SAN ANTONIO WATER SYSTEM
WATER SYSTEM CONSTRUCTION
Addendum No. 2
To Specifications For
Alamo at Guenther Ph II – Water and Sewer Siphon Project
SAWS Job No. 12-5046 & 12-5546
Solicitation No. B-13-034-MR

To Bidder of Record:

This addendum, applicable to the work associated with the above referenced Contract, is an amendment to the bidding documents and as such shall be a part of and included in the Contract. The original contract documents and any prior addenda remain in full force except as modified by the following, which shall take precedence over any contrary provisions in prior documents.

Special Conditions:

SC-1.2 **Contractor to provide Cut-Sheets, By-pass Plan, Traffic Control Plan, Construction Schedule, and Pre-construction Site Video within 7 calendar days of the pre-construction meeting.**

SC-2.1 *Sewer Item No. SC-2.1 — Refer to Special Environmental Specifications located at the end of this document*

Management of Impacted Soil (Sewer) – 4100.1
Management of Impacted Soil (Water) – 4100.2
Transportation to Disposal Facility (Sewer) – 4100.3
Transportation to Disposal Facility (Water) – 4100.4
Landfill Disposal (Sewer) – 4100.5
Landfill Disposal (Water) – 4100.6
Removal, Storage and Treatment of Water (per item "k")(0-100,000 GAL) (Sewer Work)– 4300.1
Removal, Storage and Treatment of Water (per item "k")(100,001-250,000 GAL)(Sewer Work) – 4300.1
Removal, Storage and Treatment of Water (per item "k")(250,001-Above GAL)(Sewer Work) – 4300.1
Removal, Storage and Treatment of Water (per item "k")(0-100,000 GAL) (Water Work)– 4300.2
Removal, Storage and Treatment of Water (per item "k")(100,001-250,000 GAL)(Water Work) – 4300.2
Removal, Storage and Treatment of Water (per item "k")(250,001-Above GAL)(Water Work) – 4300.2
Removal, Storage and Treatment of Water (per item "l")(0-100,000 GAL) (Sewer Work)– 4300.3
Removal, Storage and Treatment of Water (per item "l")(100,001-250,000 GAL)(Sewer Work) – 4300.3
Removal, Storage and Treatment of Water (per item "l")(250,001-Above GAL)(Sewer Work) – 4300.3

Removal, Storage and Treatment of Water (per item "l")(0-100,000 GAL) (Water Work)– 4300.4
Removal, Storage and Treatment of Water (per item "l")(100,001-250,000 GAL)(Water Work) – 4300.4
Removal, Storage and Treatment of Water (per item "l")(250,001-Above GAL)(Water Work) – 4300.4
Disposal of Impacted Water (0-100,000 GAL)(Sewer Work) – 4300.5
Disposal of Impacted Water (100,001-250,000 GAL)(Sewer Work) – 4300.5
Disposal of Impacted Water (250,001-Above GAL)(Sewer Work) – 4300.5
Disposal of Impacted Water (0-100,000 GAL)(Water Work) – 4300.6
Disposal of Impacted Water (100,001-250,000 GAL)(Water Work) – 4300.6
Disposal of Impacted Water (250,001-Above GAL)(Water Work) – 4300.6
Testing of Water for Lead – 4300.7
Testing of Water for Arsenic – 4300.8
Testing of Water for Dissolved Oxygen – 4300.9
Testing of Water for Suspended Solids – 4300.10
Development of Site Specific Health & Safety Plan – 4440.1

SC-2.2 **The environmental items related to the removal, storage, treatment and disposal of contaminated water from the Environmental Areas of Concern and the bore pit locations as described in the Environmental Specifications are cumulative. Cumulative for these items means that the first 100,000 gallons of water removed, treated, or disposed of during the water line construction will be paid with the appropriate Tier 1 pay items. Any water removed, treated, or disposed of beyond the 100,000 gallons up to 250,000 gallons will be paid at the second tier price for the water work. All water removed, treated, or disposed of beyond 250,001 gallons will be paid at the Tier 3 price for the water work.**

The environmental items related to the sewer work are also cumulative so that the 100,000 gallons removed, treated, and disposed of during the sewer portion of the construction will be paid under the appropriate Tier 1 bid items. The volume of water that is removed, treated, and disposed between 100,001 to 250,000 gallons will be paid with the appropriate second tier bid items. All water removed, treated, or disposed of beyond 250,001 gallons will be paid at the Tier 3 price for the sewer work.

Statement of Bidder's Experience:

The Bidder **and/or the Bidder's sub-contractor** must have successfully completed three projects with similar size (48 inches or larger) and similar scope of work.

Contractor should reference projects that included Jacking and Boring work on either sanitary sewer or water lines with a minimum diameter of forty-eight (48) inches under the San Antonio River **or similar water body.**

Contractor Questions:

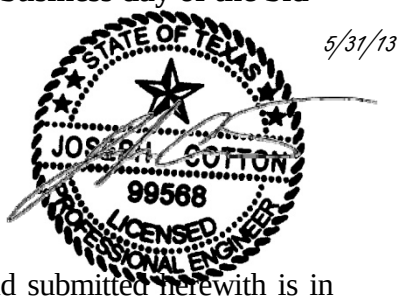
1. RE: sheet 23 of 34 Stage I sequence of work item C. "Odor control for manholes B2 and C1". Must these manholes be odor controlled simultaneously or may they be done one at a time?
    a. **The sequence depends on the contractor's construction schedule and sequencing. Odor control is needed when the sewer system is opened to the atmosphere due to construction activities.**
2. RE: Item 4500 Waste Management Plan and Environmental Oversight Implementation page 14 "Air Monitoring". I don't see a requirement for an outside agency to perform air monitoring. Is the normal air quality testing performed by contractors for manhole work sufficient?
    b. Environmental Oversight Implementation refers to having a qualified environmental consultant performing air monitoring for construction workers for at least 240 hours. This time might be incurred for construction in the two areas of concern (AOCs) included in the environmental specifications. We highly suggest to provide this document to a qualified environmental consultant for them to provide cost to perform this task.
3. What size logs (height) does the engineer want?
    c. The logs can be of any combination of heights necessary to meet the height specified on the design plans.
4. How many logs does the engineer want in EACH channel?
    d. Each log should be of a height and size that is manageable for maintenance purposes.
5. Can we find out the head requirements in EACH channel?
    e. Head requirement shall be 2 times the maximum height of the stop logs.
6. Does the engineer want a lifting device for the stop logs?
    f. Contractor will need to provide a lifting device to SAWS for maintenance purposes.
7. Does the engineer want 304 or 316 stainless steel for the stop logs?
    g. 316 stainless steel is required due to increased corrosion resistance.
8. Using the detail shown on sheet 6 of 6 of the water plans (sanitary sewer pipe in trench with flowable fill as initial backfill) as the guide to the flowable fill requirements, our takeoff quantities are much less than the bid quantities, please confirm that the detail shown applies to this bid item for both water and sewer.
    h. Use the detail as shown in the plan set.
9. Dear Mr. Ripley, I am having difficulty locating the Odophos chemical feed system to be used for odor control on this project. I have spoken with two people at Siemens and left a message with another before calling Newman Regency Group to see if they have an alternate. The two systems attached herein are what Newman sent me. Please forward them to the engineer for approval/disapproval.
    i. The system submitted thus far are all air scrubber type which won't work well because we are not just dealing with MH openings. We also have to deal with pipe cuttings and irregular field-cut openings. We recommend using oxidizing agent added to sewer flow upstream to neutralize the microorganisms.

10. Bid item 511 (water) and bid item 511 (sewer) are for asphalt treated base only. Is there to be a surface course as well?
    j. No there will not be a surface course with this section of the project. The final surface will be placed by CoSA when the road is overlaid.
11. Water plans sheet 3 of 6 general water note 11: contractor to remove concrete base and steel tracks to be paid under item 2005. There is no bid item 2005 on the bid form.
    k. Item Number 11 was in error. The item should have read "Original paving section for Alamo at Guenther Ph II included 6-18" thick concrete base including steel rails. Contractor must account for the removal of the concrete of varying depths from Sta. 2+30 to Sta. 6+00. Concrete removal shall be paid under Item 101 – Preparing Right-of-Way".
12. Dear Mr. Ripley, I was able to speak with the Siemens representative today that has the Odorphos odor control equipment. He asked me to ask you the following questions:
    l. What is the engineer's budget price for the odor control portion of this project?
        i. Item 2002 – Odor Control Set-up and Removal – $6,300.00
        ii. Item 2002 – Odor Control Equipment Rental – $5,250.00
        iii. Item 2002 – Odor Control Biochemical Solution – $2,625.00
    m. What are the estimated peak and average flows for the line to be odor controlled?
        iv. Average Dry Weather Flow = 2.61 MGD (4.04 cfs)
        v. Max Wet Weather Flow = 11.76 MGD (17.47 cfs)
    n. What is the duration of the odor control portion of this project? (I think it is 19 days)
        vi. The duration depends on contractor's construction schedule. Odor control is needed when the sewer system is opened to the atmosphere due to construction activities.
13. Dear Mr. Ripley, the quantities for bid items 4200.2, 4200.4, 4200.6 seem odd. These items are for pumping and treating water. It seems to me there should be a time or gallons element involved while pumping at 5 gallons per minute to determine the actual work involved. Example: if the contractor furnishes and uses a 5 GPM pump even for a very short period of time, the contractual obligation will have been met based on the unknown duration or total gallons.
    o. Per the environmental specifications the estimated volume of water for this project is approximately 250,000 gallons for water work and 500,000 gallons sewer work in the Areas of Concern and bore pit locations. The Contractor will need to provide water treatment and pumping capacity to accommodate the environmental specification requirements. The bid proposal has been revised to reflect a cumulative tiered payment system for the volume of water encountered during construction.
14. Dear Mr. Ripley. I downloaded the plans for this project yesterday and sheet 5 of 6 on the water drawings has a number of information blocks "hashed out". I assume this has some significance and or may be important. In any event, it is pretty difficult to read some of them.
    p. The hashed out boxes are due to a printer setting. The information in the boxes is important to the plans.
15. Has an odor control technology been specified yet for this application?
    q. A specific type of odor control technology has not been specified for this project. Contractor must select a technology that will meet the requirements.
16. I am currently working on pricing the odor control item. Can you please tell me the discharge rate per day of the 36" Brick Sanitary Sewer line?
    r. See answer above for dry and wet weather flows.

