



SAN ANTONIO WATER SYSTEM
University Pump Station Improvements Project
SAWS Job No. 12-6002
Solicitation No. B-14-002-DD

ADDENDUM NO. 8
April 10, 2014

TO BIDDER OF RECORD:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the University Pump Station Improvements Project, for the San Antonio Water System, San Antonio, Texas, dated January 2014, as fully and completely as if the same were set forth therein.

PART 1 – BIDDING AND CONTRACT DOCUMENTS

1. TABLE OF CONTENTS: Add the following to the list of table of contents:
 - a. 01000 Special Provision to Technical Specifications
 - b. Appendix F Implementation of American Iron and Steel Provisions

2. INVITATION FOR COMPETITIVE SEALED PROPOSALS: Add the following that reads:

“Comply with all federal requirements applicable to the Loan (including those imposed by the 2014 Appropriations Act and related SRF Policy Guidelines) which the Participant understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States (“Buy American Requirement”) unless (i) the Participant has requested and obtained a waiver from the Agency pertaining to the Project or (ii) the Finance Authority has otherwise advised the Participant in writing that the Buy American Requirement is not applicable to the Project.

Comply with all record keeping and reporting requirements under the Clean Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act and this Agreement may be a default hereunder that results in a repayment of the Loan in advance of the maturity of the Bonds and/or other remedial actions.”

3. PROPOSAL CHECKLIST: REMOVE AND REPLACE in its entirety with the attached and utilize this version when submitting a proposal.
4. PRICE PROPOSAL: REMOVE AND REPLACE in its entirety with the attached and utilize this version when submitting a proposal.
5. PROPOSAL CERTIFICATION: REMOVE AND REPLACE in its entirety with the attached and utilize this version when submitting a proposal.

6. CONSTRUCTION CONTRACT: REMOVE AND REPLACE in its entirety.
7. SUPPLEMENTAL CONDITIONS: Add the following to the end of page SS-3:
“**ETHICS**. To report suspected ethics violations impacting The San Antonio Water System, please call 1-800-687-1918.”
8. SPECIAL CONDITIONS: Add the following to the end of SC-14:
“Contractor to refer to SPECIAL PROVISION TO TECHNICAL SPECIFICATIONS and Appendix F – Implementation of American Iron and Steel Provisions.”

PART 2 – TECHNICAL SPECIFICATIONS

1. Section 01000, SPECIAL PROVISION TO TECHNICAL SPECIFICATIONS: Add the attached specification.
2. Section 13300 Instrumentation and Controls General Provisions
 - A. Delete in its entirety 13300-3, 1.01.G.12. Renumber accordingly.
 - B. Delete in its entirety 13300-4, 1.02.D.6. Renumber accordingly.
 - C. Delete in its entirety 13300-9, 1.06.C.2.a. Renumber accordingly.
 - D. 13300-16, 3.07 Delete “...each individual section of the specifications.” Replace with “...Section 13303.”
3. Section 13302 Instrumentation and Controls Testing
 - A. Delete in its entirety 13302-10, 3.06 “Training”
4. Section 13303 Instrumentation and Controls Training
 - A. Replace Section 13303 in its entirety. See attachment “Section 13303 Instrumentation and Control Training”
5. Section 13305 Application Services
 - A. Delete in its entirety 13305-1, 1.02.H. Renumber accordingly.
 - B. Replace 13305-2, 1.03 “Submittals” with the following:

“1.01 SUBMITTALS

- A. Pre-submittal Conference
 1. Prior to the Submittal Process, the Application Services Provider (ASP) shall hold workshops, in which the Engineer and Owner may observe the displays and control strategies prior to submitting database, trends, graphics, reports, and control strategies. No display generation, programming, etc. shall begin until standards have been approved.

2. Prior to commencement of any applications work, the ASP shall submit and receive approval from the Owner and Engineer for all required I/O Lists.

B. Submittal Process

1. Submittals shall be made in accordance with the requirements of Division 1, Section 13300, and as specified herein.
2. All electronic submittals shall be submitted in an ISO/IEC 26300:2006 or Comma Separated Values (CSV) readable electronic file format on a CD-ROM and an 8 ½-inch by 11-inch hard copy. Programs shall be submitted in the native format of the PLC as suggested by the manufacture.

