

Contract Change Request

Contract Change Request

General

Project Number: 40-00423	Project Name: H - 2012 Bond - Belford Area Drainage
Record Number: CCR-0000005	Status: Rejected
Title: SAWS-01 Water Line Offsets (13-5068)	Contract #: 4600014831
Creator: CoSA Admin	Creation Date: 06/10/2016 04:12 PM (UTC-6)
Type Contract: Construction	Vendor Name: JORDAN FOSTER CONSTRUCTION LLC
Agency: SAWS Water	Change Category: Utilities - SAWS
Special Contract: No	Proposal Record Number: PRN-0000005
Contract Amount: \$6,249,080.75	Previous Contract Changes: \$40,580.77
New Contract Value: \$6,390,881.89	Contract Change Percentage: 2.27
Change to Contract Cost: \$101,220.37	Change to Calendar Days: 0

Description Of Change

<p>Description of Change: This change order is authorizing the offset of the existing 8" water line at 1 location at Sta. 20+24.24 as well as the existing 6" water line at 6 locations along the 6 locations at Sta. 22+12.16, Sta. 25+20.00, Sta. 26+22.54, Sta. 29+63.71, Sta. 32+84.72 and Sta. 36+06.66.</p> <p>Justification for Proposed During construction it was determined that seven proposed storm drain inlets were in Change: conflict with the existing 6-inch and 8-inch water mains along the west side of Belford. These adjustments are required to eliminate the impact to the system. RFI-10 and PRN-05 is linked as backup for additional information.</p>

Ordinance Information

<p>Change Order Council \$100,000.00</p> <p>Threshold:</p> <p>Ordinance Number: _____ Ordinance Date: _____</p>

<p>Fiscal Remarks: PM: David I. Hernandez, P.E. / PO No. 4500403308, Line 7 & Contract No. 460001483, Line 3 to be increased by \$101,220.37. / BA-01 will increase reimbursables by \$101,220.37 WBS No. 40-00423-05-02-04 (linked to this CCR) / GL No. 5201245.</p>
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Vendor Information

<p>SAP Vendor No.: 0001047669</p> <p>Vendor Address 1: 7700 CF JORDAN DRIVE</p> <p>Vendor City: EL PASO</p> <p>Vendor Phone Number: 915-877-3333</p>	<p>Vendor Address 2:</p> <p>Vendor State: TX</p> <p>Vendor Zip Code: 79912</p> <p>Vendor Fax Number: 915-877-3999</p>
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Standard

12 Item(s)

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No.	Spec No.	Item Description	UM	Unit Price	Quantity	Amount	PO No.	PO Line #
012	New Item - Item 9000	SAWS-01 CPS Pole Bracing	EA	\$1,590.75	2.0	\$3,181.50	4500403308	4
011	New Item - Item 833	SAWS-01 Ex. Meter & Meter Box Relocation	EA	\$1,527.41	1.0	\$1,527.41	4500403308	4
010	New Item - Item 825	SAWS-01 Customer Shut Off Valve	EA	\$597.24	1.0	\$597.24	4500403308	4
009	New Item - Item 824	SAWS-01 3/4" Relay Service	EA	\$1,789.22	1.0	\$1,789.22	4500403308	4
008	Item 844	SAWS-01 2" Blow-off, Temporary	EA	\$1,500.00	14.0	\$21,000.00	4500403308	4
007	Item 841	SAWS-01 Hydrostatic Testing	EA	\$3,000.00	7.0	\$21,000.00	4500403308	4
006	Item 840	SAWS-01 8" Tie-In	EA	\$2.00	3,000.0	\$6,000.00	4500403308	4
005	Item 840	SAWS-01 6" Tie-In	EA	\$12.00	2,800.0	\$33,600.00	4500403308	4
004	Item 836	SAWS-01 Pipe Fittings All Sizes & Types	TON	\$0.70	4,500.0	\$3,150.00	4500403308	4
003	Item 818	SAWS-01 8" PVC Waterline	LF	\$50.00	25.0	\$1,250.00	4500403308	4
002	Item 818	SAWS-01 6" PVC Waterline	LF	\$45.00	175.0	\$7,875.00	4500403308	4
001	Item 550	SAWS-01 Trench Excavation Safety Protection	LF	\$1.25	200.0	\$250.00	4500403308	4

Total Amount \$101,220.37

Attachments (3)

Linked Records (3)

Linked Mail (0)

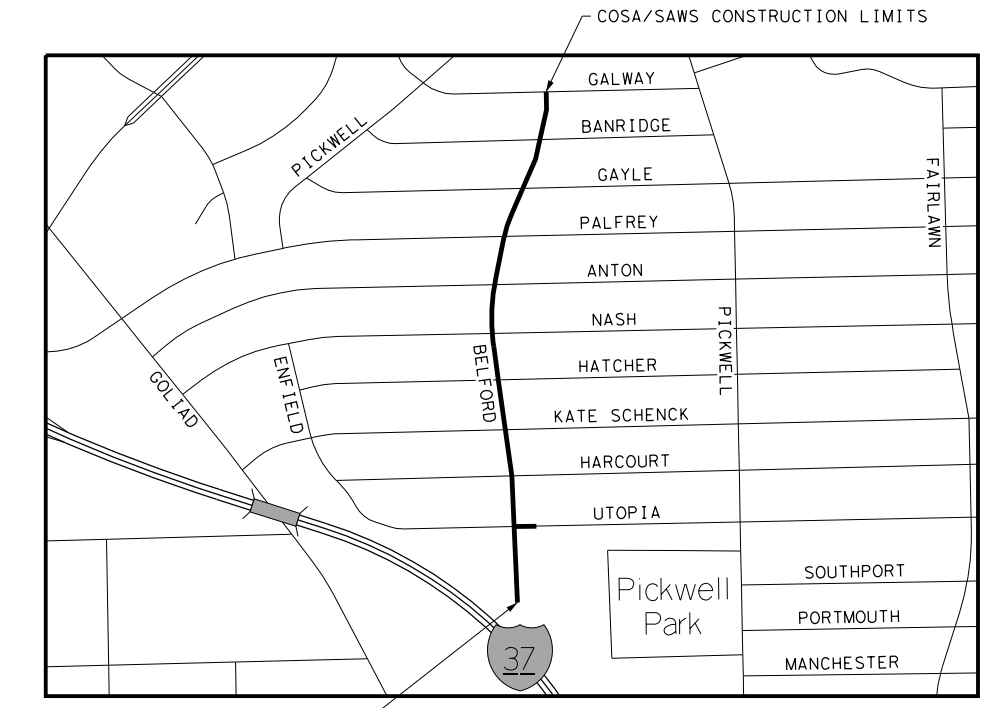
SHEET INDEX:

1	COVER
2	WATER GENERAL NOTES
3	OVERALL WATER PLANS
4	CONTROL POINT SHEET
5 - 10	WATER PLANS
11 - 14	FIRE HYDRANT REPLACEMENT
15 - 18	INLET WATERLINE OFFSET DETAIL

SAN ANTONIO WATER SYSTEM

JOB NO: 13-5068

BELFORD AREA DRAINAGE WATER PLANS



COSA/SAWS CONSTRUCTION LIMITS
LOCATION MAP
NOT TO SCALE



SUBMITTAL PREPARED BY:

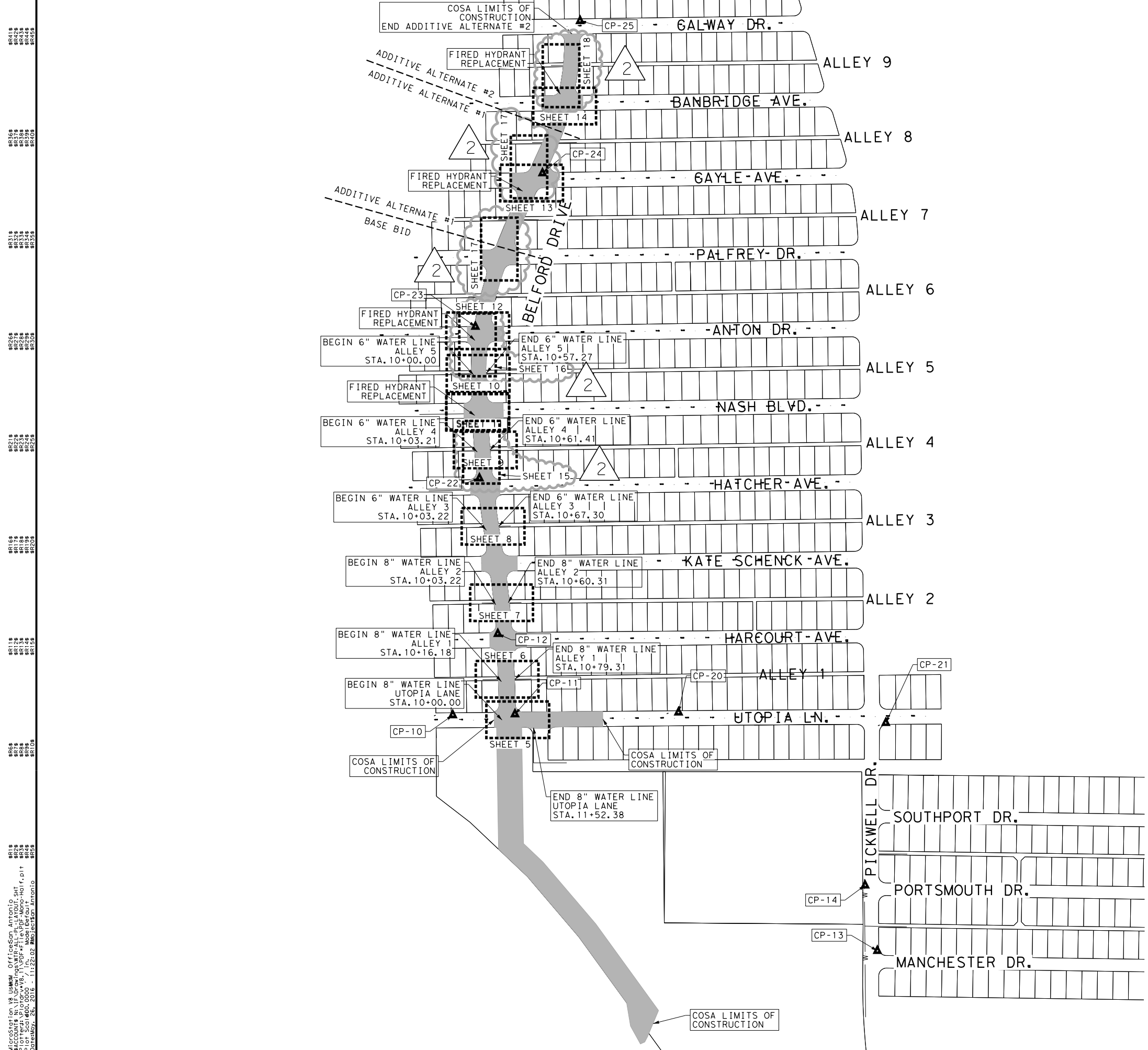


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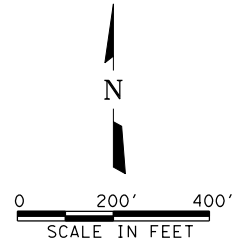
CONTACT: MR. JEROME W. SCANLON, P.E.
PHONE: (210) 298-3800

FREESE AND NICHOLS, INC.
TEXAS REGISTERED ENGINEERING FIRM F-2144

MicroStation V8 USMEM OfficeSan Antonio
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POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-5990	13681068.38	2149748.03	614.69	PK NAIL ON CONC WLK
CP-11	13681065.14	2150024.79	613.02	NAIL W/FFW IN GRASS
CP-12	13681385.13	2149956.55	614.05	NAIL W/FFW IN GRASS
CP-13	13680122.57	2151468.09	617.74	NAIL W/FFW IN GRASS
CP-14	13680383.23	2151419.2	616.51	NAIL W/FFW IN GRASS
CP-5991	13681064.24	2150675.51	615.66	IPS W/FFW ON TOC
CP-21	13681030.61	2151501.73	623.57	IPS W/FFW @ #802 IN GRASS
CP-22	13682005.04	2149883.18	616.86	IPS W/FFW @ # IN GRASS
CP-23	13682609.13	2149867.26	619.43	IPS W/FFW @ #263 IN GRASS
CP-24	13683220.28	2150134.35	624.67	IPS W/FFW @ #207 IN GRASS
CP-5992	13683822.90	2150273.24	629.88	PK NAIL ON CONC WLK



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5/26/15

FREESSE AND NICHOLS, INC.
 TEXAS REGISTERED ENGINEERING
 FIRM F-2144

No.	Revision	Drawn	Approved	Date
2	OFFSET DETAIL	MJM	JDV	5/26/15
1	IFC	MJM	JDV	8/19/15

REVISIONS
 BELFORD AREA DRAINAGE

OVERALL WATER PLANS

DEVELOPER: SAN ANTONIO WATER SYSTEM
 CONT. BUDGET PROJ.

SUBMITTED _____
 APPROVED _____

MAP No.	SHEET 3 Of 18
SECT. No.	
DR. MJM CK.	

JOB No. 13-5068

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ITEM NO	DESCRIPTION	UTOPIA-1 SHEET 5	ALLEY-1 SHEET 6	ALLEY-2 SHEET 7	ALLEY-3 SHEET 8	ALLEY-4 SHEET 9	ALLEY-5 SHEET 10	NASH SHEET 11	ANTON SHEET 12	GAYLE SHEET 13	BANBRIDGE SHEET 14	BELFORD SHEET 15	BELFORD SHEET 16	BELFORD SHEET 17	BELFORD SHEET 18	TOTAL QUANTITY	UNIT
100.0	MOBILIZATION															1	LS
101.0	PREPARING RIGHT-OF-WAY															1	LS
550.0	TRENCH EXCAVATION SAFETY PROTECTION	152	63	57	64	58	57					55	60	55	30	651	LF
818.0	6" PVC WATERLINE				25	20	40					30	60	55	30	260	LF
818.0	8" PVC WATERLINE	55	20	15								25				115	LF
824.0	RELAY SERVICE (SHORT) 3/4"											1				1	EA
825.0	CUSTOMER SHUT OFF VALVE											1				1	EA
833.0	EXISTING METER AND METER BOX RELOCATION											1				1	EA
834.1	FIRE HYDRANT	1						1	1							3	EA
836.0	PIPE FITTINGS, ALL SIZES AND TYPES															2.7	TON
840.0	6" TIE-IN				1	1	2					2	4	4	2	16	EA
840.0	8" TIE-IN	2	2	2	1	1						2				10	EA
841.0	HYDROSTATIC TESTING	1	1	1	1	1	1					2	2	2	1	13	EA
844.0	2" BLOWOFF, TEMPORARY	2	2	2	2	2	2					4	2	2	2	22	EA
856.2	6" CARRIER PIPE (OPEN CUT) (PVC)				40	40	20									100	LF
856.2	8" CARRIER PIPE (OPEN CUT) (PVC)	100	45	45												190	LF
856.3	CASING OR LINER 24"	100	45	45	40	40	20									290	LF
1015.0	SERVICE LINE BREAKS/LEAK REPAIRS															0	EA
1020.0	WATER MAIN BREAKS/LEAK REPAIRS															0	EA
9000.0	CPS POWER POLE BRACE												1		1	2	EA

ITEM NO	DESCRIPTION	UTOPIA-1 SHEET 5	ALLEY-1 SHEET 6	ALLEY-2 SHEET 7	ALLEY-3 SHEET 8	ALLEY-4 SHEET 9	ALLEY-5 SHEET 10	NASH SHEET 11	ANTON SHEET 12	GAYLE SHEET 13	BANBRIDGE SHEET 14	QUANTITY	UNIT
834.1	FIRE HYDRANT									1		1	EA
836.0	PIPE FITTINGS, ALL SIZES AND TYPES									0		0.03	TON

ITEM NO	DESCRIPTION	UTOPIA-1 SHEET 5	ALLEY-1 SHEET 6	ALLEY-2 SHEET 7	ALLEY-3 SHEET 8	ALLEY-4 SHEET 9	ALLEY-5 SHEET 10	NASH SHEET 11	ANTON SHEET 12	GAYLE SHEET 13	BANBRIDGE SHEET 14	QUANTITY	UNIT
834.1	FIRE HYDRANT										1	1	EA

GENERAL NOTES:

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
 - A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
 - B. CURRENT TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
 - C. CURRENT SAN ANTONIO WATER SYSTEM "STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."
 - D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."
 - E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL"
- THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500 AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO EXCAVATION.
- LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
 - SAWS UTILITY LOCATES: 233-2009
 - SAWS PRODUCTION CONTROL CENTER: 233-2016
 - COSA DRAINAGE: 207-8048
 - COSA TRAFFIC SIGNAL OPERATIONS: 207-7720
 - TEXAS STATE WIDE ONE CALL LOCATOR: 1-800-545-6005 OR 811
- THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS OR SPOILS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-3500 AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
- WHERE NEW WATER LINES AND NEW SEWER LINES ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC 217.53 (D) (PIPE DESIGN) AND 30 TAC 290.44 (E) (WATER DISTRIBUTION) .
- ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM) , MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM FOR ASBESTOS CEMENT PIPE.

- ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.
- CONTRACTOR SHALL CHLORINATE NEW WATER MAINS UTILIZING CALCIUM HYPOCHLORITE (HTH) IN ACCORDANCE TO SAWS SPEC 847.
- CONTRACTOR SHALL CUT EXISTING PAVEMENT, CURB, SIDEWALKS AND DRIVEWAYS USING NEAT, CLEAN LINES AND RESTORE TO MATCH EXISTING PER SAWS 804. THERE WILL BE NO SEPERATE PAY TO CUT AND RESTORE PAVEMENT, CURB, SIDEWALKS, AND DRIVEWAYS.
- SAWS CONSTRUCTION DETAILS ARE POSTED ON www.saws.org

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No.	Revision	Drawn	Approved	Date
3	OFFSET DETAIL	MJM	JDV	5/25/16
2	Quantity Change	MJM	JDV	11/30/15
1	IFC	MJM	JDV	8/19/15

REVISIONS

BELFORD AREA DRAINAGE

WATER GENERAL NOTES

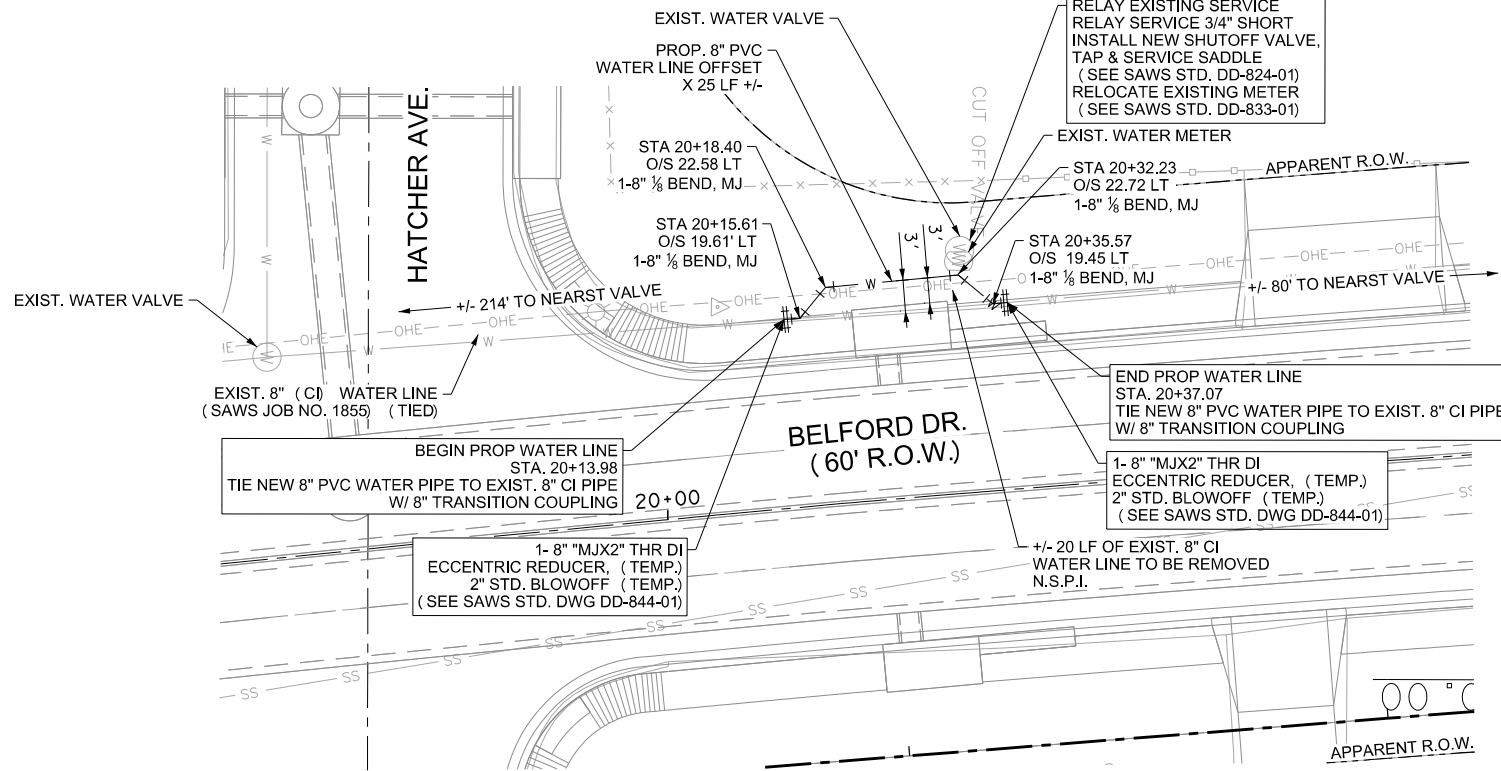
DEVELOPER: SAN ANTONIO WATER SYSTEM
 CONT. BUDGET PROJ.

SUBMITTED _____
 APPROVED _____

MAP No. _____ SHEET 2
 SECT. No. _____ Of 18
 DR. CK. JOB No. _____

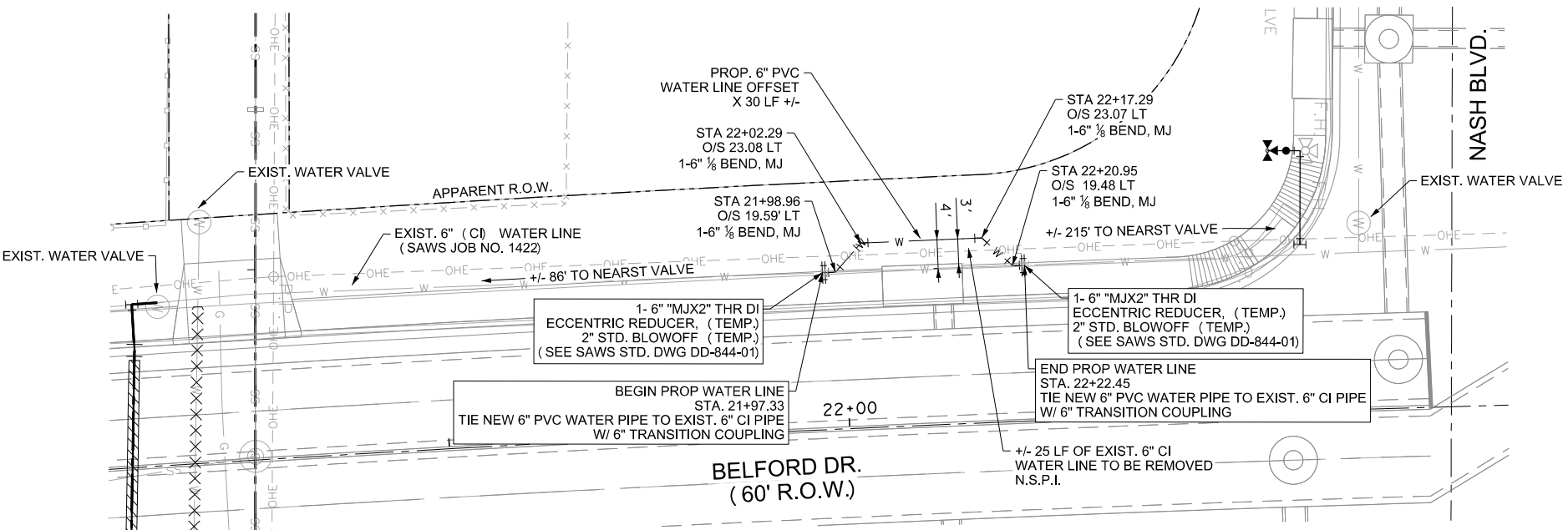
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STA 20+24.24

BETWEEN HATCHER AVE.
AND NASH BLVD.



STA 22+12.16

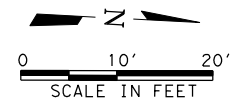
BETWEEN HATCHER AVE.
AND NASH BLVD.