17. In addition does anyone know the current levels of hydrogen sulfide in the line?
    s. **The current level of hydrogen sulfide is not known in the existing line.**
18. Specifications, Supplemental Conditions, SS-2.0 Project Milestones. There are eight project milestones listed, all of which carry a $1,300 per calendar day liquidated assessment if not met. If the contractor misses multiple milestones, does the $1,300 per calendar day liquidated damages assessment carry forward for each individual milestone passed? Or is the contractor assessed $1,300 per calendar day, but $1,300 only, once he falls behind, even when he has not met multiple milestones?
    t. **The contractor will be assessed $1,300 per day per milestone missed. i.e. if the contractor is behind on two milestones then the contractor will be assessed $2,600 per day.**
19. Specifications, Supplemental Conditions, SS2-0 Project Milestones, SS-2.1 Milestones, 1.1 Existing Sewer Diversion Completed. Why does the existing sewer diversion need to be completed 19 calendar days after Notice to Proceed? Is the existing sewer system currently leaking? There are materials that need to be ordered for this work (pipe, manholes, etc.), sewer bypassing set-up for the diversion installation (not to mention bypassing installed again when diversion is removed and doghouse manholes repaired/lined), traffic control set up, etc. Getting these materials fabricated and installed in 19 days will be an issue.
    u. **Sequencing and schedule for each section will be discussed the apparent low bidder after the bids have been opened. If sequencing days need to be adjusted then they will be adjusted at that time. As of this time, 19 days is allotted for the installation of the bypass lines, traffic control set-up, odor control, etc.**
20. Specifications, Supplemental Conditions, SS-2.0 Project Milestones, SS-2.1 Milestones, 2.5 Substantial Completion Walk-thru Begun. Does Milestone 2.5 set the substantial Completion date at 215 calendar days?
    v. **Yes.**
21. Addendum No. 1, Specifications, Supplementation Conditions, SS-3.0 City Mandated Work Stoppages, SS-3.1 "City will not allow any construction activities from December 20th, 2013 through January 1st, 2014". Since the contractor is not allowed to work during this time, will project time be stopped during this work stoppage? If project time will continue to run, the contract should be allowed to work.
    w. **Project time will stop during this work stoppage.**
22. Instruction to Bidders, IB-7, Item 23. Please confirm the items identified in Item 23 are to be provided by the apparent low bidder within one (1) day of the bid opening.
    x. **Yes, all the items identified in Item 23 of the Instruction to Bidders, IB-7, must be submitted by the apparent low bidder within one (1) business day of the bid opening.**

5/31/13

Joseph Cotton, P.E.
Project Manager
RJN Group, Inc.



The undersigned acknowledges receipt of this Addendum No. 1 and the bid submitted herewith is in accordance with the information and stipulation set forth.

_____ _____

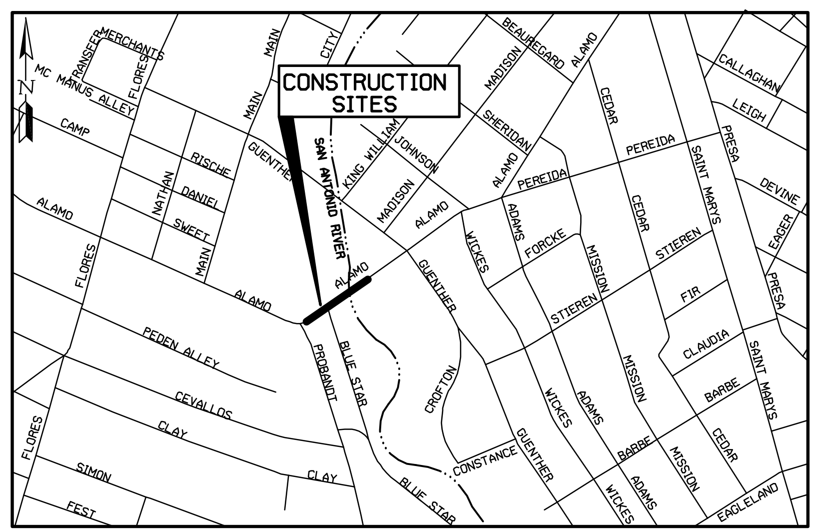
Date Signature of Bidder

END OF ADDENDUM

SAN ANTONIO WATER SYSTEM

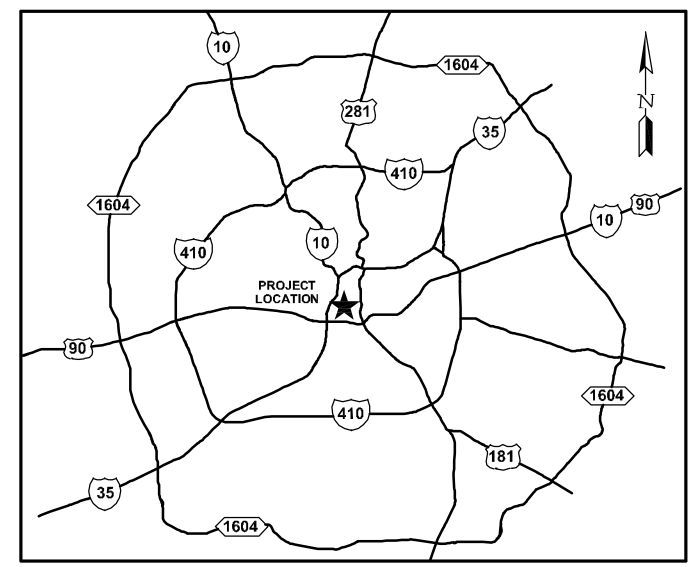
WATER JOB NO: 12-5046

ALAMO AT GUENTHER Ph II - WATER & SEWER SIPHON PROJECT



LOCATION MAP

N.T.S.



VICINITY MAP

N.T.S.

REV. 5/31/2013

STATE OF TEXAS
JOSEPH COTTON
99568
LICENSED
PROFESSIONAL ENGINEER
4/26/2013

SAN ANTONIO WATER SYSTEM

May 2013

RJN GROUP INC.
The Choice for Collection System Solutions
Texas Registered Engineering Firm F-3260
8930 Fourwinds Dr. Suite 203
San Antonio, TX 78239-1923

rjngroup
The Choice for Collection System Solutions

8930 Fourwinds Dr. Suite 203 * SAN ANTONIO, TEXAS 78239-1923 * 210-651-1661

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	COVER
2	INDEX & QUANTITIES
3	GENERAL NOTES
4	DRAWING INDEX
5	WATER MAIN A
6	WATER DETAILS
	EPIC SHEET

LEGEND

- EXISTING SEWER CLEANOUT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING GAS WELL
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING GUY WIRE
- EXISTING STORM INLET
- BENCHMARK
- CONTROL POINT
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- EXISTING FENCE (OTHER)
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING SIGN
- EXISTING IRON ROD
- EXISTING BUSH
- EXISTING TREE
- EXISTING BUILDING
- EXISTING TELEPHONE MANHOLE

1.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.
WATER MAIN			
100	MOBILIZATION	LS	1
101	PREPARING RIGHT-OF-WAY	LS	1
103	REMOVE CONCRETE CURB	LF	4
106	REMOVE SIDEWALK & DRIVEWAY	SF	16
413	FLOWABLE FILL	CY	26
500	CONCRETE CURB, GUTTER AND CONCRETE CURB AND GUTTER	LF	4
502	CONCRETE SIDEWALK	SY	2
	TRAFFIC CONTROL PLAN (AS REQUIRED)	LS	1
511	ASPHALT TREATED BASE (10" COMPACTED DEPTH)	SY	260
550	TRENCH PROTECTION	LF	415
818	12" PVC WATERLINE (RESTRAINED)	LF	380
818	16" PVC WATERLINE (RESTRAINED)	LF	35
824	RELAY 3/4" SHORT SERVICE	EA	1
824	RELAY 3/4" LONG SERVICE	EA	4
824	RELAY 2" SHORT SERVICE	EA	1
828	12" GATE VALVES	EA	1
828	16" GATE VALVES	EA	1
833	EXISTING METER AND NEW METER BOX RELOCATION	EA	6
833	NEW METER BOX	EA	6
834	FIRE HYDRANT	EA	1
836	PIPE FITTINGS, ALL SIZES AND TYPES	TN	2.5
840	12" WATER TIE-INS	EA	2
840	16" WATER TIE-INS	EA	1
841	HYDROSTATIC TESTING	EA	1
844	2" BLOWOFF, TEMPORARY	EA	2
4100.2	MANAGEMENT OF IMPACTED SOILS (4100.2)	CY	320
4100.4	TRANSPORTATION TO DISPOSAL FACILITY (4100.4)	CY	320
4100.6	LANDFILL DISPOSAL (4100.6)	CY	320
4300.2	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "k") (0-100,000 GAL)	GAL	100,000
4300.2	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "k") (100,001-250,000 GAL)	GAL	150,000
4300.2	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "k") (250,001-Above GAL)	GAL	1
4300.4	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "l") (0-100,000 GAL)	GAL	100,000
4300.4	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "l") (100,001-250,000 GAL)	GAL	150,000
4300.4	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "l") (250,001-Above GAL)	GAL	1
4300.6	DISPOSAL OF IMPACTED WATER (0-100,000 GAL)	GAL	100,000
4300.6	DISPOSAL OF IMPACTED WATER (100,001-250,000 GAL)	GAL	150,000
4300.6	DISPOSAL OF IMPACTED WATER (250,001-Above GAL)	GAL	1
4300.7	TESTING OF WATER FOR LEAD (4300.7)	EA	8
4300.8	TESTING OF WATER FOR ARSENIC (4300.8)	EA	8
4300.9	TESTING OF WATER FOR DISSOLVED OXYGEN (4300.9)	EA	8
4300.10	TESTING OF WATER FOR TOTAL SUSPENDED SOLIDS (4300.10)	EA	8
4400.1	DEVELOPMENT OF SITE SPECIFIC HEALTH & SAFETY PLAN (4400.1)	LS	1
4500.1	DEVELOPMENT OF THE WASTE MANAGEMENT PLAN (4500.1)	LS	1
4500.2	ENVIRONMENTAL OVERSIGHT IMPLEMENTATION (4500.2)	HR	40

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REV. 5/31/2013

STATE OF TEXAS
JOSEPH COTTON

No.	Revision	Approved	Date
1.	Environmental Rev.	JAC	5/31/13

REVISIONS

ALAMO AT GUENTHER
Ph II-WATER & SEWER
SIPHON PROJECT
Index & Quantities

DEVELOPER:
CONT. | BUDGET PROJ.

