 02082.

16. Furnish and install four water tight 8-feet diameter precast concrete, water tight & corrosion resistant, sanitary manholes in accordance with COH specification 02082.

17. Furnish and install three 6-Inch Air Release Valves with 5/16-Inch orifice, in 6-feet diameter precast concrete sanitary manholes, complete and in place, per plans and in accordance with COH specification 02082.

18. Furnish and install two 8-feet diameter precast concrete manholes with hatch, valve, and miscellaneous accessories and appurtenances necessary for bypass pumping per the plans and in accordance with COH specification 02082.

19. Furnish and install approximately 79 extra vertical feet of 4-foot diameter precast concrete manholes in accordance with COH specification 02082.

20. Furnish and install approximately 185 extra vertical feet of 5 -foot diameter precast concrete manholes in accordance with COH specification 02082.

21. Furnish and install approximately 38 extra vertical feet of 6 -foot diameter precast concrete manholes in accordance with COH specification 02082.

22. Furnish and install approximately 96 extra vertical feet of 8 -foot diameter precast concrete corrosion-resistant manholes in accordance with COH specification 02082.

23. Furnish & Install one 18 inch diameter external drop for manhole per plans and COH specification 02082.

24. Furnish & Install one 12 inch diameter external drop for manhole per plans and COH specification 02082.

25. Furnish all labor and equipment necessary for demolition of existing wet well and dry pit of the lift station and existing controls building, of the Harvest Moon Lift Station. Demolition includes the salvage of existing pumps, piping, valves, electrical and instrumentation devices and motors deemed salvable by the City of Houston. Contractor to coordinate with City of Houston Wastewater Operations to identify equipment and/or material to be salvaged and course of action of staging these items during demolition. Work also includes excavation/removal of all improvements, including structures, wet wells and dry pits, fences, gates, and pavement to four feet below existing grade and hauling off and legal disposal of debris. Work includes removal and disposal of grit/sludge from the wet well and grouting in accordance to COH Specification 02220 and is considered subsidiary to

the demolition. Work also includes cut, plug and abandoning the existing force main. Grading the existing site is considered part of the demolition.

26. Furnish all labor and equipment necessary for demolition of existing wet well and dry pit of the lift station and existing controls building, of the Dairy Ashford Lift Station. Demolition includes the salvage of existing pumps, piping, valves, electrical and instrumentation devices and motors deemed salvable by the City of Houston. Contractor to coordinate with City of Houston Wastewater Operations to identify equipment and/or material to be salvaged and course of action of staging these items during demolition. Work includes notification to the TCEQ and the appropriate demolition permits and notification as required. Work also includes excavation/removal of all improvements, including structures, wet wells and dry pits, fences, gates, and pavement to four feet below existing grade and hauling off and legal disposal of debris. Work includes removal and disposal of grit/sludge from the wet well and grouting in accordance to COH Specification 02220 and is considered subsidiary to the demolition. Work also includes cut, plug and abandoning the existing force main. Grading the existing site is considered part of the demolition.

27. Furnish all equipment, labor, and supervision necessary for the removal and disposal of approximately 1,620 square yards of various thicknesses of reinforced concrete pavement and bases necessary for auger pit, in accordance with the plans and COH specification 02221.

28. Furnish all equipment, labor, and supervision necessary for the removal and disposal of one manhole in accordance with the plans and COH specification 02221.

29. Furnish all equipment, labor, and supervision necessary for the removal and disposal of one storm water inlet in accordance with the plans and COH specification 02221.

30. Furnish all equipment, labor, and supervision necessary for the removal and disposal of 70 linear feet of storm water pipe culverts in accordance with the plans and COH specification 02221.

31. Furnish all equipment, labor, and supervision necessary for clearing and grubbing of one acre in accordance with the plans and COH specification 02233.

32. Provide a trench safety system for approximately 1,700 linear feet of excavation and excavation for shafts and structures in accordance with COH specification 02260.

33. Furnish all equipment, labor, and supervision necessary for the reconstruction of approximately 14 linear feet of roadside ditch in accordance with the plans and COH specification 02315.

34. Furnish all equipment, labor, and supervision necessary for the excavation and off-site disposal per COH 02120, of approximately 2,753 cubic yards of in situ soil for the establishment of the mitigation pond and the elevated pad site, in accordance with the plans and COH specification 02315.

35. Place & compact approximately 2,666 cubic yards of borrow material for the elevated pad site per the plans and COH specification 02316.

36. Furnish and deliver to site approximately 2,666 cubic yards of borrow material suitable for COH specification 02316, in accordance with the plans and COH specification 02319.

37. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 1,176 square yards of 8-inch thick of cement stabilized base course for the lift station access road in accordance with the plans and COH specification 02338.

38. Furnish approximately 25 tons of Portland cement for the lift station access road in accordance with the plans and COH specification 02338.

39. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 60 linear feet of 18-inch diameter gravity sanitary sewer pipe by trenchless methods per the plans and COH specification 02441 or 02448.

40. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 4,010 linear feet of 24-inch diameter gravity sanitary sewer pipe by trenchless methods per the plans and COH specification 02441 or 02448.

41. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 14 linear feet of 42-inch diameter gravity sanitary sewer pipe by trenchless methods per the plans and COH specification 02441 or 02448.

42. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 62 linear feet of 48-inch diameter gravity sanitary sewer pipe by trenchless methods per the plans and COH specification 02441 or 02448.

43. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 700 linear feet of 2-inch diameter water pipe by open cut per the plans and COH specification 02511.

44. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 50 linear feet of 3/4-inch

diameter water pipe by open cut per the plans and COH specification 02511.

45. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of one 1-1/2 to 2-inch water tap with meter, meter box and appurtenances per the plans and COH specification 02512.

46. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of one back flow preventer with lockable cage and a non-freeze hose bib per the plans and COH specification 02526.

47. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 10 linear feet of 12-inch diameter gravity sanitary sewer pipe by open cut per the plans and COH specification 02531.

48. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 3,500 linear feet of 30-inch diameter sanitary sewer force main pipe by trenchless methods per the plans and COH specification 02441 or 02532.

49. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 734 linear feet of 30-inch diameter sanitary sewer force main pipe by open cut per the plans and COH specification 02532.

50. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of one Stormwater Detention System (Tank) including gravel bedding and cover, compacted fill, geotextile fabric, geo-grid layer, dual discharge 6-inch PVC piping grouted end to end, excavation and installation including backfill per the plans and COH specification 02631.

51. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 185 linear feet of 24-inch diameter RCP storm sewer pipe by open cut per the plans and COH specification 02631.

52. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of approximately 597 linear feet of 12-inch diameter RCP storm sewer pipe by open cut per the plans and COH specification 02631.

53. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of seven type A storm sewer inlets per the plans and COH specification 02632.

54. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 388 tons of Type A hot mix asphalt base course 6-inchs thick for the lift station access road per the plans and COH specification 02711.

55. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 495 tons of recycled crushed concrete base course 7-inchs thick for the lift station pad per the plans and COH specification 02713.

56. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 97 tons of Type D hot mix asphalt concrete surfacing, 1 1/2-inch thick for the lift station access road per the plans and COH specification 02741.

57. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 1,449 square yards of reinforce concrete 7-inchs thick for the lift station pad site per the plans and COH specification 02751.

58. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 192 square feet of concrete driveway, including 7-inches of excavation per the plans and COH specification 02754.

59. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 40 square feet of reinforced concrete sidewalk 4 1/2-inch thick per the plans and COH specification 02775.

60. Furnish and install approximately 539 linear feet of 6-foot high chain link fence with 3 strand barb wire and PVC slats per plans and COH Specification 02830. Replace the Lift Station Identification sign, considered subsidiary to the cost of the fence

61. Furnish and install approximately 40 linear feet of 6-foot wooden fence with 3 strand barb wire per plans and COH Specification 02830.

62. Furnish and install two 4-foot wide personnel gate per plans and COH Specification 02830.

63. Furnish and install one 16-foot wide wooden double swing gate with new lift station signage per plans and COH Specification 02830.

64. Furnish and install one 20-foot wide chain link double swing gate with new lift station signage per plans and COH Specification 02830.

65. Furnish and install approximately 1.00 Acres of hydro mulch seeding per plans and COH Specification per 02921.

66. Furnish and install approximately 530 square yards of sodding per plans and COH Specification per 02921.

67. Furnish all materials, equipment, labor, and supervision necessary for the excavation and installation of 1,620 square yards of pavement repairs all thicknesses and materials, including base per the plans and COH specification 02951 and restoration.

68. Furnish all labor, equipment, material, and supervision necessary for construction of the electrical and controls building, including excavation and backfill, foundation per plans and COH Specifications, 03055, 03100, 03100, 03151, 03211, 03310, 03341, 03350, 03390, 03600, 03931, 05120.

69. Furnish all labor, equipment, material, and supervision necessary for construction of the concrete structures, wet well by caisson, valve vault, electric and control building, including excavation and backfill, final grading, wet well hatches, influent and drain line connections, grating, ventilation with bird screens per plans and COH Specifications, 03055, 03100, 03100, 03151, 03211, 03310, 03341, 03350, 03390, 03600, 03931, 05120, 06610.

70. Furnish all labor, equipment, material, and supervision necessary for the installation of approximately 5820 square feet of protective liner from the COH approved products list per plans and COH specification 09917.

71. Furnish all labor, equipment, material, and supervision necessary for the installation of three submersible pumps with VFD drives, cooling jackets, all piping, valves, fittings, brackets and piping supports, including painting, and other miscellaneous accessories and appurtenances necessary for the operation of the lift station per plans and COH specification 11311, 15050, 15053, 15126.

72. Furnish all labor, equipment, material, and supervision necessary for installation of the electrical and control system including relocation of existing electrical utilities as needed, power pole, four light poles, power equipment and wiring, electrical devices, SCADA software engineering security and quality requirements, primary instrumentation devices, electrical and control cabinets and enclosures, conduits, connections, cathodic protection and miscellaneous accessories and appurtenances necessary for the operation of the lift station per plans and COH Specifications Division 13 & 16.

B. Work of the Contract is for the Elimination of the ***Hardy Temp Lift Station (FN 595)*** located at 9561 West Hardy Road which includes:

1. Mobilization will include sufficient workforce, equipment, and supervision to complete work for the Contract for the construction of the FY 2012 Hardy Temp Lift Station Elimination Project. The project consists of construction of a relief sewer system, (approximately 384 linear feet of 8-inch diameter gravity sanitary sewer pipe encased in approximately 354 linear feet of 14-inch diameter gravity sanitary sewer and 2 @ 4-feet diameter precast sanitary sewers) thereby eliminating the need for this "temporary" lift station. The abandonment of the existing force main and salvage, demolition and restoration of the site. Coordination is required with the following entities:

   Coordination with Union Pacific:

   Union Pacific Railroad contact information: Grevon Gaines-MTM, Union Pacific Railroad Company, 12414 Hwy 225, Laporte, TX 77571,
   Phone: 713-577-0909
   Cell: 832-409-9786

   Coordination with HCTRA:

   Harris County Toll Road Authority: Quinton C. Alberto, P.E.
   7701 Wilshire Place Drive
   Houston, Texas 77040-5326,
   Phone: 713-587-7867
   Fax: 281-875-1592

2. Traffic Control Plan and Regulation - Furnish, install, utilize during construction, and remove after construction traffic control devices as per specification 01555.
3. Uniformed Peace Officer – Provide and utilize during construction uniformed peace officer(s) as specified in the Traffic Control Plan and in accordance with COH specification 01555.
4. Flagmen - Provide and utilize during construction Flagmen as specified in the Traffic Control Plan and in accordance with COH specification 01555.
5. Filter Fabric Fence (reinforced) - Furnish, install, utilize during construction, and remove after construction, 100 LF of filter fabric fence as per Storm Water Pollution Prevention Plan and specification 01570.
6. Inlet Protection Barriers - Furnish, install, utilize during construction, and remove after construction, 50 LF of inlet protection barriers as per Storm Water Pollution Prevention Plan and specification 01570.
7. Stabilized Construction Exit - Furnish, install, utilize during construction, and remove after construction, 50 SY of stabilized construction exits per Storm Water Pollution Prevention Plan and specification 01575.
8. Site Restoration - Furnish all materials, labor and equipment necessary to restore Hardy Temp Lift Station area and 200 LF to its original condition including but not limited to asphalt and concrete pavement, regrading, sodding and any other necessary items in accordance with COH specification 01740.

9. 4-ft Dia. Precast Concrete Sanitary Manhole – Furnish and install 2 new 4-foot diameter precast concrete manholes for sanitary sewers as per specification 02082.
10. Extra depth, 4-foot diameter precast concrete manhole - Furnish and install approximately 12 extra vertical feet of 4 -foot diameter precast manholes in accordance with COH specification 02082.
11. Type "C" Manhole – Furnish and install one 5-foot diameter precast concrete Type "C" manhole in accordance with COH specification
12. Lift Station Demolition – Perform partial demolition of existing temporary lift station, and salvage any equipment deemed usable by the City of Houston. Contractor to coordinate with City of Houston Wastewater Operations to identify equipment and/or material(s) to be salvaged and the course of action of staging these items during demolition as per specifications 02220, 02221, 02222. Work also includes removal and disposal concrete sidewalk and removal and disposal of grit/sludge from the wet well and is considered subsidiary to the demolition. Disposal of debris in accordance with specification 02136 and notification to the TCEQ and the appropriate demolition notification as required, and regrading and (restoration) sodding the site (specification 1740).
13. Cut, Plug, Grout Fill, and Abandon existing Force Main - Abandon existing force main as per COH construction plans and specifications (specification 02222).
14. Trench Safety System for Trench Excavations - Furnish and install trench safety system for trench excavations utilized during deployment of 8-inch diameter gravity sanitary sewer and 14-inch steel casing as per specification 02260.
15. 8-inch diameter gravity sanitary sewer by trenchless methods - Furnish and install approximately 384 linear feet of 8-inch diameter gravity sanitary sewer, by trenchless methods, in order to provide a relief sewer from the Hardy Temp Lift Station (W. Hardy Road) to the intersection of E. Hardy Road and Tidwell Lane area in accordance with construction plans and specifications 02441 and 02448. Grouting of annular space is considered subsidiary to the line item. Coordination with Harris County Toll Road Authority (HCTRA) and Union Pacific Railroad is required prior to and during construction.
16. 14-inch diameter steel casing - Furnish and install approximately 354 linear feet of 14-inch diameter steel casing, by trenchless methods, in order to provide a relief sewer from the Hardy Temp Lift Station (W. Hardy Road) to the intersection of E. Hardy Road and Tidwell Lane area in accordance with construction plans and specifications 02441 and 02448. Coordination with HCTRA and Union Pacific Railroad is required prior to and during construction.
17. 19"X30" Elliptical RCP (24" equivalent) – Furnish and install approximately 20 linear feet of 19" X 30" Elliptical RCP (24" equivalent) as per plans and specifications 02631.