C. Submittal Content

1. Submittals shall contain the following:
 - a. I/O List with register assignments.
 - b. Diagrams of the process control functions by each strategy.
 - c. Listing of inputs to the control function.
 - d. A short narrative of each control strategy.
 - e. Listing of all Operator inputs and outputs to and from the control function. Any special displays related to the function shall be illustrated. A description of the operation of any display shall be described as it relates to the control function.
 - f. Cross references of all I/O, showing to which I/O modules or software modules, they are in.
 - g. Failure contingencies shall be described in detail.
 - h. An annotated program, submitted in both hard copy and electronic format.
2. Human Machine Interface Programming
 - a. I/O List with register assignments.
 - b. Displays for each process area including all necessary pop ups.
 - c. Listing of data points on each display.
 - d. A short narrative of each control usage.
 - e. Listing of all Operator inputs and outputs to and from the control function. Any special displays related to the function shall be illustrated. A description of the operation of any display shall be described as it relates to the control function.
 - f. Cross references of all I/O, showing which software module at each point used.
 - g. Failure contingencies shall be described in detail.
 - h. A complete listing of all historical points.
 - i. Listing of all required configuration files for each SCADA client.
 - j. Submit a proposed Schedule of Work. ”

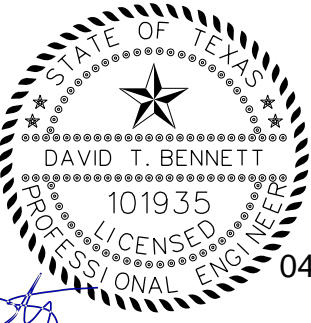
C. Delete in its entirety 13305-7, 3.01 “Coordination Meetings.” Renumber accordingly.

- D. Delete in its entirety 13305-10, 3.06 “Training”
- 6. Section 13310 Field Instruments
 - A. Delete in its entirety 13310-1, 1.02.H, Renumber accordingly.
 - B. Delete in its entirety 13310-13, 3.11 “Training”
- 7. Section 13320 Fiber Optic Data Network
 - A. Delete Section 13320 in its entirety.
- 8. Section 13325 Control Panels
 - A. Delete in its entirety 13325-2, 1.02.H. Renumber accordingly.
 - B. Delete in its entirety 13325-7, 2.02 “Ratings.” Renumber accordingly.
 - C. Delete in its entirety 13325-21, 2.06 “Factory Testing – General.” Renumber accordingly.
 - D. Delete in its entirety 13325-21, 2.07 “Witnessed Factory Testing.” Renumber accordingly.
 - E. Delete in its entirety 13325-25, 3.11 “Training.”
- 9. Section 13400 Control Loop Descriptions
 - A. Delete in its entirety 13400-1, 1.02.G. Renumber accordingly.
- 10. Section 13550 Integrated Security System
 - A. Delete in its entirety 13550-2, 1.02.D. Renumber accordingly.
 - B. Delete in its entirety 13550-12, 2.05 “Industrial Ethernet Media Converter.” Renumber accordingly.
 - C. Delete in its entirety 13550-19, 3.11 “Training.”
- 11. APPENDIX F – IMPLEMENTATION OF AMERICAN IRON AND STEEL PROVISIONS: ADD the attached guidelines in its entirety as Appendix F.

PART 3 – DRAWINGS

- 1. Replace SHEET I-02 in its entirety, See attachment “SHEET I-02”

ALL BIDDERS SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM NO. 6 IN THE BID FORM AND BY HIS/HER SIGNATURE AFFIXED HERETO AND TO FILE SAME AS AN ATTACHMENT TO HIS/HER BID. BID FORMS SUBMITTED WITHOUT THIS ACKNOWLEDGEMENT WILL BE CONSIDERED INFORMAL.


David T. Bennett 04-10-14

David T. Bennett, P.E.
Freese and Nichols, Inc.

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

ACKNOWLEDGEMENT BY BIDDER

THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THIS ADDENDUM NO. 8 AND THE BID SUBMITTED HERewith IS IN ACCORDANCE WITH THE INFORMATION AND STIPULATION SET FORTH.