SUBMITTED
APPROVED

MAP No. 160-572 | SHEET 2 OF 6
SECT. No.
DR. MES | CK. JAC | JOB No. 12-5046

GENERAL WATER NOTES

1. 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, and General Conditions and with 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"

2. The Contractor is to make arrangements with the SAWS Construction Inspection Division at 233-3500 and provide notification procedures that the contractor will use to notify affected home residents and/or property owners 48 hours prior to excavation.

3. 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.

4. 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: 233-2010
   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

5. The Contractor shall comply with City of San Antonio or other governing Municipality's tree ordinances when excavating near trees.

6. The Contractor shall not place any waste materials or spoils in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.

7. 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.

8. Where 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) or 30 TAC 290.44(e) (Water Distribution).

9. 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.

10. Any work which is not part of these plans and specifications will not be compensated by the San Antonio Water System without prior approval.

11. Original paving section for Alamo at Guenther Ph II included 6-18" thick concrete base including steel rails. Contractor must account for the removal of the concrete of varying depths from Sta. 2+30 to Sta. 6+00. Concrete removal shall be paid for under Item 101- Preparing Right-Of-Way.

1. Revised Sept. 2011

TIME WARNER NOTES:
CALL THE TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-344-8377, 48 HOURS BEFORE BEGINNING ANY EXCAVATION.

CPS ENERGY NOTES:
CALL THE TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-344-8377, 48 HOURS BEFORE BEGINNING ANY EXCAVATION.

DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE PROJECT MUST BE GAS LEAK SURVEYED PRIOR TO THE FINAL OVERLAY, ALLOW 10 WORKING DAYS FOR THE LEAK SURVEY AND ALLOW AN ADDITIONAL 10 DAYS FOR VALVE ADJUSTMENTS. THE CONTRACTOR MUST COORDINATE THE SURVEY AND THE ADJUSTMENTS THROUGH THE PROJECT INSPECTOR.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING CPS ENERGY OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

AT&T NOTE
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, CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48 HOURS PRIOR TO EXCAVATION AT 1-800-828-5127. CONTRACTOR IS TO PROTECT AND SUPPORT TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

SAWS STANDARDS CAN BE FOUND AT WWW.SAWS.ORG.

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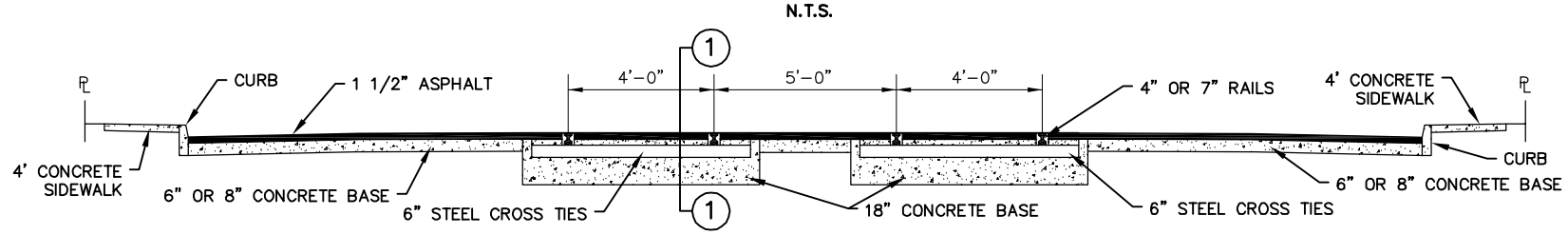
REV. 5/31/2013

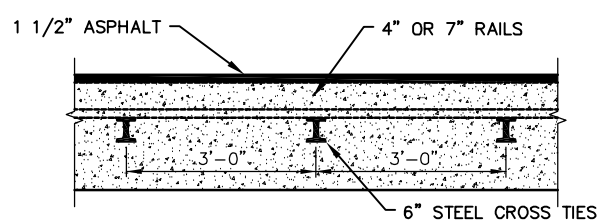
STATE OF TEXAS
JOSEPH COTTON
99568
LICENSED
PROFESSIONAL ENGINEER
4/26/2013

TYPICAL ROADWAY CROSS SECTION*
N.T.S.



*FOR INFORMATION ONLY. NOT FOR BIDDING PURPOSES.

SECTION*(1)
N.T.S.



No.	Revision	Approved	Date
1.	General Note Rev	JAC	5/31/13

REVISIONS

ALAMO AT GUENTHER
Ph II-WATER & SEWER
SIPHON PROJECT
General Notes (WATER)

DEVELOPER:
CONT. | BUDGET PROJ.
SUBMITTED
APPROVED
MAP No. 160-572 | SHEET 3 OF 6
SECT. No.
DR. MES | CK. JAC | JOB No. 12-5046

BENCHMARKS & CONTROL POINTS

CP #150
PK W/ SHINER
N - 13,699,194.24
E - 2,129,279.03
ELEV. =630.53

MON. USACE CSA-32
BRASS CAP MON.
N - 13,699,286.39
E - 2,129,333.58
ELEV. =630.66

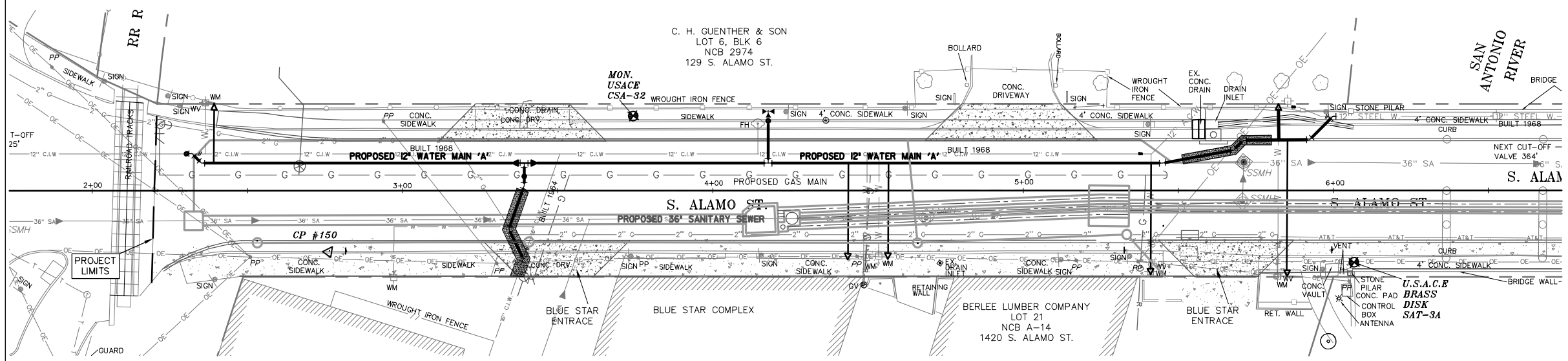
MON. USACE SAT-3A
BRASS DISK
N - 13,699,382.71
E - 2,129,550.18
ELEV. =631.05

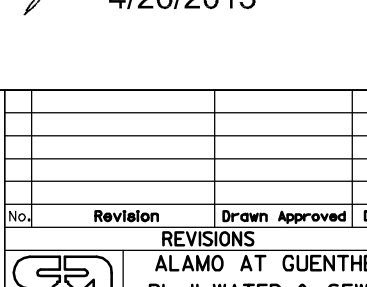
0 10' 20' 40'
SCALE: 1"= 40'

SHEET 5 OF 6

RJN GROUP INC.
The Choice for Collection System Solutions
Texas Registered Engineering Firm F-3260
8930 Fourwinds Dr. Suite 203
San Antonio, TX 78239-1923

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY "ONE CALL" 48 HOURS PRIOR TO CONSTRUCTION AT 1-800-344-8377





LEGEND

- PROP. WATER MAIN
- EXIST. WATER MAIN — 6"C.I.W.
- GAS MAIN — 2"G
- SANITARY SEWER — 8"SA
- STORM SEWER — 24"ST
- UTILITY POLE LINE
- ELECTRIC CABLE — E
- TELEPHONE CABLE — T
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
  - 3/4" SINGLE
  - 1" DUAL
- SERVICE RECONNECT:
  - 3/4"
  - 1" OR LARGER
- SERVICE RELAY:
  - 3/4"
  - 1" OR LARGER
- SERVICE RELOCATE:
  - 3/4"
  - 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
  - 3/4"
  - 1" OR LARGER