1.03 CASH ALLOWANCES

A. Include the following specific Cash Allowances in Contract Price under provision of General Conditions Paragraph 3.11 for the ***Harvest Moon Lift Station (FN 236)*** located at 709 Harvest Moon Lane:
   1. Building Permit Allowance – This allowance to be used for reimbursement of actual Building Permit fees.
   2. Lane Closure Permit Fee Allowance – This allowance to be used only for reimbursement of actual Lane Closure Permit fees.
   3. Street Cut Permit Fee Allowance – This allowance to be used only for reimbursement of actual Street Cut Permit fees.
   4. Utility Reimbursement – This allowance to be used for reimbursement of actual utility fees, not utility costs.
   5. Demolition Permit – This allowance to be used for reimbursement of actual demolition permit fees.
   6. Floodplain Management Development Permit- This allowance to be used for reimbursement of actual floodplain management development permit fees.
   7. HCFCD Permit Fees- This allowance to be used for reimbursement of actual Harris County permit fees.
   8. Electrical Transformer Platform – This allowance is to be used for reimbursement of cost actually incurred by the contractor for changes for an elevated electrical transformer platform, if required by Centerpoint Energy.

B. Include the following specific Cash Allowances in Contract Price under provision of General Conditions Paragraph 3.11 for the ***Hardy Temp Lift Station (FN 595)*** located at 9561 West Hardy Road:
   1. Building Permit Fee Allowance– This allowance to be used for reimbursement of actual building permit fees.
   2. Lane Closure Permit Fee Allowance – This allowance to be used only for reimbursement of actual Lane Closure Permit fees.
   3. Street Cut Permit Fee Allowance – This allowance to be used only for reimbursement of actual Street Cut Permit fees.
   4. Demolition Permit – This allowance to be used for reimbursement of actual demolition permit fees.
   5. Floodplain Management Development Permit Fee Allowance – This allowance to be used only for reimbursement of floodplain management development permit fees.
   6. Railroad Expense Fee Allowance – This allowance to be used only for reimbursement of railroad expense fees.

1.04 ALTERNATE-Not Used

1.05 CITY-FURNISHED PRODUCTS

A. Items Furnished by the City for Installation and final connection by Contractor: **Water Meter.**

B. Contractor's Responsibilities:

1. Arrange and pay for Product delivery to the site.
2. Receive and unload Products at the site; jointly with the City, inspect for completeness or damage.
3. Handle, store, install, and finish Products.
4. Repair or replace damaged items.

1.06 WORK SEQUENCE

A. Construct the Work in Phases during the construction period, coordinate construction schedule and operations with the COH Project Manager:

1. No Phases for this Project.

B. For projects with no phases, do not disturb more than 50% of the total project linear feet of disturbed right-of-way and easement until site is restored in accordance with 01740-Site Restoration. Contractor may have only one street in each subdivision open for excavation at any one time.

C. Coordination of the Work: Refer to Section 01312 - Coordination and Meetings.

D. Contractor shall coordinate work with the Home Owners Associations of each subdivision.

E. The recommended sequence of construction is to first install all bypass pumping required. Demolish or partially demolish lift station structures as shown on plans. Concurrently construct lift stations improvements, gravity sanitary sewer and force mains. It is recommended that the gravity sanitary sewer be constructed, from downstream to upstream. When the gravity lines, force mains, and lift stations have been tested and approved the existing lift station at Dairy Ashford may be demolished.

1.07 CONTRACTOR USE OF PREMISES

A. Comply with procedures for access to the site and Contractor's use of rights-of-way as specified in Section 01145 - Use of Premises.

B. Construction Operations: Limited to the City's rights-of-way, utility easements, and inside the wastewater treatment plant site.

C. Utility Outages and Shutdown: Provide notification to the City and private utility companies (when applicable) a minimum of 48 hours, excluding weekends and holidays, in advance of required utility shutdown. Coordinate all work with the

City as required.

1.08 STREET CUT ORDINANCE

A. Excavations on or under pavement in the City's right-of-way must have a permit. Comply with City of Houston, Texas Ordinance No. 2000-1115, an ordinance amending Chapter 40 of the Code of Ordinances, Houston, Texas, relating to excavating in the Public right-of-way.

B. Comply with the latest edition of street cut "New Pavement Repair and Pavement Replacement details".

C. Quantities are included for street cut pavement and replacement in applicable Specification sections for Unit Price contracts.

D. Include Payment for street cut pavement repair and replacement in lump sum bid for Stipulated Price contracts.

1.09 WARRANTY

A. Comply with warranty requirements in accordance with Document 00700 - General Conditions.

1.10 ADDITIONAL CONDITIONS FOR SUBSTANTIAL COMPLETION

A. In addition to requirements outlined in document 00700-General Conditions, for contractor to be substantially complete with the Work and call for the inspection by the Project Manager to confirm, the following conditions must be met or completed:

1. Demonstrate the ability to receive and monitor video and Supervisory Control and Data Acquisition (SCADA) data from all remote sites.
2. All testing shall be completed and accepted by Project manager.
3. All SCADA and security equipment shall be installed, accepted by manufacturer's representative and approved for operation.
4. Draft O&M manuals shall be delivered to Project Manager.
5. Training shall be conducted, utilizing draft O&M manuals.
6. All Safety related work including pavement stripping, signing and signalization including all safety-related systems and equipment shall be installed, accepted by manufacturer's representative and approved for use.
7. All pay items complete report.
8. Contractor shall contact Construction Project Manager to complete Texas Department of Licensing and regulation Construction Inspection of pedestrian elements for Texas Accessibility Standards
9. Complete removal of temporary diversion pumping systems.