SHEET NOTES:

- THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. THE CONTRACTOR SHOULD CALL FOR LOCATES THROUGH THE "ONE CALL" UTILITY LOCATE SERVICE (1-800-344-8377) 48 HOURS PRIOR TO CONSTRUCTION/EXCAVATION WORK. CONTRACTORS HAVE THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY DURING CONSTRUCTION.
- ANY DAMAGE TO EXISTING CONCRETE RIPRAP, HEADWALLS, PIPE, OR OTHER EXISTING FEATURES IN THE RIGHT-OF-WAY AS A RESULT OF CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED OR REPLACE TO ITS ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S (N.S.P.I.)
- ALL WATER MAIN PIPE SHALL BE RESTRAINED IN ACCORDANCE WITH S.A.W.S. STANDARDS.
- WATER MAIN SHALL BE PVC C-900, UNLESS OTHERWISE NOTED.
- INSTALL CONCRETE REACTION BLOCK AT TIE-IN PER S.A.W.S. STANDARD DRAWING DD-830-01. JOINT RESTRAINT SHALL NOT EXCEED PROJECT LIMITS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING AND PROPOSED WATER VALVES AND KEEP THEM FREE FROM GRAVEL, ASPHALT, OR OTHER DEBRIS.
- PROVIDE CUSTOMER CUT-OFF VALVES PER SPECIFICATIONS AT EACH LOT WHERE NEW SERVICES HAVE BEEN RELAYED OR RELOCATED.
- CONTRACTOR SHALL CENTER ONE JOINT OF WATER PIPE AT EACH SANITARY SEWER CROSSING.
- CONTRACTOR SHALL REMOVE ABANDONED WATER VALVES AFTER NEW MAIN HAS BEEN RELEASED FOR SERVICE (N.S.P.I.)
- CONTRACTOR AND S.A.W.S. INSPECTION SHALL COORDINATE WITH EACH PROPERTY OWNER TO DETERMINE THE MOST FEASIBLE LOCATION OF THE RELOCATED METER BOX SO AS TO AVOID DAMAGE TO EXISTING TREES, PLANTER BOXES, LANDSCAPING OR OTHER IMPROVEMENTS INSIDE THE R.O.W. (N.S.P.I.)
- CONTRACTOR SHALL INSTALL ALL WATER SERVICES IN ACCORDANCE WITH S.A.W.S. STANDARD DRAWINGS: SERIES DD-824.
- DIMENSIONS ARE TAKING FROM FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL WATER LINES TO BE RESTRAINED.
- ELEVATIONS POSTED FOR TOP OF VALVES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR THE TOP OF VALVE TO MATCH THE FINISHED GRADE FOR THE STREET IMPROVEMENTS (N.S.P.I.)

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE (S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS, AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS, AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, O.S.H.A. STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH O.S.H.A. STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



WATER QUANTITIES			
ITEM NO	DESCRIPTION	QUANTITY	UNIT
550.0	TRENCH EXCAVATION SAFETY PROTECTION	55	LF
818	6" PVC WATERLINE	30	LF
818	8" PVC WATERLINE	25	LF
824	RELAY SERVICE (SHORT) 3/4"	1	EA
825	CUSTOMER SHUT OFF VALVE	1	EA
833	EXISTING METER AND METER BOX RELOCATION	1	EA
836.0	PIPE FITTINGS, ALL SIZES AND TYPES	0.2	TON
840	6" TIE-IN	2	EA
840	8" TIE-IN	2	EA
841.0	HYDROSTATIC TESTING	2	EA
844.0	2" BLOWOFF, TEMPORARY	4	EA

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FRESE AND NICHOLS, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-2144

LEGEND

PROP. WATER MAIN	— 6" C.I. —
EXIST. WATER MAIN	— 6" C.I. —
GAS MAIN	— 2" G —
SANITARY SEWER	— 8" SA —
STORM SEWER	— 24" ST —
UTILITY POLE LINE	— U —
ELECTRIC CABLE	— E —
TELEPHONE CABLE	— T —
SERVICE RELAY:	
3/4"	—
1" OR LARGER	—
NEW SERVICE:	
3/4"	—
1" OR LARGER	—

1	OFFSET DETAIL	CK	JDV	5/25/16
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No.	Revision	Drawn	Approved	Date

REVISIONS
BELFORD AREA DRAINAGE
**INLET WATERLINE
OFFSET DETAIL
STA. 20+24.24 &
STA. 22+12.16**

DEVELOPER: SAN ANTONIO WATER SYSTEM
CONT. BUDGET PROJ.

SUBMITTED _____
APPROVED _____

MAP No.	SHEET 15
SECT. No.	
DR. MJM CK.	JOB No. 13-5068

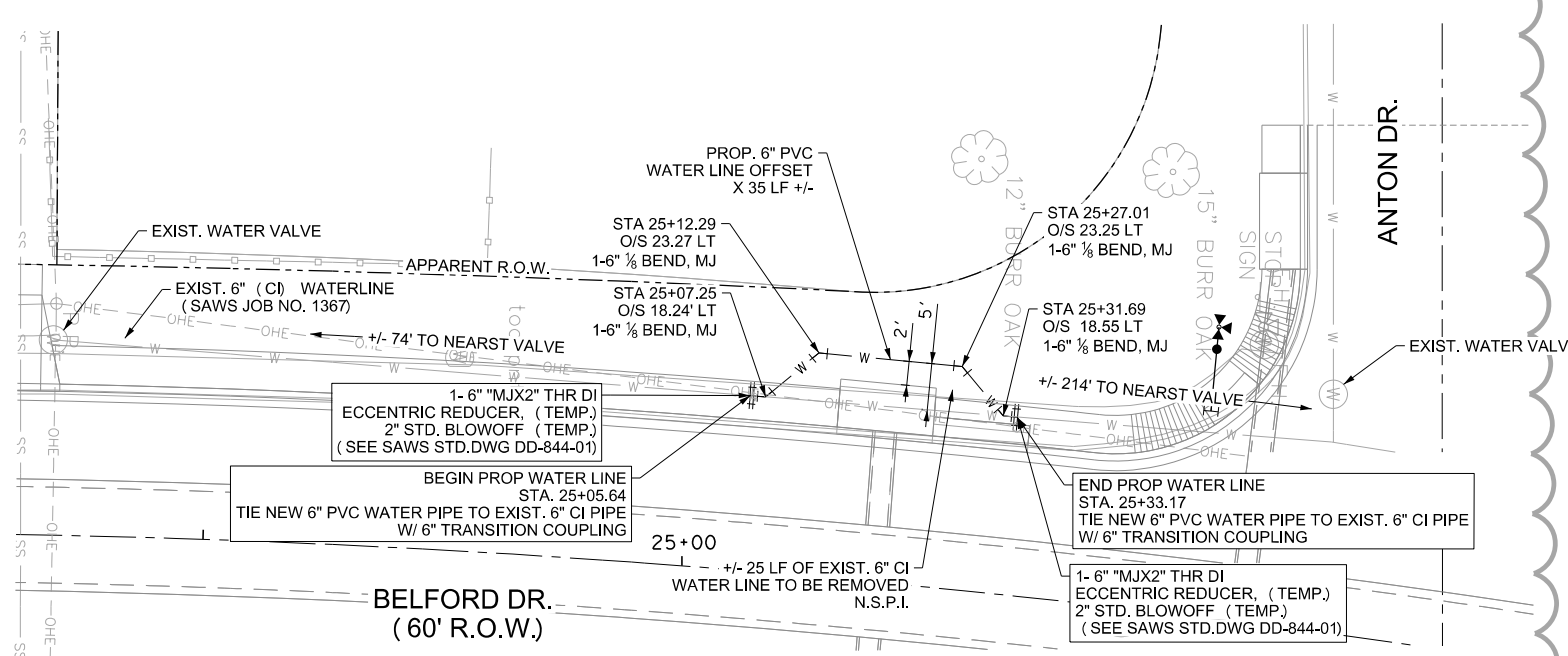
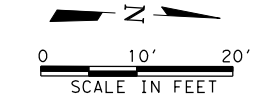
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SHEET NOTES:

1. THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. THE CONTRACTOR SHOULD CALL FOR LOCATES THROUGH THE "ONE CALL" UTILITY LOCATE SERVICE (1-800-344-8377) 48 HOURS PRIOR TO CONSTRUCTION/EXCAVATION WORK. CONTRACTORS HAVE THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY DURING CONSTRUCTION.
2. ANY DAMAGE TO EXISTING CONCRETE RIPRAP, HEADWALLS, PIPE, OR OTHER EXISTING FEATURES IN THE RIGHT-OF-WAY AS A RESULT OF CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED OR REPLACE TO ITS ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S (N.S.P.I.)
3. ALL WATER MAIN PIPE SHALL BE RESTRAINED IN ACCORDANCE WITH S.A.W.S. STANDARDS.
4. WATER MAIN SHALL BE PVC C-900, UNLESS OTHERWISE NOTED.
5. INSTALL CONCRETE REACTION BLOCK AT TIE-IN PER S.A.W.S. STANDARD DRAWING DD-830-01. JOINT RESTRAINT SHALL NOT EXCEED PROJECT LIMITS.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING AND PROPOSED WATER VALVES AND KEEP THEM FREE FROM GRAVEL, ASPHALT, OR OTHER DEBRIS.
7. PROVIDE CUSTOMER CUT-OFF VALVES PER SPECIFICATIONS AT EACH LOT WHERE NEW SERVICES HAVE BEEN RELAYED OR RELOCATED.
8. CONTRACTOR SHALL CENTER ONE JOINT OF WATER PIPE AT EACH SANITARY SEWER CROSSING.
9. CONTRACTOR SHALL REMOVE ABANDONED WATER VALVES AFTER NEW MAIN HAS BEEN RELEASED FOR SERVICE (N.S.P.I.)
10. CONTRACTOR AND S.A.W.S. INSPECTION SHALL COORDINATE WITH EACH PROPERTY OWNER TO DETERMINE THE MOST FEASIBLE LOCATION OF THE RELOCATED METER BOX SO AS TO AVOID DAMAGE TO EXISTING TREES, PLANTER BOXES, LANDSCAPING OR OTHER IMPROVEMENTS INSIDE THE R.O.W. (N.S.P.I.)
11. CONTRACTOR SHALL INSTALL ALL WATER SERVICES IN ACCORDANCE WITH S.A.W.S. STANDARD DRAWINGS: SERIES DD-824.
12. DIMENSIONS ARE TAKING FROM FACE OF CURB UNLESS OTHERWISE NOTED.
13. ALL WATER LINES TO BE RESTRAINED.
14. ELEVATIONS POSTED FOR TOP OF VALVES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR THE TOP OF VALVE TO MATCH THE FINISHED GRADE FOR THE STREET IMPROVEMENTS (N.S.P.I.)