No.	Revision	Drawn Approved	Date

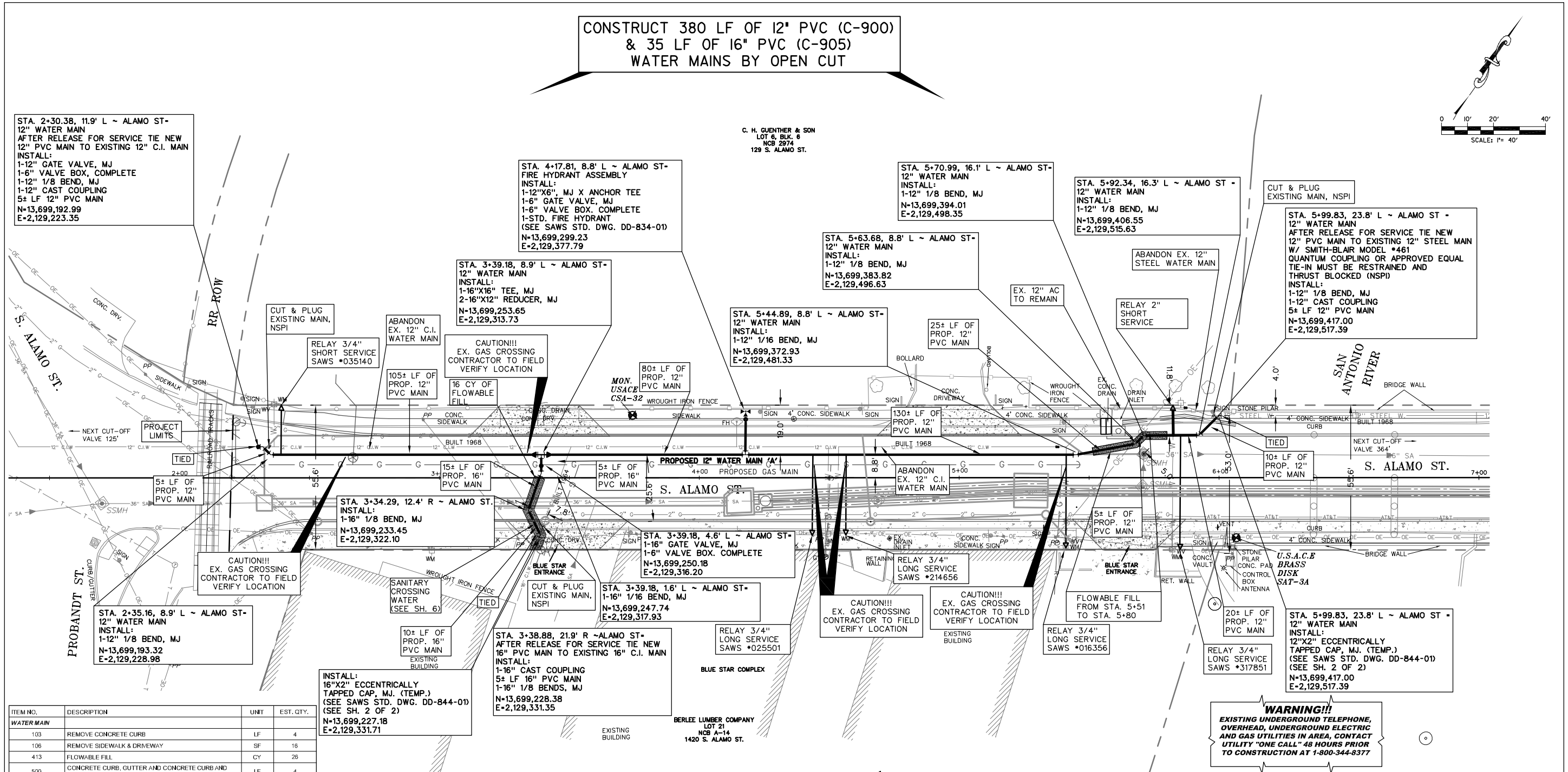
REVISIONS

ALAMO AT GUENTHER
Ph II-WATER & SEWER
SIPHON PROJECT
WATER INDEX

DEVELOPER:
CONT. | BUDGET PROJ.
SUBMITTED
APPROVED
MAP No. 160-572 | SHEET 4 OF 6
SECT. No.
DR. MES | CK. JAC | JOB No. 12-5046

RJN GROUP, INC. DESIGN

CONSTRUCT 380 LF OF 12" PVC (C-900) & 35 LF OF 16" PVC (C-905) WATER MAINS BY OPEN CUT



ITEM NO.	DESCRIPTION	UNIT	EST. QTY.
WATER MAIN			
103	REMOVE CONCRETE CURB	LF	4
106	REMOVE SIDEWALK & DRIVEWAY	SF	16
413	FLOWABLE FILL	CY	26
500	CONCRETE CURB, GUTTER AND CONCRETE CURB AND GUTTER	LF	4
502	CONCRETE SIDEWALK	SY	2
511	ASPHALT TREATED BASE (10" COMPACTED DEPTH)	SY	260
550	TRENCH PROTECTION	LF	415
818	12" PVC WATERLINE (RESTRAINED)	LF	380
818	16" PVC WATERLINE (RESTRAINED)	LF	35
824	RELAY 3/4" SHORT SERVICE	EA	1
824	RELAY 3/4" LONG SERVICE	EA	4
824	RELAY 2" SHORT SERVICE	EA	1
828	12" GATE VALVES	EA	1
828	16" GATE VALVES	EA	1
833	EXISTING METER AND NEW METER BOX RELOCATION	EA	6
833	NEW METER BOX	EA	6
834	FIRE HYDRANT	EA	1
836	PIPE FITTINGS, ALL SIZES AND TYPES	TN	2.5
840	12" WATER TIE-INS	EA	2
840	16" WATER TIE-INS	EA	1
841	HYDROSTATIC TESTING	EA	1
844	2" BLOWOFF, TEMPORARY	EA	2
4100.2	MANAGEMENT OF IMPACTED SOILS (4100.2)	CY	320
4100.4	TRANSPORTATION TO DISPOSAL FACILITY (4100.4)	CY	320
4100.6	LANDFILL DISPOSAL (4100.6)	CY	320

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. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CONTRACTOR SHALL CHLORINATE NEW MAINS WITH HTH

RJN GROUP INC.
The Choice for Collection System Solutions
Texas Registered Engineering Firm F-3260
8930 Fourwinds Dr. Suite 203
San Antonio, TX 78239-1923

STATE OF TEXAS
JOSEPH COTTON
09568
LICENSED PROFESSIONAL ENGINEER
4/26/2013

LEGEND

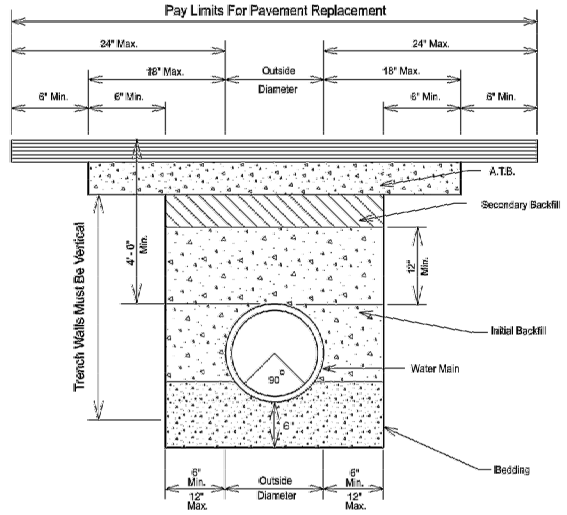
PROP. WATER MAIN
EXIST. WATER MAIN — 6"C.I.W.
GAS MAIN — 2"G
SANITARY SEWER — 8"SA
STORM SEWER — 24"ST
UTILITY POLE LINE
ELECTRIC CABLE — E
TELEPHONE CABLE — T
DUAL BRANCH SERV.
NEW UNMETERED SERVICE: 3/4" SINGLE, 1" DUAL
SERVICE RECONNECT: 3/4", 1" OR LARGER
SERVICE RELAY: 3/4", 1" OR LARGER
SERVICE RELOCATE: 3/4", 1" OR LARGER
RELOCATE METER
NEW SERVICE: 3/4", 1" OR LARGER

No.	Revision	Drawn	Approved	Date

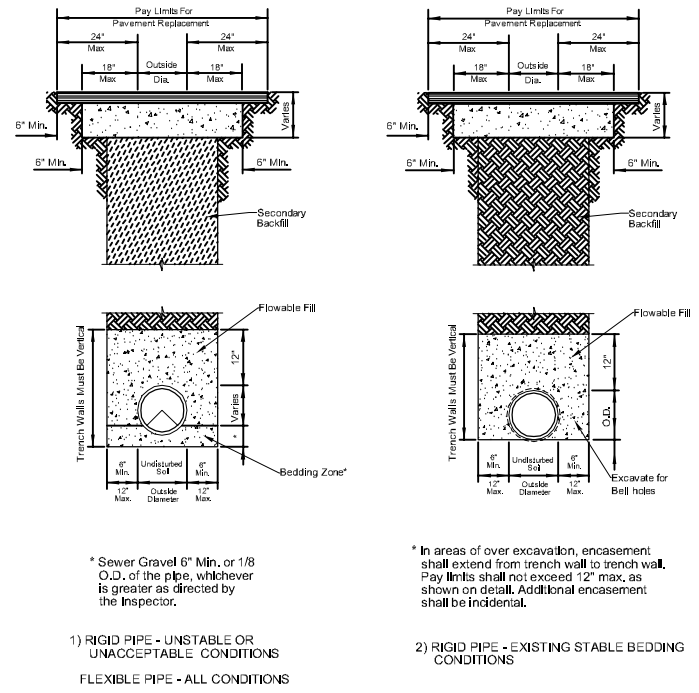
REVISIONS

ALAMO AT GUENTHER
Ph II-WATER & SEWER
SIPHON PROJECT
WATER MAIN 'A'

DEVELOPER:
CONT. | BUDGET PROJ.
SUBMITTED
APPROVED
MAP No. 160-572 | SHEET 5 OF 6
SECT. No.
DR. MES | CK. JAC | JOB No. 12-5046



PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	POTABLE AND RECYCLED WATER MAIN DETAIL	APPROVED March 2008	REVISED March 2010
		DD-812-01	SHEET 1 OF 1



* Sewer Gravel 6" Min. or 1/8 O.D. of the pipe, whichever is greater as directed by the Inspector.