10. Completed demolition at the existing lift station facility.
11. Abandonment and/or grout fill of noted force main, gravity sewer sections and wet well.
12. Completion of site restoration and pavement restoration.
13. Substantial completion shall be contingent on the successful completion of the seven-day operational test. Successful completion of the seven-day operational test is defined as normal operation of all lift station systems for seven consecutive days without shut downs, failures, system malfunctions or SCADA errors. The Contractor shall request, in writing, that the Project Manager notify Wastewater Operations Branch (WOB) at least three weeks prior to the proposed start of the seven-day test to confirm that the facility to be tested and WOB is ready for the seven-day test. WOB will then authorize the Project Manager to run the seven-day and WOB will set the start date for this test.
14. Accepted Methods of sanitary sewer line testing passed.
15. Approval of warranty documents.

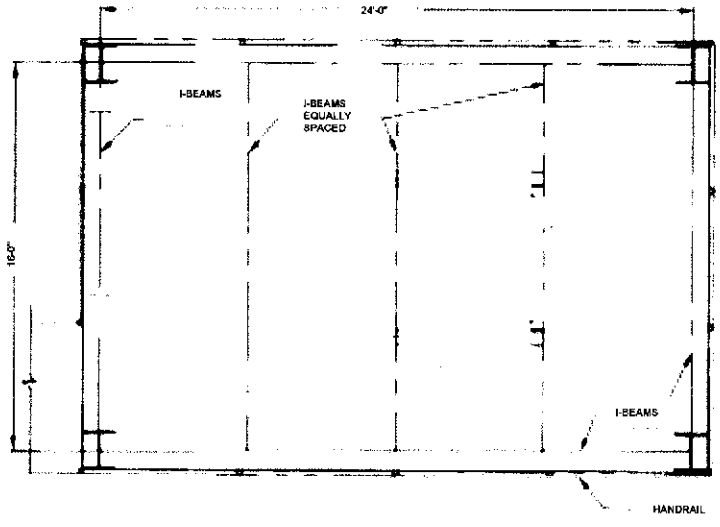
B. No additional or special conditions described in Paragraph 1.10 may be included in Contractor's punch list. Final acceptance shall require completion of all punch list items. This completion shall be approved by the Project Manager. Final acceptance shall require delivery, to Wastewater Operations Branch, the final O&M Manuals, spare parts, and completion of all operator and maintenance training. The Contractor is also required to deliver to Wastewater Operations, an active copy of the lift station PLC program for final acceptance. A .pdf version of the program is not acceptable.

PART 2 PRODUCTS - Not Used

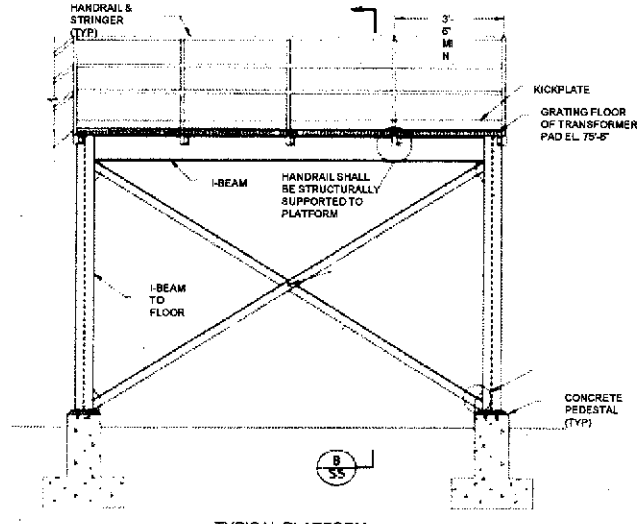
PART 3 EXECUTION - Not Used

END OF SECTION

ILLUSTRATION OF SUPPORT PLATFORM FOR TRANSFORMER



PLATFORM FRAMING PLAN
NTS

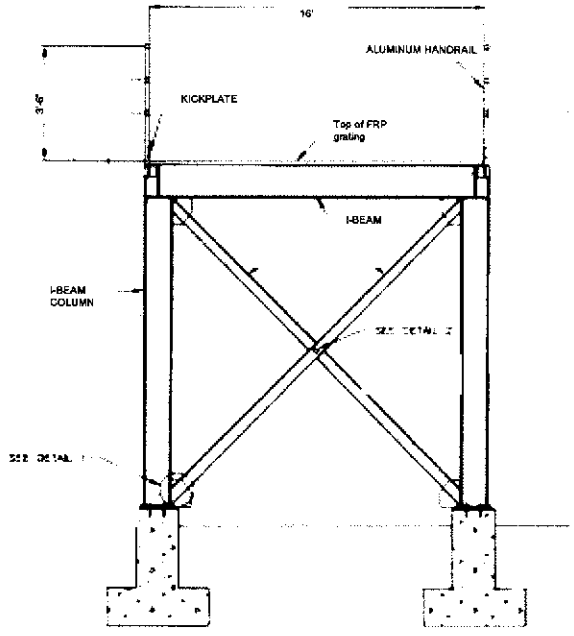


TYPICAL PLATFORM
NTS

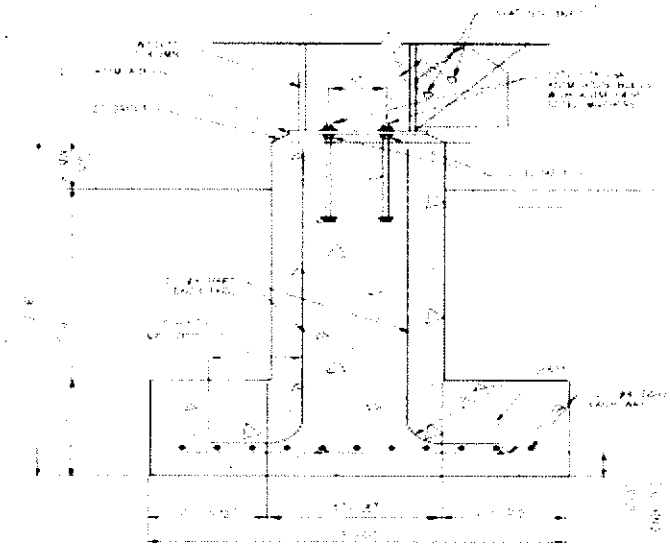
Notes:

1. Drawings are for illustration only and shall not be used for construction. Contractor shall submit engineering drawings signed and sealed by a Professional Engineer licensed in the State of Texas for approval.
2. Design shall be in compliance with CenterPoint Energy's requirements and regulations and shall be approved submitted and approved by CenterPoint. Contact Adam McDonald, CnterPoint Energy Engineering, 713-207-6120,with questions.
3. Platform shall be designed to meet the CenterPoint criteria for material, structural loading capacity, vehicular and personnel accessibility. The transformer to be supported weighs 43,000 pounds.
4. Platform shall be 1-foot above the 500-year flood elevation, which is calculated as 75'-6".
5. Provide concrete pedestals, aluminum guardrails, steel supports, FRP grating, access stairway with aluminum handrails and FRP treads and concrete landing with minimum dimensions 5' x 8'.