Date _____ Signature of bidder _____

Appended hereto and part of Addendum No. 8 are:

1. Proposal Checklist
2. Price Proposal
3. Proposal Certification
4. Construction Contract
5. Section 01000, Special Provision to Technical Specifications
6. Section 13303, Instrumentation and Controls Training
7. Sheet I-02
8. Appendix F – Implementation of American Iron and Steel Provisions

END OF ADDENDUM NO. 8

PROPOSAL CHECKLIST

Addendum 8

Project Name: University Pump Station Improvements Project

Solicitation Number: B-14-002-DD

ENVELOPE 1 (sealed envelope or box)

- Signed revised Price Proposal issued with Addendum 8 (Do not include this Price Proposal within the 7 required copies)
- Signed Proposal Certification Page issued with Addendum 8 (PC-1)

ENVELOPE (OR BOX) 2

ORIGINAL PROPOSAL

- Proposal Checklist
- Good Faith Effort Plan
- Financial Statement (do not include this item within the copies)
- Conflict of Interest Questionnaire
- Bid Bond/Cashier's Check
- W-9
- Proof of Insurability (Letter from Insurer or Sample Certificate of Insurance)
- Respondent Questionnaire
- Background, Experience, and Qualifications narrative (*including, but not limited to*):
 - Organizational Chart
 - Three (3) projects of similar size and scope within the last five (5) years as outlined on page SIR-2, C.1. f.)
- Project Plan, Safety and Quality Program narrative (*including, but not limited to*):
 - OSHA 300
 - OSHA Form 300A
 - TRIR
 - Any OSHA Citations
- Acknowledgement of Pollution Abatement Compliance
- Acknowledgement of Addendum(s)
- TWDB -0216 (*Reference DB-0210 and FAQ*)
- TWDB -0217 (*Reference DB-0210 and FAQ*)
- TWDB -0373 (*Reference DB-0210 and FAQ*)
- TWDB-0255
- TWDB Form 0459
- TWDB Form SRF-404
- 6100-3 DBE Subcontractor Performance Form
- 6100-4 DBE Subcontractor Utilization Form
- One (1) CD of Original Proposal Packet (*excluding the Price Proposal and Financial Statement*)

Project Name: University Pump Station Improvements Project

Solicitation Number: B-14-002-DD

PROPOSAL PACKET COPIES -7 (sealed box or large envelope containing all 7 copies)

The copies should include **only** the following items:

- Proposal Checklist**
- Respondent Questionnaire**
- Background, Experience, and Qualifications narrative**
 - Organizational Chart
 - Three (3) projects of similar size and scope within the last five (5) years as outlined on page SIR-2, C.1. f.)
- Project Plan, Safety and Quality Program narrative** (*including, but not limited to*):
 - OSHA 300
 - OSHA Form 300A
 - TRIR
 - Any OSHA Citations

I certify that the proposal packet submitted includes the items as indicated above.

Signature

Date

Printed Name/Title

Company Name

PRICE PROPOSAL

PROPOSAL OF _____,
 a corporation _____
 a partnership consisting of _____
 an individual doing business as _____

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitations for Competitive Sealed Proposals, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the construction of the **UNIVERSITY PUMP STATION IMPROVEMENTS PROJECT**, San Antonio Water System Job Number 12-6002 in accordance with the Plans and Specifications for the following prices, to wit:

BID ITEMS

ITEM NO.	ITEM DESCRIPTION Price to be written in words)	(Unit UNIT	ESTIMATED QUANTITY	UNIT PRICES (FIGURES)	TOTAL PRICE (FIGURES)
A BASE BID					
1	Total amount for furnishing all labor materials, services, equipment, and appurtenances in conjunction with and incidental to all work (site work, general construction) for execution of the University Pump Station Improvements Project in conformance with the Project Documents, with the exception of those items specifically listed in other bid items. _____ Dollars and _____ Cents	LS	1	\$ _____	\$ _____
2	On-site security guard during performance of the work _____ Dollars and _____ Cents	LS	1	\$ _____	\$ _____
3	Allowance for City of San Antonio (COSA) building, tree, and ROW permits. Thirty-Five Thousand _____ Dollars and <u>no</u> _____ Cents	LS	1	<u>\$35,000.00</u>	<u>\$35,000.00</u>
4	Allowance for City Public Service (CPS Energy). Eighty-Five Thousand _____ Dollars and <u>no</u> _____ Cents	LS	1	<u>\$85,000.00</u>	<u>\$85,000.00</u>
5	Allowance for Traffic Control. Twenty-Five Thousand _____ Dollars and <u>no</u> _____ Cents	LS	1	<u>\$25,000.00</u>	<u>\$25,000.00</u>
LINE ITEM "A" SUBTOTAL BASE BID (Items 1-5)					
100	Mobilization and Demobilization: This item includes project move-in and move-out of personnel and equipment, for work shall include furnishing all labor, materials, tools, equipment and incidentals required to mobilize, demobilize, bond and insure the Work for the <i>UNIVERSITY PUMP STATION IMPROVEMENTS PROJECT</i> , in accordance with the contract documents, complete in place. Percent of the <u>Line Item "A"</u> , Subtotal Base Bid written in words _____ Percent (Maximum of 10% of <u>Line Item "A"</u> Subtotal Base Bid amount)	LS	1	\$ _____	\$ _____
MOBILIZATION SUBTOTAL (Item 100)					