1) RIGID PIPE - UNSTABLE OR UNACCEPTABLE CONDITIONS

FLEXIBLE PIPE - ALL CONDITIONS

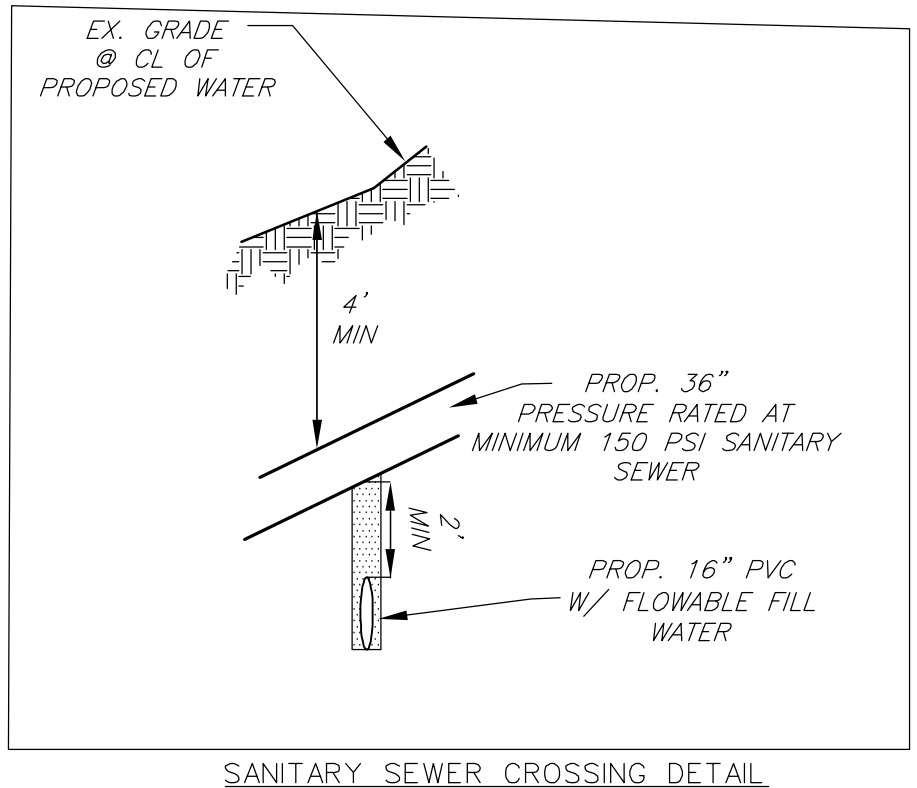
* In areas of over excavation, encasement shall extend from trench wall to trench wall. Pay limits shall not exceed 12" max, as shown on detail. Additional encasement shall be incidental.

2) RIGID PIPE - EXISTING STABLE BEDDING CONDITIONS

SANITARY SEWER PIPE LAID IN TRENCH W/ FLOWABLE FILL AS INITIAL BACKFILL AT STA. 5+51 & STA. 5+80

TREE PROTECTION TABLE

TREE SHEET #	TREE/CALIPER SHEET #	STATION OR NUMBER	LOCATION	ITEM 801	PROTECTION MEASURE ITEM 802 MAINTENCE/ TREATMENTS/ PROTECTION	REMOVAL SEE GENERAL NOTE No. 2



SANITARY SEWER CROSSING DETAIL
NTS

STATE OF TEXAS
JOSEPH COTTON
99568
LICENSED
PROFESSIONAL ENGINEER
4/26/2013

LEGEND

- PROP. WATER MAIN
- EXIST. WATER MAIN — 6"C.I.W.
- GAS MAIN — 2"G
- SANITARY SEWER — 8"SA
- STORM SEWER — 24"ST
- UTILITY POLE LINE
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- SERVICE RELOCATE:
  - 3/4"
  - 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
  - 3/4"
  - 1" OR LARGER

No.	Revision	Drawn Approved	Date

REVISIONS

ALAMO AT GUENTHER
Ph II-WATER & SEWER
SIPHON PROJECT
WATER XING DETAIL

DEVELOPER:

CONT. | BUDGET PROJ.

SUBMITTED

APPROVED

MAP No. 160-572 | SHEET 6 OF 6

SECT. No.

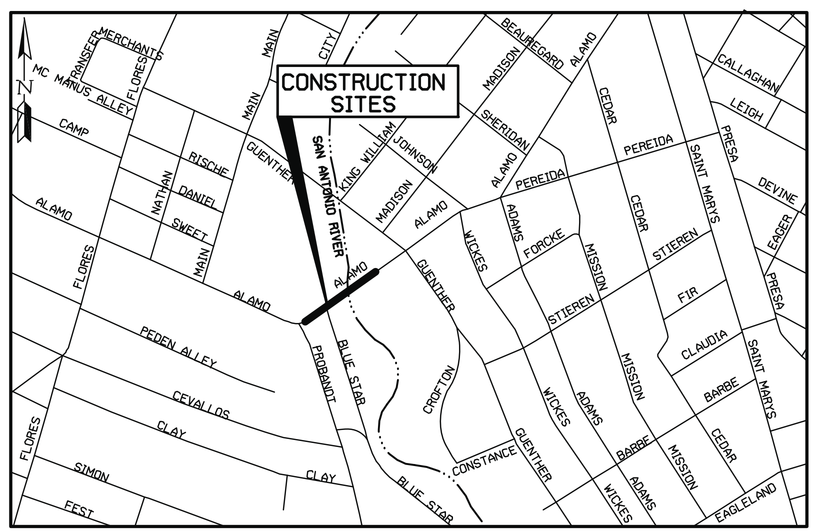
DR. MES | CK. JAC | JOB No. 12-5046

RJN GROUP, INC. DESIGN

SAN ANTONIO WATER SYSTEM

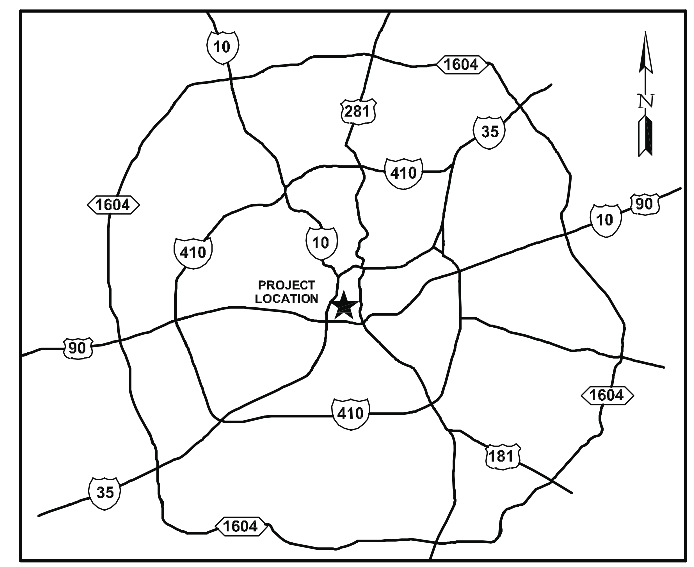
SEWER JOB NO: 12-5546

ALAMO AT GUENTHER Ph II - WATER AND SEWER SIPHON PROJECT



LOCATION MAP

N.T.S.



VICINITY MAP

N.T.S.

K. M. NG & ASSOCIATES, INC.
CONSULTING ENGINEERS
SAN ANTONIO, TEXAS 78201
TEXAS REGISTERED ENGINEERING FIRM F-442

STATE OF TEXAS
KUM WING CHAN
65399
REGISTERED
PROFESSIONAL ENGINEER
4-26-13

REV. 5/31/2013

STATE OF TEXAS
JOSEPH COTTON
99568
LICENSED
PROFESSIONAL ENGINEER
4/26/2013

RJN GROUP INC.
The Choice for Collection System Solutions
Texas Registered Engineering Firm F-3260
8930 Fourwinds Dr. Suite 203
San Antonio, TX 78239-1923

SAN ANTONIO WATER SYSTEM

April 2013

rjngroup
The Choice for Collection System Solutions

8930 Fourwinds Dr. Suite 203 * SAN ANTONIO, TEXAS 78239-1923 * 210-651-1661

SHEET INDEX

SHEET NUMBER	SHEET TITLE
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2	INDEX & QUANTITIES
3	GENERAL NOTES
4	SEWER INDEX
5	SEWER INDEX2
6	SEWER MAIN - STA. 2+94-6+ØØ
7	SEWER MAIN - STA. 6+ØØ-END
8	LINE B, C & D
9	LINES B, D, & E
1Ø	PROFILES LINE E & D
11	LINES PERM E & F
12	SANITARY DETAILS
13	SIPHON BOX GENERAL NOTE
14	DS SIPHON BOX (SB2)
15	DS SIPHON BOX (SB2) 2
16	US SIPHON BOX (SB1)
17	US SIPHON BOX (SB1) 2
18	AIR BYPASS DETAIL
19	SPECIAL DETAILS
2Ø	54IN CASING DETAILS
21	66IN CASING DETAILS
22	ABANDONMENT PLAN
23	CONSTRUCT SEQUENCE STG1
24	CONSTRUCT SEQUENCE STG1
25	CONSTRUCT SEQUENCE STG2
26	CONSTRUCT SEQUENCE STG2
27	TRAFFIC CONTROL STAGE 1A
28	STAGE 1A DETOUR
29	TRAFFIC CONTROL STAGE 1B
3Ø	TRAFFIC CONTROL STAGE 1C
31	TRAFFIC CONTROL STAGE 1D
32	TRAFFIC CONTROL STAGE 2A
33	STAGE 2A DETOUR
34	TRAFFIC CONTROL STAGE 2B
	EPIC SHEET
	SAWS BARICADE DETAILS (1-4)
	TXDOT DETAIL SHEETS (1-12)

SUMMARY OF QUANTITIES

1.