ILLUSTRATION OF SUPPORT PLATFORM FOR TRANSFORMER



SECTION
NTS



TYPICAL PEDESTAL
NTS

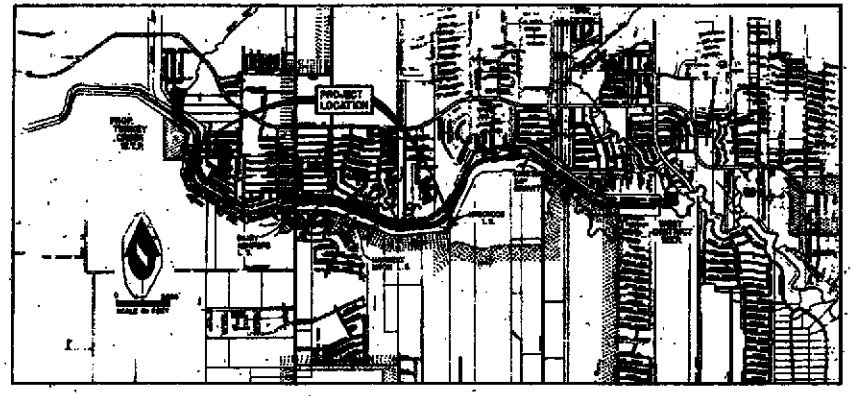
Notes:

1. Drawings are for illustration only and shall not be used for construction. Contractor shall submit engineering drawings signed and sealed by a Professional Engineer licensed in the State of Texas for approval.
2. Design shall be in compliance with CenterPoint Energy's requirements and regulations and shall be approved submitted and approved by CenterPoint. Contact Adam McDonald, CnterPoint Energy Engineering, 713-207-6120,with questions.
3. Platform shall be designed to meet the CenterPoint criteria for material, structural loading capacity, vehicular and personnel accessibility. The transformer to be supported weighs 43,000 pounds.
4. Platform shall be 1-foot above the 500-year flood elevation, which is calculated as 75'-6".
5. Provide concrete pedestals, aluminum guardrails, steel supports, FRP grating, access stairway with aluminum handrails and FRP treads and concrete landing with minimum dimensions 5' x 8'.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS
WEST DISTRICT DIVERSION

WASTEWATER DIVISION JOB NO. 3807-1

EPA NO. C-48-1205-40



PRIVATE UTILITY LINES SHOWN

Turner Collie & Braden Inc.

JOB NO. 1971-325 CONTRACT NO. 1

INDEX OF DRAWINGS

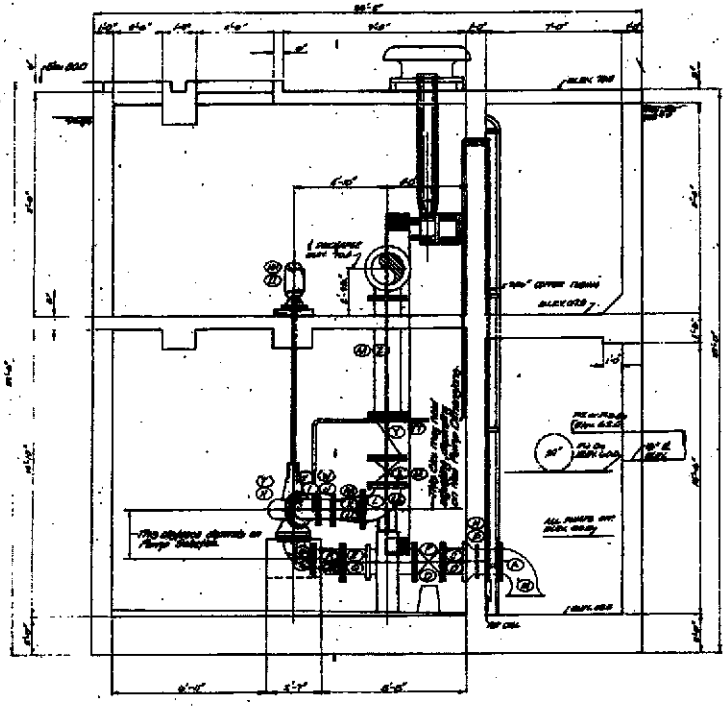
SHEET NO.	DESCRIPTION
1	Cover Sheet
2	General Notes and Site Location
3-8	Force Main Plan and Profile Sheets
10	Buffalo Bayou Crossing - Elevation and Details
11	Lift Station Dairy Ashford - Mechanical
12	Lift Station Richmond - Mechanical
13	Lift Station, Dairy Ashford and Richmond - Electrical
14	Lift Station Richmond - Electrical
15	Harvest Main Lift Station - Project Layout & General Notes
16	Harvest Main Lift Station - Structural Plans and Sections
17	Harvest Main Lift Station - Mechanical Plans and Sections
18	Harvest Main Lift Station - Electrical Details
19	Harvest Main Lift Station - Details
20	Standard Concrete Details

SHEET NO. 1 OF 20 SHEETS

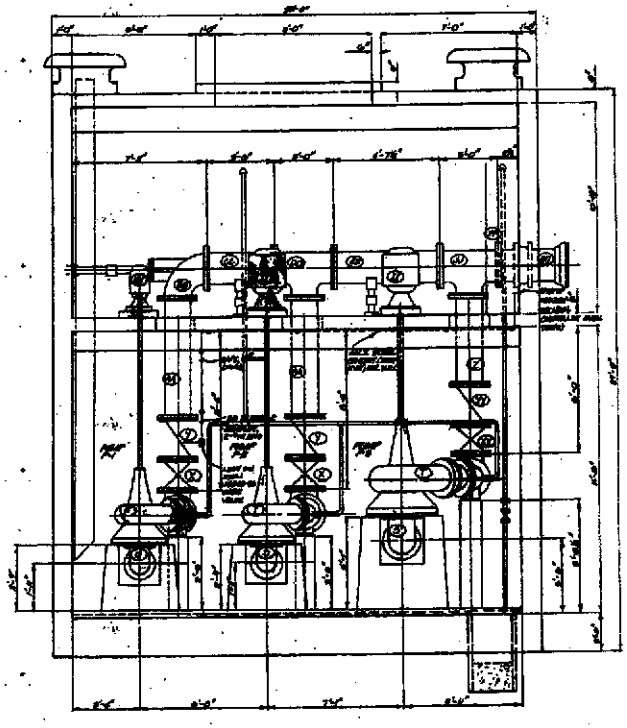
27936

GENERAL NOTES

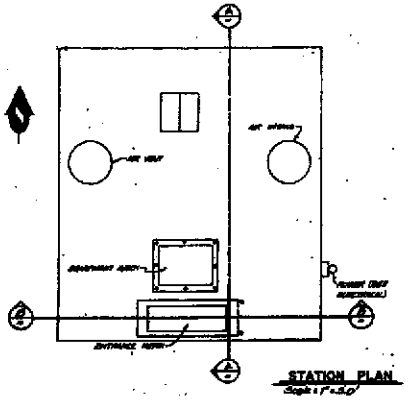
1. Lift Station Structure is Existing with 3 Operating Pumps.
2. Shaded Items Represent New Material to Replace Existing.
3. All existing pumps and motors to be removed and turned over to the City.
4. Existing Pump Foundations will Accomodate Proposed Pumps after minor modifications. (no Reason Pad
5. Pumps shown on Plans for illustration are Peirchoke Makes. If other Pumps meeting specifications are supplied, contractor will make required piping Adaptations(at No Change in Contract Amount)
6. Replacement of pumps and motors includes drive shaft and all drive components.
7. All lift station piping to be flanged ductile iron as per specification "Ductile Iron Pipe and Cast Iron and Ductile Iron Fittings" unless otherwise noted. (Thickness Class 53)
8. Pump to start switch of the engine is auto-operation, an hand operate pump or a portable pump of equal capacity shall be kept operational during construction.