Mobilization and Demobilization lump sum bid shall be limited to a maximum 10% of the Line Item "A" Subtotal Base Bid Amount. The Line Item "A" Subtotal Base Bid Amount is defined as all bid items EXCLUDING Item 100, Mobilization and Demobilization. **In the event of a discrepancy between the written percentage and dollar amount shown for Mobilization and Demobilization bid item, the bid item's written percentage will govern. If the percentage written exceeds the allowable maximum stated for Mobilization and Demobilization, SAWS reserves the right to cap the amount at the percentage shown and adjust the extensions of the bid item accordingly.**

TOTAL BID AMOUNT (LINE ITEM "A", MOBILIZATION)

DOLLARS

\$

AND

CENTS

RESPONDENT'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO./FAX NO.

FIRM'S PHONE EMAIL ADDRESS

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

The Respondent offers to construct the Project in accordance with the Contract Documents for the contract price, and to final completion, as defined in the General Conditions, within **570 calendar days** after the start date, as set forth in the Authorization to Proceed. **The Respondent 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.

PROPOSAL CERTIFICATION

Accompanying this proposal is a Bid Bond or Certified or Cashier's Check payable to the Order of the San Antonio Water System for _____ dollars (\$_____), which amount represents five percent (5%) of the total bid price. Said bond or check is to be returned to the bidder unless the proposal is accepted and the bidder fails to execute and file a contract within **10** calendar days after the award of the Contract, in which case the check shall become the property of said San Antonio Water System, and shall be considered as payment for damages due to delay and other inconveniences suffered by said San Antonio Water System due to the failure of the bidder to execute the contract. The San Antonio Water System reserves the right to reject any and all bids.

It is anticipated that the Owner will act on this proposal within **60** calendar days after the bid opening. Upon acceptance and award of the contract to the undersigned by the Owner, the undersigned shall execute standard San Antonio Water System Contract Documents and make Performance and Payment Bonds for the full amount of the contract within **10** calendar days after the award of the Contract to secure proper compliance with the terms and provisions of the contract, to insure and guarantee the work until final completion and acceptance, and the guarantee period stipulated, and to guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

It is anticipated that the Owner will provide written Authorization to Proceed within **30** days after the award of the Contract.

The work called for in this Contract shall commence on the date indicated in the SAWS written Authorization to Proceed. Under no circumstances shall the work commence prior to the date provided for in the SAWS issued, written Authorization to Proceed. Work shall be completed in full within _____ consecutive calendar days.

The undersigned certifies that the bid prices contained in the proposal have been carefully checked and are submitted as correct and final and are in conformance with the requirements of the American Iron and Steel provisions of P.L. 113-76. Consolidated Appropriations Act, 2014.

The undersigned further acknowledges compliance with "Wage and Labor Standard Provisions" of this contract and the use of the Blue Book rental rates for establishment of equipment rental rates whether owned or leased during the course of this Contract.

In completing the work contained in this proposal the undersigned certifies that bidder's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin and that the bidder will affirmatively cooperate in the implementation of these policies and practices.