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.
SEWER MAIN			
100	MOBILIZATION	LS	1
101	PREPARING RIGHT-OF-WAY	LS	1
413	FLOWABLE FILL	CY	184
511	ASPHALT TREATED BASE (10" COMPACTED DEPTH)	SY	951
530	BARRICADES, SIGNS, & TRAFFIC HANDLING	LS	1
550	TRENCH PROTECTION	LF	1,685
848	8" PVC GRAVITY SEWER PIPE (SDR 26-2241, 160 PSI) (0'-10' CUT) (TEMPORARY DIVERSION)	LF	198
848	8" PVC GRAVITY SEWER PIPE (SDR 26-2241, 160 PSI) (0'-10' CUT)	LF	151
848	12" RESTRAINED JOINT PVC C900 DR-25 AIR BYPASS	LF	186
848	16" RESTRAINED JOINT PVC C905 DR-18 SANITARY SEWER PIPE SIPHON	LF	176
848	24" FUSIBLE PVC C905 SANITARY SEWER SIPHON	LF	358
848	30" PVC SANITARY SEWER PIPE ASTM F-679 (TEMPORARY DIVERSION)	LF	449
848	36" PVC SANITARY SEWER PIPE ASTM F-679 (PVC)	LF	209
850	SIPHON BOX (SB1)	EA	1
850	SIPHON BOX (SB2)	EA	1
850	6' SQ. DOGHOUSE SANITARY SEWER MANHOLE (0'-6')	EA	2
852	SANITARY SEWER MANHOLE (0'-6')	EA	4
852	EXTRA DEPTH MANHOLES (>6')	VF	10.32
853	SANITARY SEWER FIBERGLASS T-BASE MANHOLE (0'-6')	EA	2
854	SANITARY SEWER LATERALS SDR 26-2241, 160 PSI	LF	270
854	SERVICE LATERAL CLEANOUT	EA	12
856	12" CARRIER PIPE (RESTRAINED JOINT PVC C900 DR-25)	LF	210
856	16" CARRIER PIPE (RESTRAINED JOINT PVC C905 DR-18)	LF	210
856	24" CARRIER PIPE (FUSIBLE PVC C905)	LF	420
856	54" STEEL CASING	LF	210
856	60" STEEL CASING	LF	210
856	JACKING & BORING - 54" CASING (30'-40' Depth)	LF	210
856	JACKING & BORING - 60" CASING (30'-40' Depth)	LF	210
862	ABANDONMENT OF SANITARY SEWER MAIN (8" or greater)	LF	227
864	BYPASS PUMPING (8"-36")	LS	1
866	PRE SEWER MAIN TELEVISION INSPECTION (36")	LF	599
866	POST SEWER MAIN TELEVISION INSPECTION (8"-36")	LF	2,317
2002	ODOR CONTROL SET-UP AND REMOVAL	LS	1
2002	ODOR CONTROL EQUIPMENT RENTAL	LS	1
2002	ODOR CONTROL BIOCHEMICAL SOLUTION	LS	1
2004	DEWATER, CLEAN, REMOVE, AND BACKFILL OF TEMPORARY DIVERSION (8" or greater)	LF	552
4100.1	MANAGEMENT OF IMPACTED SOILS (4100.1)	CY	1,284
4100.3	TRANSPORTATION TO DISPOSAL FACILITY (4100.3)	CY	1,284
4100.5	LANDFILL DISPOSAL (4100.5)	CY	1,284
4300.1	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "k") (0-100,000 GAL)	GAL	100,000
4300.1	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "k") (100,001-250,000 GAL)	GAL	150,000
4300.1	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "k") (250,001-Above GAL)	GAL	1
4300.3	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "l") (0-100,000 GAL)	GAL	100,000
4300.3	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "l") (100,001-250,000 GAL)	GAL	150,000
4300.3	REMOVAL, STORAGE, AND TREATMENT OF WATER (per item "l") (250,001-Above GAL)	GAL	1
4300.5	DISPOSAL OF IMPACTED WATER (0-100,000 GAL)	GAL	100,000
4300.5	DISPOSAL OF IMPACTED WATER (100,001-250,000 GAL)	GAL	150,000
4300.5	DISPOSAL OF IMPACTED WATER (250,001-Above GAL)	GAL	1
4300.7	TESTING OF WATER FOR LEAD (4300.7)	EA	8
4300.8	TESTING OF WATER FOR ARSENIC (4300.8)	EA	8
4300.9	TESTING OF WATER FOR DISSOLVED OXYGEN (4300.9)	EA	8
4300.10	TESTING OF WATER FOR TOTAL SUSPENDED SOLIDS (4300.10)	EA	8
4400.1	DEVELOPMENT OF SITE SPECIFIC HEALTH & SAFETY PLAN (4400.1)	LS	1
4500.1	DEVELOPMENT OF THE WASTE MANAGEMENT PLAN (4500.1)	LS	1
4500.2	ENVIRONMENTAL OVERSIGHT IMPLEMENTATION (4500.2)	HR	200

LEGEND

- EXISTING SEWER CLEANOUT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING GAS WELL
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING GUY WIRE
- EXISTING STORM INLET
- BENCHMARK
- CONTROL POINT
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- EXISTING FENCE (OTHER)
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING SIGN
- EXISTING IRON ROD
- EXISTING BUSH
- EXISTING TREE
- EXISTING BUILDING
- EXISTING TELEPHONE MANHOLE

RJN GROUP INC.
The Choice for Collection System Solutions
Texas Registered Engineering Firm F-3260
8930 Fourwinds Dr. Suite 203
San Antonio, TX 78239-1923

REV. 5/31/2013

STATE OF TEXAS
JOSEPH COTTON
99568
LICENSED
PROFESSIONAL ENGINEER
4/26/2013

STATE OF TEXAS
KUM WING CHAN
65399
REGISTERED
PROFESSIONAL ENGINEER
5/31/2013

No.	Revision	Approved	Date
1.	Environmental Rev.	JAC	5/31/13

REVISIONS

ALAMO AT GUENTHER
Ph II-WATER & SEWER
SIPHON PROJECT
Index & Quantities

DEVELOPER:
CONT. | BUDGET PROJ.
SUBMITTED
APPROVED
MAP No. 160-572 | SHEET 2 OF 34
SECT. No.
DR. MES | CK. JAC | JOB No. 12-5546

BID PROPOSAL

PROPOSAL OF _____ , a corporation

a partnership consisting of

an individual doing business as

TO THE SAN ANTONIO WATER SYSTEM:
Pursuant to Instructions and Invitations to Bidders, the undersigned proposes to furnish all labor and materials as specified, and perform the work required for the construction of pipeline and appurtenances, San Antonio Water System Water Job Number 12-5046 and Sewer Job Number 12-5546 in accordance with the Plans and Specifications for the following prices to wit:

Base Bid
SAWS JOB NO. 12-5046 (WATER)