SECTION "A-A"
Scale 1 Sq=1'-0"



SECTION "B-B"
Scale 1 Sq=1'-0"



STATION PLAN
Scale 1"=1'-0"

SYMBOL	DESCRIPTION	SIZE
A	16" C.I. Flange & Plane 90° Bend	P-1,2
B	18" C.I. Wall Fitting Flg/Bell	P-1,2
C	18" C.I. Spool Flg/Spigot	P-1,2
D	16" Flanged Eccentric Plug Valve w/Handwheel Operator	P-1,2
E	18" C.I. Flanged Spool	P-1,2
F	16" x 8" C.I. Eccentric Reducer Flg./Flg.	P-1
G	8" x 8" C.I. 90° Bend Flg/Flg.	P-1
H	8" x 4" Centrifugal Pump	P-1
I	8" C.I. 45° Bend Flg/Flg	P-1
J	8" x 6" C.I. Concentric Reducer Flg/Flg.	P-1
K	10" x 8" C.I. Concentric Reducer Flg/Flg.	P-1
KK	10" x 12" C.I. Concentric Reducer Flg/Flg	P-2
L	18" C.I. 90° Bend Bend	P-1,2
M	20" C.I. Flange & Plane 90° Bend	P-2
N	24" C.I. Wall Fitting Flg/Bell	P-2
O	24" C.I. Spool Flg./Spigot	P-2

SYMBOL	DESCRIPTION	SIZE
P	24" Flanged Eccentric Plug Valve w/Handwheel Operator	P-1
Q	12" C.I. 90° Bend Bend	P-1
QQ	20" Flanged Eccentric Plug Valve w/Chain Operator.	P-1
TV	20" Flanged Vertical Swing Check Valve. Cushioned Outside Lever & weight.	P-1
S	20" C.I. Spool Flg/Flg.	P-2
R	24" x 12" C.I. Eccentric Reducer Flg./Flg.	P-2,3
U	12" x 10" C.I. 90° Bend Flg./Flg.	P-2,3
T	10" x 4" Centrifugal Pump	P-2,3
V	20" x 10" C.I. Concentric Reducer Flg./Flg.	P-2
W	8" C.I. 45° Bend Flg./Flg.	P-2,3
X	10" x 6" C.I. Concentric Reducer Flg./Flg.	P-2,3
Y	18" Flanged Eccentric Plug Valve w/Chain Operator	P-1,2
Z	18" Flanged Vertical Swing Check Valve. Cushioned Outside Lever & wgt.	P-1,2
Z	20" C.I. Pipe Flg./Flg.	P-2

SYMBOL	DESCRIPTION	SIZE
AA	16" C.I. Pipe Flg./Flg.	P-1,2
BB	20" x 16" C.I. Reducing 90° Bend Bend Flg./Flg.	
CC	20" C.I. Pipe Flg./Flg.	
DD	20" x 20" x 12" C.I. Tee	
EE	20" C.I. Pipe Flg./Flg.	
FF	20" C.I. Spool Flg/Spigot	
GG	20" C.I. Wall Fitting Flg/M.J.	
HH	H.P. Electric Motor	P-1
II	H.P. Electric Motor	P-2,3
JJ	24" x 20" x 20" C.I. Tee	

JOB NO. 5807-1

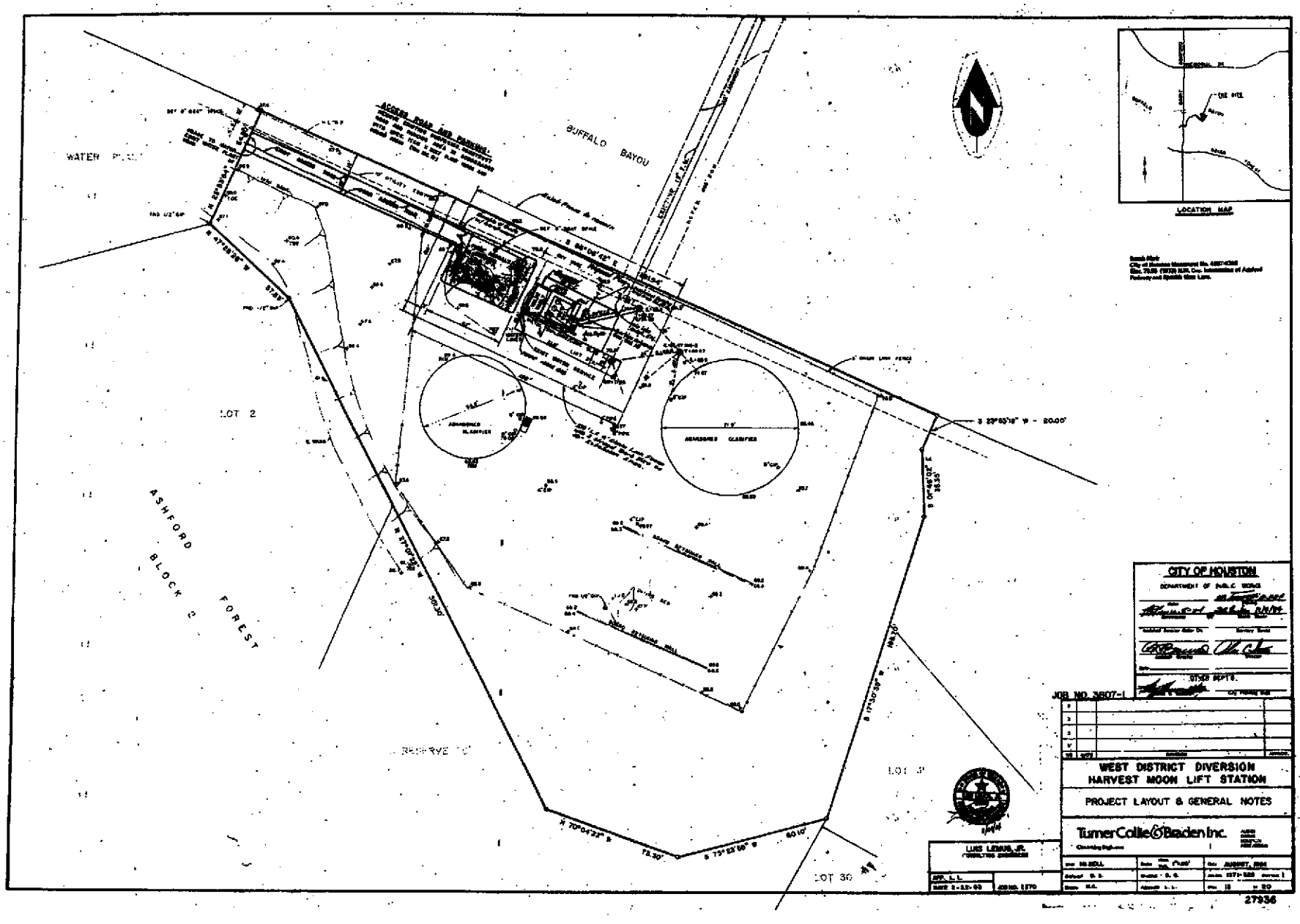
Turner Collie & Braden Inc.