Signed: _____
Company Representative

Company Name

Address

Please return bidder's check to: _____
Company Name

Address

CONTRACT

«Contract_No»

«Job_No»

STATE OF TEXAS §
COUNTY OF BEXAR §

KNOW ALL MEN BY THESE PRESENTS:

That this Agreement made and entered into this «Board Date» day of «Board Month», A.D.,«Board Year», by and between **THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES**, hereinafter called **THE SAN ANTONIO WATER SYSTEM, COUNTY OF BEXAR, STATE OF TEXAS**, Acting through its Contracting Officer, First Party, hereinafter termed the Owner, and «Company Name», of the City of «City», County of «County», State of «State », Second Party, hereinafter termed the Contractor.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned to be made and performed by said First Party, (Owner), the said Second Party, (Contractor), hereby agrees with the First Party to commence and complete the construction of certain improvements in the amount of «Written Contract Amt» Dollars «Formatted Price», for the San Antonio Water System Job No(s). , dated «Bid Opening Date», the same being designated as San Antonio Water System Project «Project Name».

The Contractor shall perform all work shown on the Plans and described Specifications and shall meet all requirements of this Agreement, The General and Special Conditions of the Agreement; and such Orders and Agreements for Extra Work as may subsequently be entered by the above named parties to this Agreement.

The Contractor shall not offer, confer, or agree to confer any benefit or gift to any San Antonio Water System employee.

This Contract is contingent upon the release of funds from the Texas Water Development Board (State). The San Antonio Water System may not issue an Authorization to Proceed Letter until the San Antonio Water System has received written approval of the bid and contract document package, and approval of funds from the Texas Water Development Board.

The Contractor acknowledges to and for the benefit of the Owner and the State that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund and such law contains provisions commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or the State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Owner or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Owner). While the Contractor has no direct contractual privity with the State, as a lender to the Owner for the funding of its project, the Owner and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

The Contractor hereby agrees to commence work under this Contract on the date indicated in the SAWS written Authorization to Proceed. Under no circumstances shall the work commence prior to the Contractor's receipt of SAWS issued, written Authorization to Proceed. Computation of Contract Time will begin on the construction start date as indicated on the written Authorization to Proceed. All work specified in these Contract Documents shall be completed within «Calendar Days» calendar days from the construction start date indicated on the written Authorization to Proceed.

It is agreed and understood by the Owner and the Contractor that the provisions of Chapter 252, Texas Local Government Code, and/or Chapter 2267, Texas Government Code (as amended) apply to this contract. As applicable, the terms of the aforementioned state law are incorporated herein by reference. Contractor and Owner agree that pursuant to state law, Owner authorizes its duly designated administrative officer (Contracting Officer) to negotiate change orders up to and including the amount of \$25,000.00. It is also agreed and understood that any change orders which increase the cost of the work provided under the contract in excess of 25% of the original contract price are prohibited. The cost of the work provided under the contract may be decreased over 25% of the original contract price with the consent of the Contractor.

The Owner agrees to pay the Contractor in current funds, and to make payments on account, for the performance of the work in accordance with the Contract, at the prices set forth in the Contractor's Proposal, subject to additions and deductions, all as provided in the General Conditions of the Agreement.

The following documents, together with this Contract, comprise the Agreement, and they are as fully a part thereof as if herein repeated in full:

- The Invitation to Bidders or Invitation for Competitive Sealed Proposals
- The Instructions to Bidders or Instructions to Respondents
- The Supplementary Instructions to Respondents (if applicable)
- The Bid Proposal or Price Proposal
- The Payment Bond
- The Performance Bond
- The General Conditions of the Contract
- The Special Conditions of the Contract
- The Supplemental Conditions of the Contract
- The Construction Specifications
- The Standard Drawings
- Addenda
- Change Orders
- Good Faith Effort Plan

The Plans, designated San Antonio Water System Project «Job No.»
«Project Name».

STATUTORY PERFORMANCE BOND
Pursuant to Vernon's Texas Government Code
Title 10, Chapter 2253, as amended

Bond No. _____

(Penalty of this Bond must be 100% of Contract Award)

KNOW ALL MEN BY THESE PRESENTS:

That «Company Name» «Street Address» «City and State» «Zip Code» (hereinafter called "Principal"), as Principal, and «Surety Name», a Corporation organized and existing under the laws of the State of «Suretys State », with its principal office in the City of «City of Suretys Principal Office», and authorized under the laws of the State of Texas to act as surety on bonds for principals (hereinafter called "Surety"), are held and firmly bound unto THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, San Antonio, Bexar County, Texas (hereinafter called "Owner/Obligee"), in the amount of «Written Contract Amt.» Dollars «Formatted Price», for the payment whereof, Principal and Surety firmly bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, Principal has entered into a certain written contract with the Owner/Obligee, dated the «Board Date» day of «Board Month», «Board Year», consisting of «Job No»; «Project Name» (hereinafter called "the Contract"), which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal shall faithfully perform the work in accordance with the plans, specifications and Contract Documents, then this obligation shall be void; otherwise to remain in full force and effect.