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
103	Remove Concrete Curb, per linear foot _____ Dollars and _____ Cents	LF	4	$_____	$_____
106	Remove Sidewalks & Driveways, per square foot _____ Dollars and _____ Cents	SF	16	$_____	$_____
413	Flowable Fill, per cubic yard _____ Dollars and _____ Cents	CY	26	$_____	$_____
500	Concrete Curb, Gutter, and Concrete Curb and Gutter, per linear foot _____ Dollars and _____ Cents	LF	4	$_____	$_____
502	Concrete Sidewalks, per square yard _____ Dollars and _____ Cents	SY	2	$_____	$_____
511	Asphalt Treated Base (10” Compacted Depth), per square yard _____ Dollars and _____ Cents	SY	260	$_____	$_____
550	Trench Protection, per linear foot _____ Dollars and _____ Cents	LF	415	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
818	12” PVC Waterline (Restrained), per linear foot	LF	380		
	_____ Dollars and _____ Cents			$_____	$_____
818	16” PVC Waterline (Restrained), per linear foot	LF	35		
	_____ Dollars and _____ Cents			$_____	$_____
824	Relay ¾” Short Service, per each	EA	1		
	_____ Dollars and _____ Cents			$_____	$_____
824	Relay ¾” Long Service, per each	EA	4		
	_____ Dollars and _____ Cents			$_____	$_____
824	Relay 2” Short Service, per each	EA	1		
	_____ Dollars and _____ Cents			$_____	$_____
828	12” Gate Valve, per each	EA	1		
	_____ Dollars and _____ Cents			$_____	$_____
828	16” Gate Valve, per each	EA	1		
	_____ Dollars and _____ Cents			$_____	$_____
833	Existing Meter & Meter Box Relocation, per each	EA	6		
	_____ Dollars and _____ Cents			$_____	$_____
833	New Meter Box, per each	EA	6		
	_____ Dollars and _____ Cents			$_____	$_____
834	Fire Hydrant, per each	EA	1		
	_____ Dollars and _____ Cents			$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
836	Pipe Fittings, All Sizes & Types, per ton _____ Dollars and _____ Cents	TON	2.50	$_____	$_____
840	12" Water Tie-Ins, per each _____ Dollars and _____ Cents	EA	2	$_____	$_____
840	16" Water Tie-Ins, per each _____ Dollars and _____ Cents	EA	1	$_____	$_____
841	Hydrostatic Testing, per each _____ Dollars and _____ Cents	EA	1	$_____	$_____
844	2" Blow-off, Temporary, per each _____ Dollars and _____ Cents	EA	2	$_____	$_____
4100.2	Management of Impacted Soils (4100.2), per cubic yard _____ Dollars and _____ Cents	CY	320	$_____	$_____
4100.4	Transportation to Disposal Facility (4100.4), per cubic yard _____ Dollars and _____ Cents	CY	320	$_____	$_____
4100.6	Landfill Disposal (4100.6), per cubic yard _____ Dollars and _____ Cents	CY	320	$_____	$_____
4300.2	Removal, Storage & Treatment of Water (per item "k") (0-100,000 gal), per gallon _____ Dollars and _____ Cents	GAL	100,000	$_____	$_____
4300.2	Removal, Storage & Treatment of Water (per item "k") (100,001-250,000 gal), per gallon _____ Dollars and _____ Cents	GAL	150,000	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
4300.2	Removal, Storage & Treatment of Water (per item "k") (250,001-Above gal), per gallon _____Dollars and _____Cents	GAL	1	$_____	$_____
4300.4	Removal, Storage & Treatment of Water (per item "l") (0-100,000 gal), per gallon _____Dollars and _____Cents	GAL	100,000	$_____	$_____
4300.4	Removal, Storage & Treatment of Water (per item "l") (100,001-250,000 gal), per gallon _____Dollars and _____Cents	GAL	150,000	$_____	$_____
4300.4	Removal, Storage & Treatment of Water (per item "l") (250,001-Above gal), per gallon _____Dollars and _____Cents	GAL	1	$_____	$_____
4300.6	Disposal of Impacted Water (0-100,000 gal), per gallon _____Dollars and _____Cents	GAL	100,000	$_____	$_____
4300.6	Disposal of Impacted Water (100,001-250,000 gal), per gallon _____Dollars and _____Cents	GAL	150,000	$_____	$_____
4300.6	Disposal of Impacted Water (250,001-Above gal), per gallon _____Dollars and _____Cents	GAL	1	$_____	$_____
4300.7	Testing of Water for Lead (4300.7), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4300.8	Testing of Water for Arsenic (4300.8), per each _____Dollars and _____Cents	EA	8	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
4300.9	Testing of Water for Dissolved Oxygen (4300.9), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4300.10	Testing of Water for Total Suspended Solids (4300.10), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4400.1	Development of Site Specific Health and Safety Plan (4400.1), per lump sum _____Dollars and _____Cents	LS	1	$_____	$_____
4500.1	Development of the Waste Management Plan (4500.1), per lump sum _____Dollars and _____Cents	LS	1	$_____	$_____
4500.2	Environmental Oversight Implementation (4500.2), per hour _____Dollars and _____Cents	HR	40	$_____	$_____

SUBTOTAL SAWS JOB NO. 12-5046 (WATER)

_____ **Dollars**

and _____ **Cents** **$**_____

SAWS JOB NO. 12-5546 (SEWER)

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
413	Flowable Fill, per cubic yard _____Dollars and _____Cents	CY	184	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
511	Asphalt Treated Base (10" Compacted Depth), per square yard _____Dollars and _____Cents	SY	951	$_____	$_____
550	Trench Protection, per linear foot _____Dollars and _____Cents	LF	1,685	$_____	$_____
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 PSI) (0'-10' Cut) (Temporary Diversion), per linear foot _____Dollars and _____Cents	LF	198	$_____	$_____
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 PSI) (0'-10' Cut), per linear foot _____Dollars and _____Cents	LF	151	$_____	$_____
848	12" Restrained Joint PVC C900 DR-25 Air Bypass, per linear foot _____Dollars and _____Cents	LF	186	$_____	$_____
848	16" Restrained Joint PVC C905 DR-18 Sanitary Sewer Pipe Siphon, per linear foot _____Dollars and _____Cents	LF	176	$_____	$_____
848	24" Fusible PVC C905 Sanitary Sewer Siphon, per linear foot _____Dollars and _____Cents	LF	358	$_____	$_____
848	30" PVC Sanitary Sewer Pipe ASTM F-679 (Temporary Diversion), per linear foot _____Dollars and _____Cents	LF	449	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
848	36" PVC Sanitary Sewer Pipe ASTM F-679 (PVC), per linear foot _____Dollars and _____Cents	LF	209	$_____	$_____
850	Siphon Box (SB1), per each _____Dollars and _____Cents	EA	1	$_____	$_____
850	Siphon Box (SB2), per each _____Dollars and _____Cents	EA	1	$_____	$_____
850	6' Sq. Sanitary Sewer Doghouse Manhole (0'-6'), per each _____Dollars and _____Cents	EA	2	$_____	$_____
852	Sanitary Sewer Manhole (0'-6'), per each _____Dollars and _____Cents	EA	4	$_____	$_____
852	Extra Depth Manholes (greater than 6'), per vertical foot _____Dollars and _____Cents	VF	15	$_____	$_____
853	Sanitary Sewer Fiberglass T-Base Manhole (0'-6'), per each _____Dollars and _____Cents	EA	2	$_____	$_____
854	Sanitary Sewer Laterals SDR 26-2241, 160 PSI, per linear foot _____Dollars and _____Cents	LF	270	$_____	$_____
854	Service Lateral Cleanout, per each _____Dollars and _____Cents	EA	12	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
856	12" Carrier Pipe (Restrained Joint PVC Joint C-900 DR-25, per linear foot _____Dollars and _____Cents	LF	210	$_____	$_____
856	16" Carrier Pipe (Restrained Joint PVC C-905 DR-18), per linear foot _____Dollars and _____Cents	LF	210	$_____	$_____
856	24" Carrier Pipe (Fusible PVC C-905), per linear foot _____Dollars and _____Cents	LF	420	$_____	$_____
856	54" Steel Casing, per linear foot _____Dollars and _____Cents	LF	210	$_____	$_____
856	60" Steel Casing, per linear foot _____Dollars and _____Cents	LF	210	$_____	$_____
856	Jacking and Boring - 54" Casing (30' - 40' Depths), per linear foot _____Dollars and _____Cents	LF	210	$_____	$_____
856	Jacking and Boring – 60" Casing (30' – 40' Depths), per linear foot _____Dollars and _____Cents	LF	210	$_____	$_____
862	Abandonment of Sanitary Sewer Main (8" or greater), per linear foot _____Dollars and _____Cents	LF	227	$_____	$_____
864	Bypass Pumping (8"-36"), per lump sum _____Dollars and _____Cents	LS	1	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
866	Sewer Main Pre-Television Inspection (36"), per linear foot _____Dollars and _____Cents	LF	599	$_____	$_____
866	Sewer Main Post-Television Inspection (36"), per linear foot _____Dollars and _____Cents	LF	2,317	$_____	$_____
2002	Odor Control Set-up and Removal _____Dollars and _____Cents	LS	1	$ X X X X	$_____
2002	Odor Control Equipment Rental _____Dollars and _____Cents	LS	1	$ X X X X	$_____
2002	Odor Control Biochemical Solution _____Dollars and _____Cents	LS	1	$ X X X X	$_____
2004	Dewater, Clean, Remove and Backfill of Temporary Diversion (8" or greater), per linear foot _____Dollars and _____Cents	LF	552	_____	$_____
4100.1	Management of Impacted Soils (4100.1), per cubic yard _____Dollars and _____Cents	CY	1,284	$_____	$_____
4100.3	Transportation to Disposal Facility (4100.3), per cubic yard _____Dollars and _____Cents	CY	1,284	$_____	$_____
4100.5	Landfill Disposal (4100.5), per cubic yard _____Dollars and _____Cents	CY	1,284	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
4300.1	Removal, Storage & Treatment of Water (per item "k")(0-100,000 gal), per gallon _____Dollars and _____Cents	GAL	100,000	$_____	$_____
4300.1	Removal, Storage & Treatment of Water (per item "k")(100,001-250,000 gal), per gallon _____Dollars and _____Cents	GAL	150,000	$_____	$_____
4300.1	Removal, Storage & Treatment of Water (per item "k")(250,001-Above gal), per gallon _____Dollars and _____Cents	GAL	1	$_____	$_____
4300.3	Removal, Storage & Treatment of Water (per item "l")(0-100,000 gal), per gallon _____Dollars and _____Cents	GAL	100,000	$_____	$_____
4300.3	Removal, Storage & Treatment of Water (per item "l")(100,001-250,000 gal), per gallon _____Dollars and _____Cents	GAL	150,000	$_____	$_____
4300.3	Removal, Storage & Treatment of Water (per item "l")(250,001-Above gal), per gallon _____Dollars and _____Cents	GAL	1	$_____	$_____
4300.5	Disposal of Impacted Water (0-100,000 gal), per gallon _____Dollars and _____Cents	GAL	100,000	$_____	$_____
4300.5	Disposal of Impacted Water (100,001-250,000 gal), per gallon _____Dollars and _____Cents	GAL	150,000	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
4300.5	Disposal of Impacted Water (250,001-Above gal), per gallon _____Dollars and _____Cents	GAL	1	$_____	$_____
4300.7	Testing of Water for Lead (4300.7), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4300.8	Testing of Water for Arsenic (4300.8), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4300.9	Testing of Water for Dissolved Oxygen (4300.9), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4300.10	Testing of Water for Total Suspended Solids (4300.10), per each _____Dollars and _____Cents	EA	8	$_____	$_____
4400.1	Development of Site Specific Health and Safety Plan (4400.1), per lump sum _____Dollars and _____Cents	LS	1	$_____	$_____
4500.1	Development of the Waste Management Plan (4500.1), per lump sum _____Dollars and _____Cents	LS	1	$_____	$_____
4500.2	Environmental Oversight Implementation (4500.2), per hour _____Dollars and _____Cents	HR	200	$_____	$_____