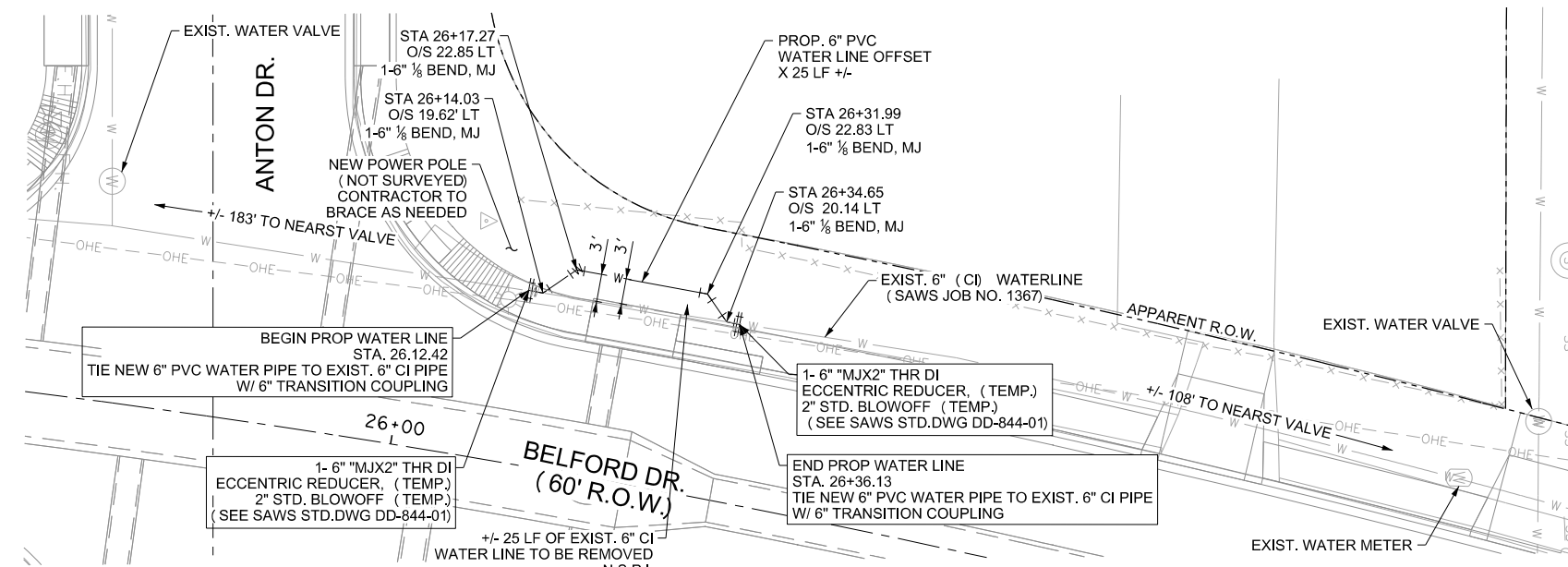
TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE (S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS, AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS, AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, O.S.H.A. STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH O.S.H.A. STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



STA 25+20.00

BETWEEN NASH BLVD.
AND ANTON DR.



STA 26+22.54

BETWEEN ANTON DR.
AND PALFREY DR.

WATER QUANTITIES			
ITEM NO	DESCRIPTION	QUANTITY	UNIT
550.0	TRENCH EXCAVATION SAFETY PROTECTION	60	LF
818	6" PVC WATERLINE	60	LF
836.0	PIPE FITTINGS, ALL SIZES AND TYPES	0.2	TON
846	6" TIE-IN	4	EA
841.0	HYDROSTATIC TESTING	2	EA
844.0	2" BLOWOFF, TEMPORARY	4	EA
9000	CPS POWER POLE BRACE	1	EA

FREES & NICHOLS
4040 Broadway Street, Suite 600
San Antonio, Texas 78209-6353
Phone: (210) 298-3800
Fax: (210) 298-3801
web: www.freese.com



FREES AND NICHOLS, INC.
TEXAS REGISTERED ENGINEERING
FIRM F-2144

LEGEND

- PROP. WATER MAIN
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- SERVICE RELAY:
- 3/4"
- 1" OR LARGER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

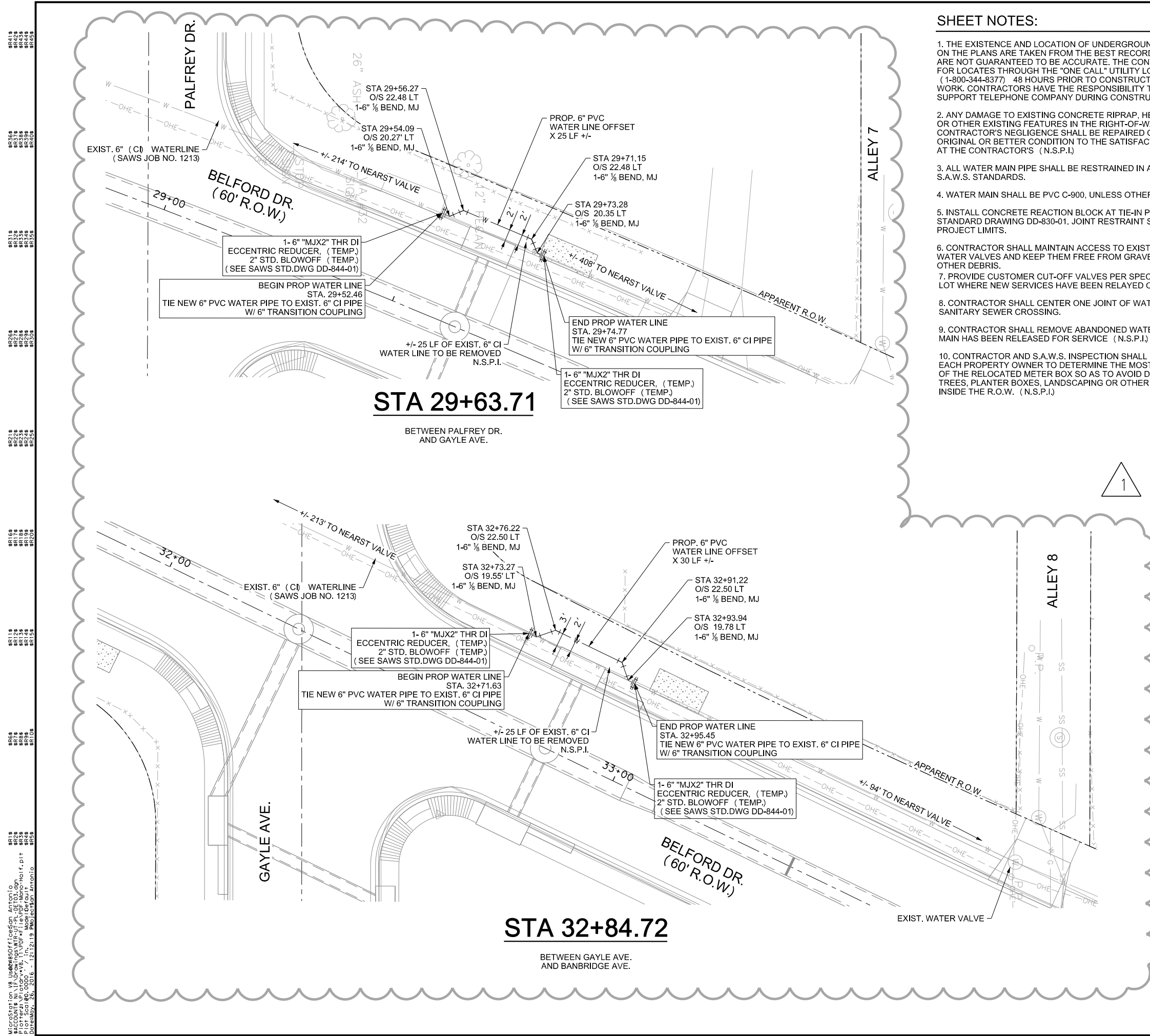
1	OFFSET DETAIL	CK	JDV	5/25/16
No.	Revision	Drawn	Approved	Date

REVISIONS
BELFORD AREA DRAINAGE
**INLET WATERLINE
OFFSET DETAIL
STA. 25+20.00 &
STA. 26+22.54**

DEVELOPER: SAN ANTONIO WATER SYSTEM
CONT. BUDGET PROJ.