NOW, THEREFORE, if Principal shall repair any and all defects in said work occasioned by and resulting from defect in materials furnished by, or workmanship of, Principal in performance of the work covered by the Contract, occurring during a period of within 24 months from the date of the Contract Completion Certification, therein this obligation shall be null and void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 10, Chapter 2253, as amended, of the Texas Government Code, and all liabilities on this bond shall be determined in accordance with the provisions of this Chapter, to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, or other waiver or amendment of the terms of the Contract or to the work to be performed thereunder, nor any change in the method nor any change in the method or amount of payments stipulated to be made by Owner/Obligee under the Contract, shall relieve Surety of its obligations hereunder, and Surety hereby waives notice of any such change, extension of time, waiver or amendment of the terms of the Contract or to the work to be performed thereunder. The bond shall be automatically extended in time, without formal and separate amendment, to cover full and faithful performance of the Contract in the event of modification of the Contract, regardless of the length of time involved.

IN WITNESS THEREOF, Principal and Surety have signed and sealed this instrument on _____ day of _____, 2014.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

Name, Address and Telephone Number of Resident Agent of Surety:

STATUTORY PAYMENT BOND
Pursuant to Vernon's Texas Government Code
Title 10, Chapter 2253, as amended

Bond No. _____

(Penalty of this Bond must be 100% of Contract Award)

KNOW ALL MEN BY THESE PRESENTS:

That «Company Name»«Street Address»«City and State»«Zip Code» (hereinafter called "Principal"), as Principal, and «Surety Name», a corporation organized and existing under the laws of the State of «Suretys State », with its principal office in the City of «City of Suretys Principal Office», and authorized under the laws of the State of Texas to act as surety on bonds for principals (hereinafter called "Surety"), are held and firmly bound unto THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, San Antonio, Bexar County, Texas (hereinafter called "Owner/Obligee"), in the amount «Written Contract Amt» Dollars «Formatted Price», for the payment whereof, Principal and Surety firmly bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, Principal has entered into a certain written contract with the Owner/Obligee, dated the «Board Date» day of «Board Month», «Board Year» consisting of «Job No» ; «Project Name» (hereinafter called "the Contract"), which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal shall faithfully pay in full all claimants supplying labor and material to Principal or to a subcontractor in the prosecution of the work provided for in the terms of the Contract Documents, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 10, Chapter 2253, as amended, of the Texas Government Code, and all liabilities on this bond shall be determined in accordance with the provisions of this Chapter, to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, or other waiver or amendment of the terms of the Contract or to the work thereunder, nor any change in the method nor any change in the method or amount of payments stipulated to be made by Owner/Obligee under the Contract, shall relieve Surety of its obligations hereunder, and Surety hereby waives notice of any such change, extension of time, waiver or amendment of the terms of the Contract or to the work thereunder. The bond shall be automatically extended in time, without formal and separate amendment, to cover full and faithful performance of the Contract in the event of modification of the Contract, regardless of the length of time involved.

IN WITNESS THEREOF, Principal and Surety have signed and sealed this instrument on the ____ day of _____, 2014.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

Name, Address and Telephone Number of Resident Agent of Surety:

SECTION 01000

SPECIAL PROVISION TO TECHNICAL SPECIFICATIONS

1.00 GENERAL

1.01 The following list of major project components must comply with the American Iron and Steel (AIS) Provisions:

Product	Associated Specifications
Lined or unlined pipes or fittings	SAWS Standard Specification 816
Access Hatches	Specification 08310, 16600
Bollards	Specification 05500
Downspout Shoes (boot, inlet)	Specification 05500, 07620
Lampposts	Specification 16500
Meter Boxes	SAWS Standard Specification 833
Services Boxes	Specification 16110
Valve Boxes, Covers and Risers	SAWS Standard Specifications 828, 830 Specification 15106
Flanges	SAWS Standard Specification 816
Pipe clamps and restraints	SAWS Standard Specification 816
Valves	SAWS Standard Specifications 828, 830, 846 Specification 15106, 15136
Structural Steel	Specification 03200, 05210, 05312
Fences and Gates	Specification 02820
Pipe and Tube Railings	Specification 05521
Metal Gratings	Specification 05530
Doors and Windows	Specification 08110, 08310, 08331, 08710