CITY OF HOUSTON

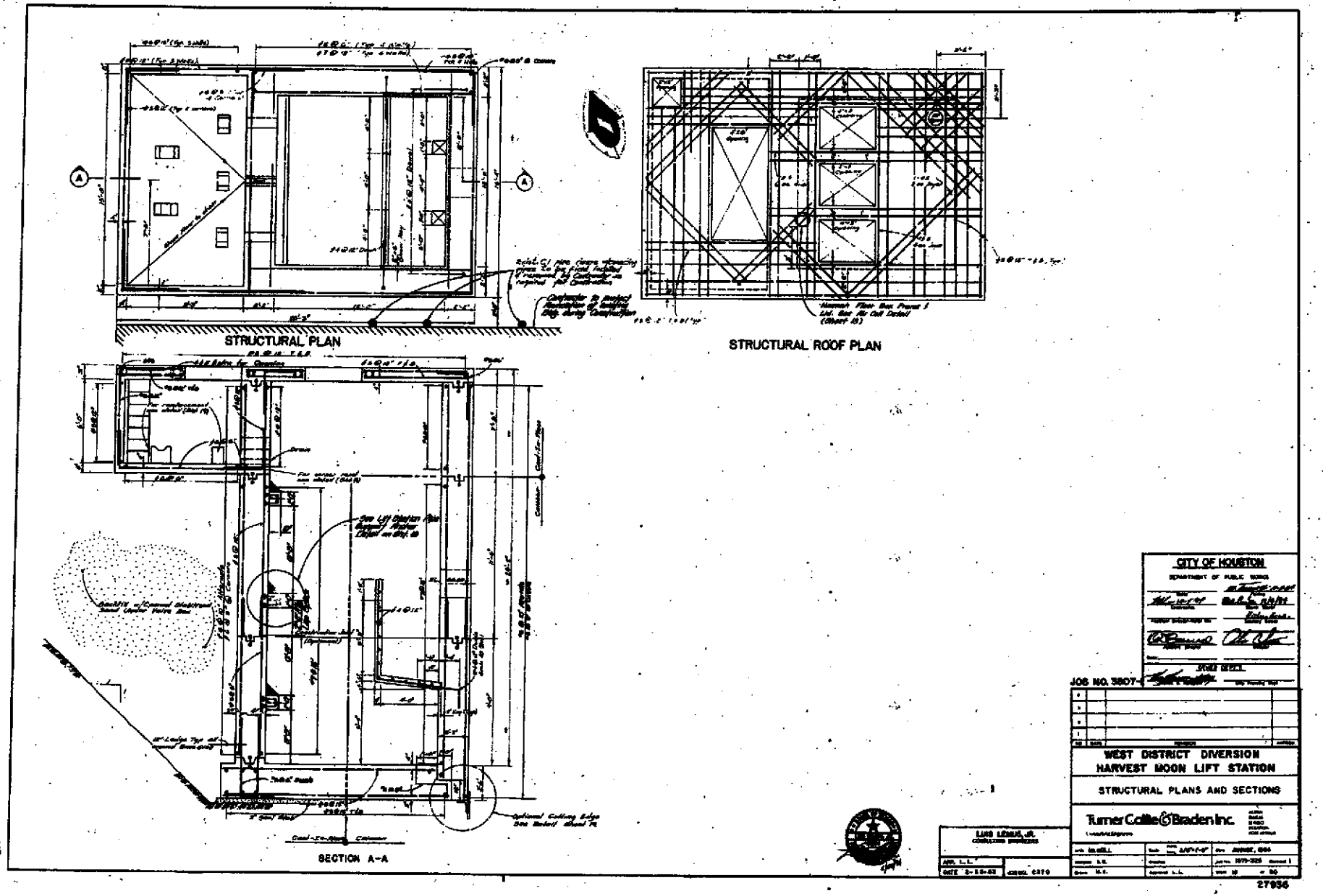
WEST DISTRICT DIVERSION

LIFT STATION
DAIRY ASHFORD-
MECHANICAL

27936



BUFFALO BAYOU
WATER PLANT
LOT 2
ASHFORD FOREST
BLOCK 2
RESERVE 'C'
LOT 30
LOCATION MAP
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS
JOB NO. 3807-1
WEST DISTRICT DIVERSION
HARVEST MOON LIFT STATION
PROJECT LAYOUT & GENERAL NOTES
Turner Collie & Braden Inc.
LUIS LEMUS, JR.
27936