SUBMITTED _____
APPROVED _____

MAP No.	SHEET 16
SECT. No.	
DR. MJM	JOB No. 13-5068
CK.	

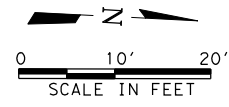


SHEET NOTES:

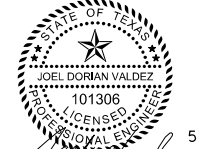
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12. DIMENSIONS ARE TAKING FROM FACE OF CURB UNLESS OTHERWISE NOTED.
13. ALL WATER LINES TO BE RESTRAINED.
14. ELEVATIONS POSTED FOR TOP OF VALVES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR THE TOP OF VALVE TO MATCH THE FINISHED GRADE FOR THE STREET IMPROVEMENTS (N.S.P.I.)

TRENCH EXCAVATION SAFETY PROTECTION:

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WATER QUANTITIES			
ITEM NO	DESCRIPTION	QUANTITY	UNIT
550.0	TRENCH EXCAVATION SAFETY PROTECTION	55	LF
818	6" PVC WATERLINE	55	LF
836.0	PIPE FITTINGS, ALL SIZES AND TYPES	0.2	TON
846	6" TIE-IN	4	EA
841.0	HYDROSTATIC TESTING	2	EA
844.0	2" BLOWOFF, TEMPORARY	4	EA



FREES AND NICHOLS, INC.
TEXAS REGISTERED ENGINEERING FIRM F-2144

LEGEND

- PROP. WATER MAIN
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- SERVICE RELAY:
- 3/4"
- 1" OR LARGER
- NEW SERVICE:
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1	OFFSET DETAIL	CK	JDV	5/25/16
No.	Revision	Drawn	Approved	Date

REVISIONS
BELFORD AREA DRAINAGE
**INLET WATERLINE
OFFSET DETAIL
STA. 29+63.71 &
STA. 32+84.72**

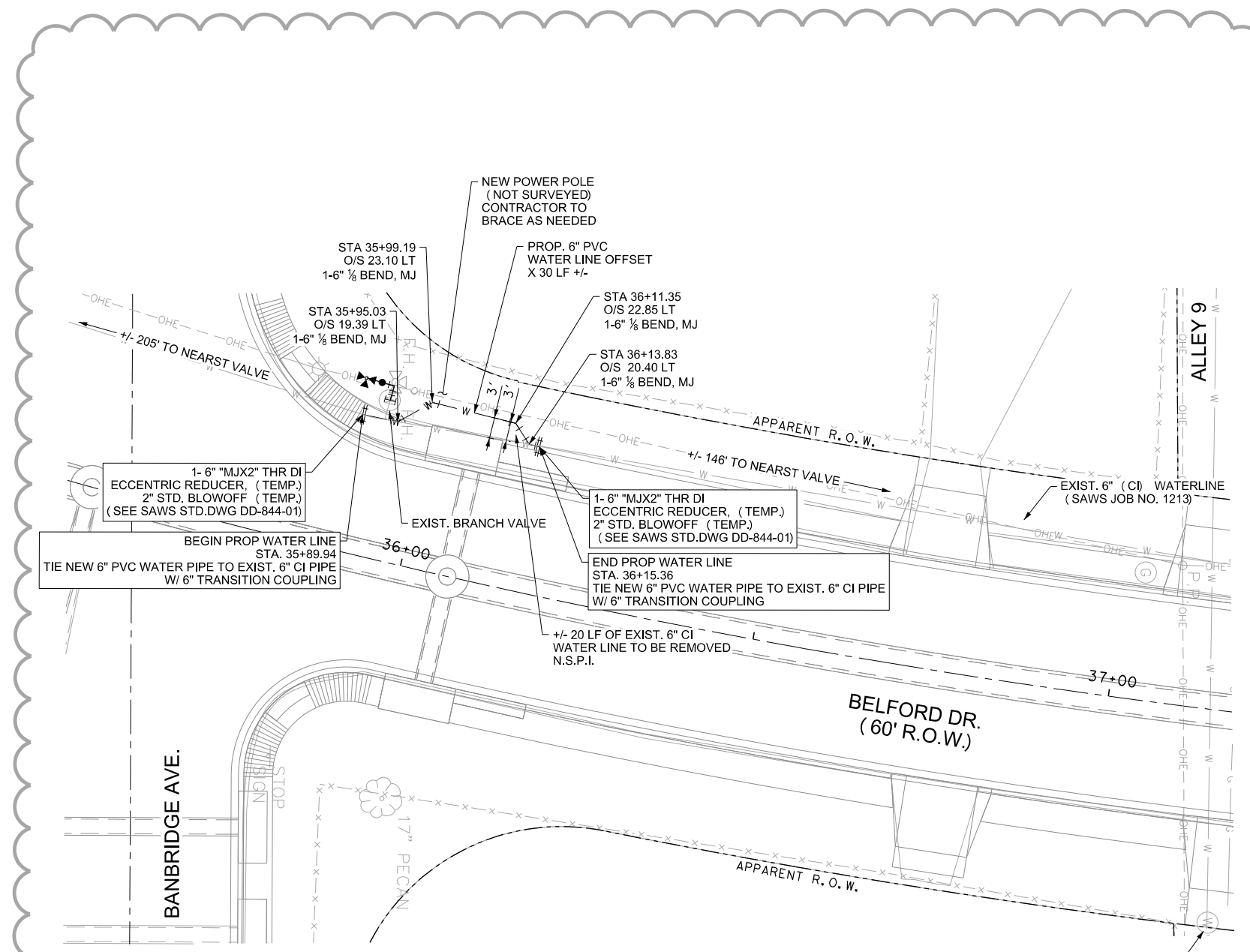
DEVELOPER: SAN ANTONIO WATER SYSTEM
CONT. BUDGET PROJ.

SUBMITTED _____
APPROVED _____

MAP No.	SHEET 17
DR. MJM CK.	
JOB No. 13-5068	SHEET Of 18

MicroStation V8 Use: 06/05/2016
 Plotter: HP DesignJet 5000 Series
 Plot: Scale: 1/8" = 1'-0"
 Date: 5/25/16
 User: JDM

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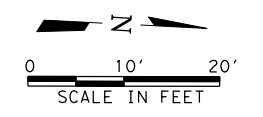


STA 36+06.66
 BETWEEN BANBRIDGE AVE.
 AND GALWAY DR.

- SHEET NOTES:**
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 - DIMENSIONS ARE TAKING FROM FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL WATER LINES TO BE RESTRAINED.
 - ELEVATIONS POSTED FOR TOP OF VALVES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR THE TOP OF VALVE TO MATCH THE FINISHED GRADE FOR THE STREET IMPROVEMENTS (N.S.P.I.)

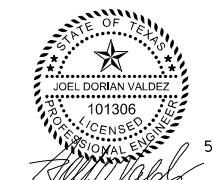
TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE (S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS, AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS, AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, O.S.H.A. STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH O.S.H.A. STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



WATER QUANTITIES			
ITEM NO	DESCRIPTION	QUANTITY	UNIT
550.0	TRENCH EXCAVATION SAFETY PROTECTION	30	LF
818	6" PVC WATERLINE	30	LF
836.0	PIPE FITTINGS, ALL SIZES AND TYPES	0.1	TON
840	6" TIE-IN	2	EA
841.0	HYDROSTATIC TESTING	1	EA
844.0	2" BLOWOFF, TEMPORARY	2	EA
9000	CPS POWER POLE BRACE	1	EA

FREESE & NICHOLS
 4040 Broadway Street, Suite 600
 San Antonio, Texas 78209-6353
 Phone: (210) 298-3800
 Fax: (210) 298-3801
 web - www.freese.com



FREESE AND NICHOLS, INC.
 TEXAS REGISTERED ENGINEERING FIRM F-2144

LEGEND

PROP. WATER MAIN	
EXIST. WATER MAIN	
GAS MAIN	
SANITARY SEWER	
STORM SEWER	
UTILITY POLE LINE	
ELECTRIC CABLE	
TELEPHONE CABLE	
SERVICE RELAY:	
3/4"	
1" OR LARGER	
NEW SERVICE:	
3/4"	
1" OR LARGER	

No.	Revision	Drawn	Approved	Date
1		CK	JDV	5/25/16

REVISIONS
 BELFORD AREA DRAINAGE
**INLET WATERLINE
 OFFSET DETAIL
 STA. 36+06.66**

DEVELOPER: SAN ANTONIO WATER SYSTEM
 CONT. BUDGET PROJ.
 SUBMITTED _____
 APPROVED _____
 MAP No. _____ SHEET 18
 SECT. No. _____
 DR. MJM CK. JOB No. 13-5068 Of 18

San Antonio Water System

PROJECT CONSTRUCTION PROGRAM

MEMORANDUM

SAWS FINDINGS: SAWS is in concurrence with your proposal, in the net amount of **\$101,220.37**. We are requesting that you sign this memorandum in the space provided below and return to this office for processing. Once received, we will forward this memorandum along with the attached supporting documents to the design engineer and request that a change order / field alteration be prepared for your signature reflecting this agreement.