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)

SUBTOTAL SAWS JOB NO. 12-5546 (SEWER)

_____ **Dollars**

and _____ **Cents** **$**_____

Traffic Control Bid Items

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
530	Barricades, Signs, and Traffic Handling, per lump sum	LS	1		
	_____Dollars			$_____	$_____
	and _____Cents				

SUBTOTAL TRAFFIC CONTROL BID ITEMS $_____

Bid Summary

SUBTOTAL SAWS JOB NO. 12-5046 (WATER): $_____

SUBTOTAL SAWS JOB NO. 12-5546 (SEWER): $_____

SUBTOTAL TRAFFIC CONTROL: $_____

LINE ITEM "A"

SUBTOTAL BASE BID (WATER, SEWER, & TRAFFIC CONTROL) **$**_____

Mobilization & Prep Right-of-Way Items

Item No.	Description & Unit Price (Unit Price To Be Written In Words)	Unit	Quantity	Unit Price (Figures)	Total Price (Figures)
100	Mobilization Percent of the Line Item "A" Subtotal Base Bid written in words _____Percent (Maximum of 10% of the Line Item "A" Subtotal Base Bid amount)	Lump Sum	1	$ XXXXXXXX	$_____
101	Preparing R.O.W. Percent of the Line Item "A" Subtotal Base Bid written in words _____Percent (Maximum of 5% of the Line Item "A" Subtotal Base Bid amount)	Lump Sum	1	$ XXXXXXXX	$_____

Mobilization lump sum bid shall be limited to a maximum 10% of the Line Item "A" Sub-total Base Bid amount. Preparing Right-of-Way lump sum bid shall be limited to a maximum of 5% of the Line Item "A" Sub-total Base Bid amount. The Line Item "A" Sub-total base bid is defined as all bid items **EXCLUDING** Item 100, Mobilization and Item 101, Preparing Right-of-Way. **In the event of a discrepancy between the written percentage and dollar amount shown for Mobilization and Preparation of ROW bid items the written percentage will govern**. **If the percentage written exceeds the allowable maximum stated for mobilization and or preparation of ROW, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly.**

TOTAL BID AMOUNT (Line Item "A", Mobilization & Preparing Right-of-Way)

$_____

_____DOLLARS AND

AND_____CENTS

_____
BIDDER'S SIGNATURE & TITLE

_____
FIRM'S NAME (TYPE OR PRINT)

_____
FIRM'S ADDRESS

_____
FIRM'S PHONE NO. /FAX NO.

_____
FIRM'S EMAIL ADDRESS

The Contractor herein acknowledges receipt of the following:
Addendum Nos._____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID.

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **240** calendar days after the start date, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Proposal which are included on the following pages.

Statement of Bidder's Experience

BIDDER'S EXPERIENCE

In order to make a responsive Bid, the Bidder (Prime Contractor) must provide evidence of being a responsible bidder by providing a minimum of three (3) successfully ***completed*** Jacking and Boring projects. The Bidder and/or the Bidder's sub-contractor must have successfully completed three projects with similar size (48" inches or larger) and similar scope of work. A successfully completed project is considered as a project that did not involve the contractor defaulting on the contract, was completed within the contract time and incurred zero (0) owner claims. Contractor should reference projects that included Jacking and Boring work on either sanitary sewer or water lines with a minimum diameter of forty-eight (48) inches under the San Antonio River or similar water body.

Data given must be clear and comprehensive. Include specific project name, facility owner and telephone number, total length of installed water/sanitary sewer lines, and total contract amount, as presented below. San Antonio Water System in determining the responsible bidder will approve the Bid based on low cost and on Bidder's demonstrated experience and ability to perform the work.

Project Name	Facility Owner (tel. #)	Length and Size of Mains Installed	Construction Completion Date	Contract Amount

The signed Bidder Experience Form and any required supplemental information must be submitted with this Proposal for the Bidder to be considered:

_____
Contractor

_____
By

_____
Title

_____
Date

Special Conditions

Article IV – Contract Administration

Section 4.4 of the general conditions shall be amended as follows:

CONTRACTORS – The Contractor shall perform the Work with its own organization on at least 40% of the total original contract price.

The term to "perform the Work with its own organization" is defined herein as utilizing only:

- Workers employed and paid directly by the Contractor or a wholly owned subsidiary of the contractor.
- Equipment owned by the contractor or its wholly owned subsidiary.
- Rented or leased equipment operated by the Contractor's, or its wholly owned subsidiaries, employees.
- For purposes of determining the valve of the Work self performed, the amount shall include all materials incorporated into the Work where the majority of the value of the Work involved in incorporating the material is performed by the Contractor's own Organization, including wholly owned subsidiary; and
- Labor provided by staff leasing firms licensed under Chapter 91 of the Texas Labor code for non supervisory personnel if the contractor or wholly owned subsidiary maintains direct control over the labor.

The remaining sections of Article IV shall remain the same.

SC-1.0 PROJECT REQUIREMENTS

SC-1.1 In the event the Contractors utilize property for a construction storage yard, the Contractor is required to provide the Owner (SAWS) with a copy of the Lease Agreement prior to use. It is the contractor responsibility to repair any damages to any property outside the City of San Antonio Right of Way, Bexar County Right of Way and Texas Department of Transportation Right of Way and any property outside any easements (permanent or temporary) at no cost to SAWS.

SC-1.2 Contractor to provide Cut-Sheets, By-pass Plan, Traffic Control Plan, construction schedule, and pre-construction site video within 7 calendar days of the pre-construction meeting.

SC-1.3 HEALTH AND SAFETY PROGRAM

Soil contamination has been identified in two sections of the project area. Contractor to follow all environmental specifications required in SECTION 4000: Environmental specifications for this project. Contractor is required to submit a Health and Safety Program outlining the procedure

to respond to the contaminated soil and ground water when encountered in the trench. Contractor will be responsible for the actual soil/groundwater remediation.

SC-2.0 BID PROPOSAL

The following special conditions provide clarification to specific bid proposal items.

SC-2.1 *Sewer Item No. SC-2.1 — Refer to Special Environmental Specifications located at the end of this document*

Management of Impacted Soil (Sewer) – 4100.1
Management of Impacted Soil (Water) – 4100.2
Transportation to Disposal Facility (Sewer) – 4100.3
Transportation to Disposal Facility (Water) – 4100.4
Landfill Disposal (Sewer) – 4100.5
Landfill Disposal (Water) – 4100.6
Removal, Storage and Treatment of Water (per item "k")(0-100,000 GAL) (Sewer Work)– 4300.1
Removal, Storage and Treatment of Water (per item "k")(100,001-250,000 GAL)(Sewer Work) – 4300.1
Removal, Storage and Treatment of Water (per item "k")(250,001-Above GAL)(Sewer Work) – 4300.1
Removal, Storage and Treatment of Water (per item "k")(0-100,000 GAL) (Water Work)– 4300.2
Removal, Storage and Treatment of Water (per item "k")(100,001-250,000 GAL)(Water Work) – 4300.2
Removal, Storage and Treatment of Water (per item "k")(250,001-Above GAL)(Water Work) – 4300.2
Removal, Storage and Treatment of Water (per item "l")(0-100,000 GAL) (Sewer Work)– 4300.3
Removal, Storage and Treatment of Water (per item "l")(100,001-250,000 GAL)(Sewer Work) – 4300.3
Removal, Storage and Treatment of Water (per item "l")(250,001-Above GAL)(Sewer Work) – 4300.3
Removal, Storage and Treatment of Water (per item "l")(0-100,000 GAL) (Water Work)– 4300.4
Removal, Storage and Treatment of Water (per item "l")(100,001-250,000 GAL)(Water Work) – 4300.4
Removal, Storage and Treatment of Water (per item "l")(250,001-Above GAL)(Water Work) – 4300.4
Disposal of Impacted Water (0-100,000 GAL)(Sewer Work) – 4300.5
Disposal of Impacted Water (100,001-250,000 GAL)(Sewer Work) – 4300.5
Disposal of Impacted Water (250,001-Above GAL)(Sewer Work) – 4300.5

Disposal of Impacted Water (0-100,000 GAL)(Water Work) – 4300.6
Disposal of Impacted Water (100,001-250,000 GAL)(Water Work) – 4300.6
Disposal of Impacted Water (250,001-Above GAL)(Water Work) – 4300.6
Testing of Water for Lead – 4300.7
Testing of Water for Arsenic – 4300.8
Testing of Water for Dissolved Oxygen – 4300.9
Testing of Water for Total Suspended Solids – 4300.10
Development of Site Specific Health & Safety Plan – 4440.1

SC-2.2 The environmental items related to the removal, storage, treatment and disposal of contaminated water from the Environmental Areas of Concern and the bore pit locations as described in the Environmental Specifications are cumulative. Cumulative for these items means that the first 100,000 gallons of water removed, treated, or disposed of during the water line construction will be paid with the appropriate Tier 1 pay items. Any water removed, treated, or disposed of beyond the 100,000 gallons up to 250,000 gallons will be paid at the second tier price for the water work. All water removed, treated, or disposed of beyond 250,001 gallons will be paid at the Tier 3 price for the water work.

The environmental items related to the sewer work are also cumulative so that the 100,000 gallons removed, treated, and disposed of during the sewer portion of the construction will be paid under the appropriate Tier 1 bid items. The volume of water that is removed, treated, and disposed between 100,001 to 250,000 gallons will be paid with the appropriate second tier bid items. All water removed, treated, or disposed of beyond 250,001 gallons will be paid at the Tier 3 price for the sewer work.

- END -