STRUCTURAL PLAN
STRUCTURAL ROOF PLAN
SECTION A-A
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS
JOB NO. 3807-
WEST DISTRICT DIVERSION
HARVEST MOON LIFT STATION
STRUCTURAL PLANS AND SECTIONS
Turner Collie & Braden Inc.
LUIS LEMUS, JR.
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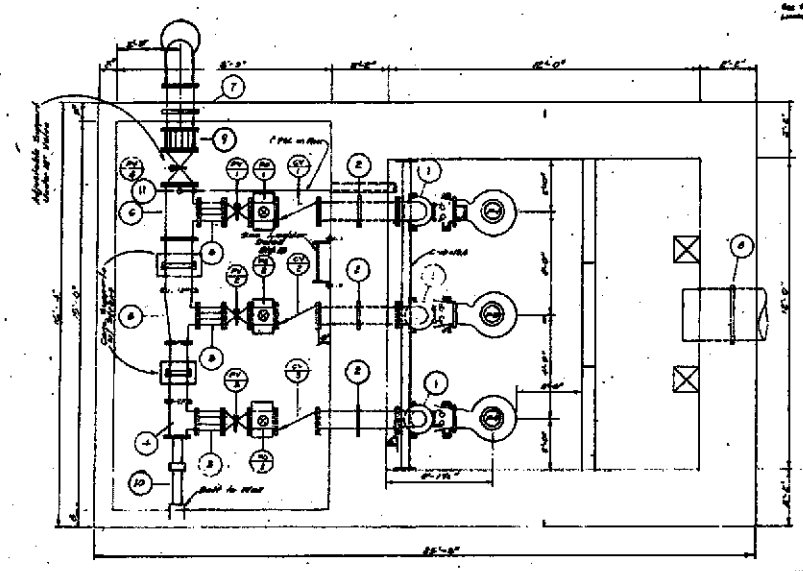
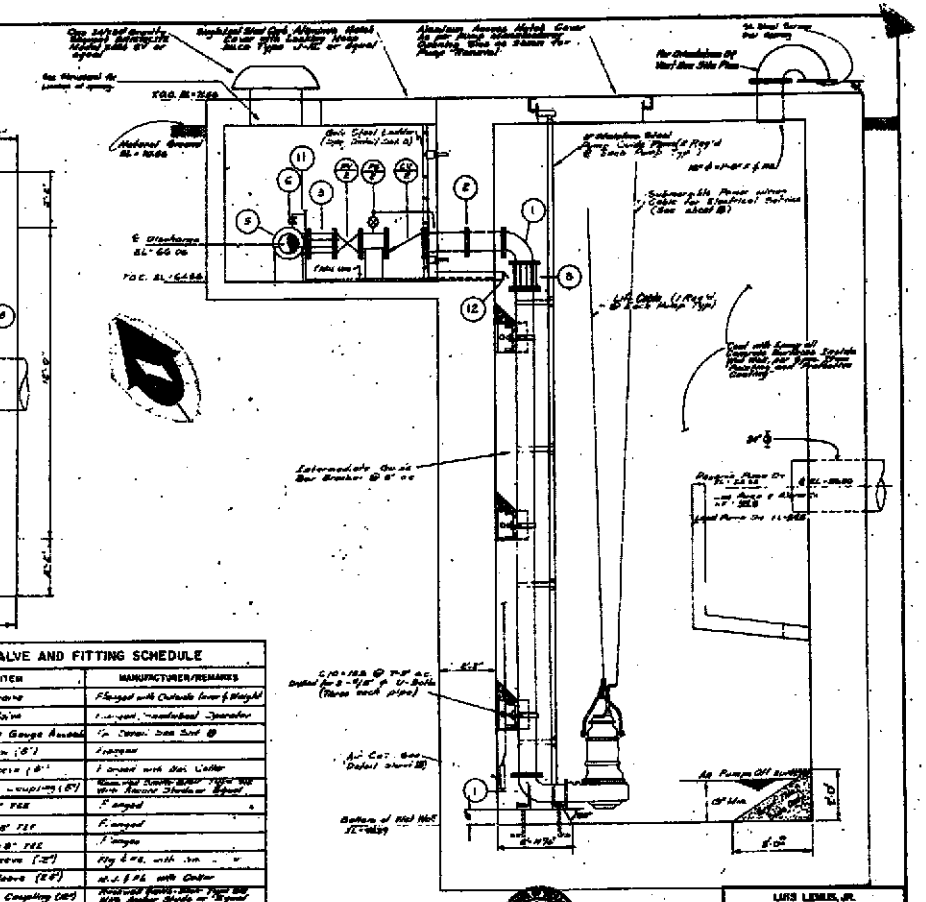
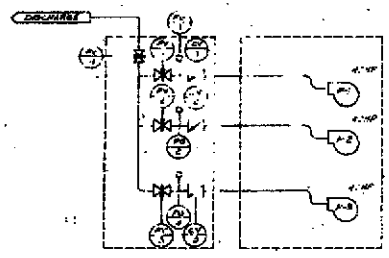


PLAN AT ELEVATION 66.56



SECTIONAL ELEV.



Equal Size Pumps And Individual Pump Piping Line. Pump Information And Approved Condition Table	
Single Pump Data with 1 Pump Operation Single Speed Pumps	
Max Output (cfm) Per Pump	[illegible]
Max Head (ft-lbs) Per Pump	[illegible]
TDH (ft-lbs)	[illegible]
TEH (ft-lbs)	[illegible]
Shut Head (ft-lbs)	[illegible]
NPSH	[illegible]
Max NPSH	[illegible]

VALVE AND FITTING SCHEDULE		
MARK	ITEM	MANUFACTURER/REMARKS
CV	Check Valve	Flanged with Outside Lever & Weight
PV	Plug Valve	Flanged, Manual Operator
PG	Pressure Gauge Assembly	See Detail Dwg Sht 8
1	90° Elbow (8")	Flanged
2	Wall Sleeve (8")	Flanged with Set Collar
3	Flexible Coupling (8")	Mechanical Joints Both Ends with Anchor Studs as Req'd
4	8"x8"x8" TEE	Flanged
5	18"x 8"x8" TEE	Flanged
6	18"x18"x8" TEE	Flanged
7	Wall Sleeve (24")	Plg Ends, with Set Collar
8	Wall Sleeve (24")	M.J. & PL with Collar
9	Flexible Coupling (18")	Mechanical Joints Both Ends with Anchor Studs as Req'd
10	Adjustable Brace (8"Ø)	Flanged Body, Pad Collar
11	Air Release Valve	See Sheet 8
12	Plug Valve (4")	On Crank Line

MECHANICAL DATA:

1. Furnish and install Pump System as shown on PLANS per specification. Pump Table is for information, performance and dimensions, such as follows:

   Flow: 1000 GPM Static Head: 48 (Max)
   TDH: [illegible] [illegible] Min
   Speed: 1755 RPM
   NPS: 8"
   Power: 460 VAC, 3 Phase, 60 Hz

2. Pumps shown on PLANS are Flygt Model NA3201/400 Impeller. If other pumps are approved, contractor to adapt piping to this pump.

3. Contractor to have Pump Manufacturer's Approved Certified Shop Drawings to finalize Lift Station arrangement.

4. Wet Well capacity is [illegible] gallons per foot.

5. All Lift Station Piping to be Flanged ductile iron. Fittings to be Flanged ductile iron. Sheet Body as per Specification "Cast Iron and Ductile Iron Pipe and Fitting," unless otherwise noted.

6. All pipe to be well, during preparation and Heat Treat to be as per specification "Painting and Protective Coating" paragraph [illegible]. Paint Coat as per specification "Painting and Protective Coating".

7. Make Harvey Flanged Connections with Epoxy Coated Bolts, Nuts and Washers. (Separate pay.)

8. Polyethylene Wrap and zone recline Ductile Iron Inside Outside Structure. (No separate pay.)

9. All bends will have Leaved or Bottom Concrete Thrust Blocking poured in place against the undisturbed portion of excavation surface.

10. Discharge Piping service pressure is 75 psi.

11. Contractor to provide hasp for locks on Lift Station Access Panels and Electrical Control Board; Owner will furnish locks and keys.

12. Extend reinforcing where slab is continuous.

13. Contractor to provide temporary construction piping of sewer and discharge piping to sanitary sewer and force main construction in wet concrete with Lift Station construction. Otherwise make connection. (No separate pay.)

14. Except for some points of [illegible] to make connection, stations [illegible] in use in operation during construction.

LUIS LEBES, JR.
CONSULTING ENGINEER

JOB NO. 3807-1

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS

OTHER DEPT'S.

WEST DISTRICT DIVERSION
HARVEST MOON LIFT STATION

MECHANICAL PLANS AND SECTIONS

Turner Collie & Braden Inc.

AUGUST, 1984

27936