Because this change order / field alteration exceeds \$100,000.00, and due to shortage of funding to cover the additional cost, SAWS Board approval and/or Vice President Ratification will be required before the commencement of the work can be authorized. Once this has been obtained, this office will inform you, giving you authorization to proceed.

Should you have any questions, please contact me at 233-3499.


Clint Henson
Jordan Foster Construction
operations Manager

Respectfully,

Johnathan Ratcliff

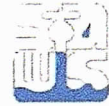
Digitally signed by Johnathan Ratcliff
DN: dc=org, dc=saws, ou=Facilities, ou=HQ Customer Support Offices, ou=Construction Administration, cn=Johnathan Ratcliff, email=Johnathan.Ratcliff@saws.org
Date: 2016.06.02 15:35:14 -05'00'

Johnathan Ratcliff
Construction Specialist
Construction

Attachment(s)

- Cc: Jose Carreño, PE, Sr. Director, Construction
- Kathleen Price, PE, Director, Governmental Engineering
- David R. Gonzales, CPM, Manager, Construction
- Nina C. Bittle, PE, Manager, Pipelines – Governmental Engineering
- Joshua Garcia, PE, SAWS Project Engineer
- Nicholas N. Vasquez, Graduate Engineer II
- Freese and Nichols, Inc. ATTN: Joel D. Valdez, PE, Project Manager
- Christina Calleros, SAWS Payment Coordinator
- Pedro S. Reyna, SAWS Area Inspector
- Gilbert Rangel, SAWS Inspector
- File

X:\Construction Contract Administration\Projects\13-5068 & 13-5568-Belford Drainage Area\RFP\RFP No. 1 Approval Response, Waterline Offsets and Additional Water Items.docx



San Antonio Water System

PROJECT CONSTRUCTION PROGRAM

REQUEST FOR PROPOSAL

No: 1

DATE: May 26, 2016

CONTRACTOR: Jordan Foster Construction

PROJECT: Belford Drainage Area

JOB NO.: 13-5068

THE FOLLOWING MODIFICATION TO THE CONTRACT HAS BEEN IDENTIFIED. PURSUANT TO THE GENERAL CONDITIONS, PLEASE PROVIDE A QUOTATION FOR THE ALTERATION DESCRIBED IN ITEM 1. THE QUOTATION SHOULD INCLUDE AN ITEMIZED BREAKDOWN OF CONTRACTOR AND SUBCONTRACTOR COSTS, INCLUDING LABOR, MATERIALS, RENTALS, APPROVED SERVICES, OVERHEAD, AND PROFIT. THIS REQUEST SHALL NOT BE CONSIDERED AUTHORIZATION TO PROCEED WITH THE WORK HEREIN DESCRIBED.

TO BE COMPLETED BY INITIATOR OF REQUEST:

1. SCOPE OF WORK: (INCLUDE LIST OF ATTACHMENTS)

550	TRENCH EXCAVATION SAFETY PROTECTION	200	LF	\$ 1.25	\$ 250.00
818	6" PVC WATERLINE	175	LF	\$ 45.00	\$ 7,875.00
818	8" PVC WATERLINE	25	LF	\$ 50.00	\$ 1,250.00
836	PIPE FITTINGS, ALL SIZES AND TYPES	0.7	TON	\$ 4,500.00	\$ 3,150.00
840	6" TIE-IN	12	EA	\$ 2,800.00	\$ 33,600.00
840	8" TIE-IN	2	EA	\$ 3,000.00	\$ 6,000.00
841	HYDROSTATIC TESTING	7	EA	\$ 3,000.00	\$ 21,000.00
844	2" BLOWOFF, TEMPORARY	14	EA	\$ 1,500.00	\$ 21,000.00
824	3/4" RELAY SERVICE	1	EA		\$ -
825	CUSTOMER SHUT OFF VALVE	1	EA		\$ -
833	EXISTING METER & EXISTING METER BOX RELOC	1	EA		\$ -
9000	CPS POLE BRACING	2	EA		\$ -

2. JUSTIFICATION FOR MODIFICATION:

During construction it was determined that seven proposed storm drain inlets are in conflict with existing 6-inch and 8-inch water mains throughout the project. Adjustments of the water mains are required to eliminate the impact to the system (please see the revised plan sheets attached). Most items required will be paid for under existing bid items listed above. SAWS is requesting pricing for the remaining items identified above.

3. APPROVAL OF REQUEST

DESIGN ENGINEER: _____ DATE: _____

APPROVED

By Johnathan Ratcliff at 3:33 pm, Jun 02, 2016

TO BE COMPLETED BY CONTRACTOR

NOTE: Cost submitted is acceptable for the scope of work required. Board approval is required.

4. TOTAL COST OF MODIFICATION (ATTACH DETAILED BREAKDOWN) \$ 101,220.37

5. WILL A MODIFICATION TO THE CONTRACT TIME BE REQUIRED?

YES NO

DURATION: 7 (CALENDAR DAYS)



San Antonio Water System

PROJECT CONSTRUCTION PROGRAM

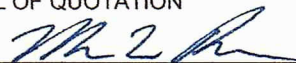
REQUEST FOR PROPOSAL

No: 1

6. ATTACHMENT IDENTIFICATION (LIST): Water line offset Proposal

7. QUOTATION IN EFFECT UNTIL (DATE): 7-1-16

8. APPROVAL OF QUOTATION

CONTRACTOR: 

DATE: 6-1-16

BELFORD AREA DRAINAGE
 CITY OF SAN ANTONIO
 JORDAN FOSTER CONSTRUCTION, LLC.
 DATE PREPARED: 5/27/2016



WATER LINE OFFSETS

CO ITEM	CONTRACT ITEM	DESCRIPTION	UNIT	ORIGINAL QTY	CO QTY	UNIT PRICE	CHANGE AMOUNT
	550	TRENCH EXCAVATION SAFETY PROTECTION	LF	451.00	200.00	\$ 1.25	\$ 250.00
	818	6" PVC WATERLINE	LF	120.00	175.00	\$ 45.00	\$ 7,875.00
	818	8" PVC WATERLINE	LF	125.00	25.00	\$ 50.00	\$ 1,250.00
	836	PIPE FITTINGS, ALL SIZES AND TYPES	TON	2.00	0.70	\$ 4,500.00	\$ 3,150.00
	840	6" TIE-IN	EA	4.00	12.00	\$ 2,800.00	\$ 33,600.00
	840	8" TIE-IN	EA	8.00	2.00	\$ 3,000.00	\$ 6,000.00
	841	HYDROSTATIC TESTING	EA	6.00	7.00	\$ 3,000.00	\$ 21,000.00
	844	2" BLOWOFF, TEMPORARY	EA	12.00	14.00	\$ 1,500.00	\$ 21,000.00
CO. 1	824	3/4" RELAY SERVICE	EA	0.00	1.00	\$ 1,789.22	\$ 1,789.22
CO. 2	825	CUSTOMER SHUT OFF VALVE	EA	0.00	1.00	\$ 597.24	\$ 597.24
CO. 3	833	EXISTING METER & EXISTING METER BOX RELOCATE	EA	0.00	1.00	\$ 1,527.41	\$ 1,527.41
CO. 4	9000	CPS POLE BRACING	EA	0.00	2.00	\$ 1,590.75	\$ 3,181.50
TOTAL							\$ 101,220.37

APPROVED
 By Johnathan Ratcliff at 3:34 pm, Jun 02, 2016

PROJECT: BELFORD AREA DRAINAGE
 ITEM NUMBER/DESC.: 3/4" RELAY SERVICE
 ESTIMATED QUANTITY: 1.00 EA
 DATE PREPARED: 5/27/2016



ITEM DESCRIPTION	QTY	UNIT	UNIT COSTS			TOTAL COSTS			
			LABOR	MATERIAL	EQUIP	LABOR	MATERIAL	EQUIP	
LABOR FOREMAN	3	HR	\$ 24.00			\$ 72.00			
EXCAVATOR OPERATOR	3	HR	\$ 18.50			\$ 55.50			
LOADER OPERATOR	3	HR	\$ 16.50			\$ 49.50			
PIPE LAYER	3	HR	\$ 15.00			\$ 45.00			
UTILITY LABORER	3	HR	\$ 14.50			\$ 43.50			
LABORER	3	HR	\$ 13.00			\$ 39.00			
MATERIAL PIPE BEDDING	2	TON		\$ 14.80		\$ 29.60			
8X3/4 SS DBL SCL C900 NPT	1	EA		\$ 123.00		\$ 123.00			
LF 3/4 MIP X COMP BALL CORP ST	1	EA		\$ 37.79		\$ 37.79			
3/4X100 K SOFT COP TUBE	1	EA		\$ 294.86		\$ 294.86			
LF 5/8X3/4X3/4 CTS COMP ANG MTR BV	1	EA		\$ 36.92		\$ 36.92			
EQUIPMENT EXCAVATOR	3	HR			\$ 82.20		\$ 246.60		
LOADER	3	HR			\$ 54.00		\$ 162.00		
PICKUP TRUCK	3	HR			\$ 14.00		\$ 42.00		
SUBCONTRACT TRUCKING	1	HR			\$ 50.00		\$ 50.00		
TOTALS						\$ 304.50	\$ 522.17	\$ 450.60	\$ 50.00

TOTAL LABOR \$ 304.50
 TOTAL MATERIAL \$ 522.17
 TOTAL EQUIPMENT \$ 450.60
 TOTAL SUBCONTRACT \$ 50.00

MARKUPS
 LABOR BURDENS \$ 304.50 @ 55% \$ 167.48
 LABOR MARK-UP \$ 304.50 @ 25% \$ 76.13
 MATERIAL MARK-UP \$ 522.17 @ 25% \$ 130.54
 EQUIPMENT MARK-UP \$ 450.60 @ 15% \$ 67.59
 SUBCONTRACT MARK-UP \$ 50.00 @ 5% \$ 2.50

MISC COST \$ -
 PERFORMANCE BOND \$ 1,771.50 @ 1.00% \$ 17.72

TOTAL QUANTITY 1.00 EA
 UNIT COST \$ 1,789.22 EA



PROJECT: BELFORD AREA DRAINAGE
 ITEM NUMBER/DESC.: CUSTOMER SHUT OFF VALVE
 ESTIMATED QUANTITY: 1.00
 DATE PREPARED: 5/27/2016

ITEM DESCRIPTION	QTY	UNIT	UNIT COSTS				TOTAL COSTS											
			LABOR	MATERIAL	EQUIP	SUBCT.	LABOR	MATERIAL	EQUIP	SUBCT.	MISC							
LABOR																		
FOREMAN	1	HR	\$ 24.00				\$ 24.00											
EXCAVATOR OPERATOR	1	HR	\$ 18.50				\$ 18.50											
LOADER OPERATOR	1	HR	\$ 16.50				\$ 16.50											
PIPE LAYER	1	HR	\$ 15.00				\$ 15.00											
UTILITY LABORER	1	HR	\$ 14.50				\$ 14.50											
LABORER	1	HR	\$ 13.00				\$ 13.00											
MATERIAL																		
PIPE BEDDING	1	TON		\$ 14.80			\$ 14.80											
3/4" VALVE	1	EA		\$ 31.92			\$ 31.92											
MISC MATERIAL	1	EA		\$ 100.00			\$ 100.00											
EQUIPMENT																		
EXCAVATOR	1	HR			\$ 82.20		\$ 82.20											
LOADER	1	HR			\$ 54.00		\$ 54.00											
PICKUP TRUCK	1	HR			\$ 14.00		\$ 14.00											
SUBCONTRACT																		
TRUCKING	1	HR				\$ 50.00	\$ 50.00											
TOTALS							\$ 101.50	\$ 146.72	\$ 150.20	\$ 50.00								

TOTAL LABOR \$ 101.50
 TOTAL MATERIAL \$ 146.72
 TOTAL EQUIPMENT \$ 150.20
 TOTAL SUBCONTRACT \$ 50.00

MARKUPS

LABOR BURDENS @ 55% \$ 55.83
 LABOR MARK-UP @ 25% \$ 25.36
 MATERIAL MARK-UP @ 25% \$ 35.68
 EQUIPMENT MARK-UP @ 15% \$ 22.53
 SUBCONTRACT MARK-UP @ 5% \$ 2.50

MISC COST

PERFORMANCE BOND \$ 591.33 @

SUBTOTAL \$ 591.33
 TOTAL \$ 591.33
 QUANTITY 1.00 EA
 UNIT COST \$ 591.33 EA



PROJECT: BELFORD AREA DRAINAGE
 ITEM NUMBER/DESC: EXISTING METER & EXISTING METER BOX RELOCATE
 ESTIMATED QUANTITY: 1.00
 DATE PREPARED: 5/27/2016

ITEM DESCRIPTION	QTY	UNIT	UNIT COSTS				TOTAL COSTS											
			LABOR	MATERIAL	EQUIP	SUBCT	LABOR	MATERIAL	EQUIP	SUBCT	MISC.							
LABOR																		
FOREMAN	3	HR	\$ 24.00				\$ 72.00											
EXCAVATOR OPERATOR	3	HR	\$ 18.50				\$ 55.50											
LOADER OPERATOR	3	HR	\$ 16.50				\$ 49.50											
PIPE LAYER	3	HR	\$ 15.00				\$ 45.00											
UTILITY LABORER	3	HR	\$ 14.50				\$ 43.50											
LABORER	3	HR	\$ 13.00				\$ 39.00											
MATERIAL																		
PIPE BEDDING	1	TON	\$ 14.80				\$ 14.80											
MISC MATERIAL	1	EA	\$ 300.00				\$ 300.00											
EQUIPMENT																		
EXCAVATOR	3	HR			\$ 82.20		\$ 246.60											
LOADER	3	HR			\$ 54.00		\$ 162.00											
PICKUP TRUCK	3	HR			\$ 14.00		\$ 42.00											
SUBCONTRACT																		
TRUCKING	1	HR				\$ 50.00	\$ 50.00											
TOTALS							\$ 304.50	\$ 314.80	\$ 450.60	\$ 50.00								

TOTAL LABOR \$ 304.50
 TOTAL MATERIAL \$ 314.80
 TOTAL EQUIPMENT \$ 450.60
 TOTAL SUBCONTRACT \$ 50.00
 MARKUPS
 LABOR BUREDENS \$ 304.50 @ 55% \$ 167.48
 LABOR MARK-UP \$ 314.80 @ 25% \$ 78.70
 MATERIAL MARK-UP \$ 450.60 @ 15% \$ 67.59
 EQUIPMENT MARK-UP \$ 50.00 @ 5% \$ 2.50
 SUBCONTRACT MARK-UP
 MISC COST
 PERFORMANCE BOND \$ 1,512.29 @ 1.00% \$ 15.12
 SUBTOTAL \$ 1,527.41
 TOTAL QUANTITY 1.00 EA
 UNIT COST \$ 1,527.41 EA

PROJECT: BELFORD AREA DRAINAGE
 ITEM NUMBER/DESC: CPS POLE BRACING
 ESTIMATED QUANTITY: 2.00
 DATE PREPARED: 5/27/2016 EA



ITEM DESCRIPTION	QTY	UNIT	UNIT COSTS			SUBJECT	O.T Factor	TOTAL COSTS			MISC.	
			LABOR	MATERIAL	EQUIP			LABOR	MATERIAL	EQUIP		SUBJECT
LABOR												
MATERIAL												
EQUIPMENT												
SUBCONTRACT												
CPS POLE BRACING	2	EA				\$ 1,500.00					\$ 3,000.00	
TOTALS											\$ 3,000.00	

TOTAL LABOR \$ -
 TOTAL MATERIAL \$ -
 TOTAL EQUIPMENT \$ -
 TOTAL SUBCONTRACT \$ 3,000.00
 MARKUPS
 LABOR BUREAUS @ 55% \$ -
 LABOR MARK-UP @ 25% \$ -
 MATERIAL MARK-UP @ 15% \$ -
 EQUIPMENT MARK-UP @ 15% \$ -
 SUBCONTRACT MARK-UP @ 5% \$ 150.00
 MISC COST \$ -
 PERFORMANCE BOND \$ 3,150.00 @

SUBTOTAL \$ 3,150.00
 TOTAL QUANTITY 1.000%
 UNIT COST \$ 2.00 EA
 \$ 1,590.75 EA