1.02 Additional construction materials must also comply with the AIS provisions. Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. All construction materials must

meet comply with the AIS requirements. Contractor shall refer to Appendix F - Implementation of AIS Provisions for all construction material requirements.

- 1.03 Material requirements listed in this Section 01000 are for guidance purposes. Contractor shall refer to Appendix F – Implementation of American Iron and Steel Provisions for a complete listing of AIS requirements.

END OF SECTION

SECTION 13303

INSTRUMENTATION AND CONTROLS TRAINING

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Provide all equipment, materials, incidentals and labor, necessary to perform and coordinate the overall system training for the Instrumentation and Controls System.
- B. The Application Services (ASP) shall coordinate with the Contractor's Process Control Systems Integrator (PCSI) and shall supervise and/or perform the requirements of this Section. As part of these services, the ASP shall include, for those equipment items not manufactured by him, the services of an authorized manufacturer's representative to provide training as set forth within this section and related sections of the specifications.

1.02 RELATED WORK

- A. Process Equipment Divisions
- B. Mechanical Equipment Division
- C. Electrical Equipment Division
- D. Section 13300 Instrumentation and Controls General Provisions
- E. Section 13400 Control Loop Descriptions
- F. Section 13405 Input/Output List
- G. Section 13500 Programmable Logic Controllers

1.03 SUBMITTALS

- A. Application Service Provider (ASP) shall prepare and submit a complete overall system testing plan.
- B. The Submittal shall contain an overall process control system overview. Each plant process area as affected by this contract shall be included. The detail shall include but not be limited to the following:
 - 1. displays

2. control strategies
3. database
4. trends
5. reports
6. programming

C. Submittal Process

1. Submittals shall be made in accordance with the requirements of Division 1, Section 13300, and as specified herein.

D. Submittal Content

1. Training Submittals shall cover the following:
 - a. Programmable Logic Controller Programming
 - i. I/O List with register assignments.
 - ii. Diagrams of the process control functions by each strategy.
 - iii. Listing of inputs to the control function.
 - iv. A short narrative of each control strategy.
 - v. Listing of all Operator inputs and outputs to and from the control function. Any special displays related to the function shall be illustrated. A description of the operation of any display shall be described as it relates to the control function.
 - vi. Cross references of all I/O, showing to which I/O modules or software modules, they are in.
 - vii. Failure contingencies shall be described in detail.
 - viii. An annotated program, submitted in both hard copy and electronic format.
 - ix. Logic flow charts that explain how the control strategy implementation logic works
 - b. Operation Interface Terminal Programming
 - i. I/O List with register assignments.
 - ii. Listing of all Operator displays with inputs and outputs to and from the control function. Displays shall be illustrated to show data presentation.

- iii. Cross references of all I/O, showing to which I/O modules or software modules, they are in.
- iv. Failure contingencies shall be described in detail.
- c. Human Machine Interface Programming
 - i. I/O List with register assignments.
 - ii. Displays for each process area including all necessary pop ups.
 - iii. Listing of data points on each display.
 - iv. A short narrative of each control usage.
 - v. Listing of all Operator inputs and outputs to and from the control function. Any special displays related to the function shall be illustrated. A description of the operation of any display shall be described as it relates to the control function.
 - vi. Cross references of all I/O, showing which software module at each point used.
 - vii. Failure contingencies shall be described in detail.
 - viii. A complete listing of all historical points.
 - ix. Listing of all required configuration files for each SCADA client.
- 2. Submit a proposed Training Schedule.

1.04 REFERENCE CODES AND STANDARDS

- A. Instrumentation equipment and HMI programming shall comply with the following codes and standards:
 - 1. National Electrical Safety Code (NESC)
 - 2. Occupational Safety and Health Administration (OSHA)
 - 3. NEMA ICS 1-101 Diagrams, Designations and Symbols
 - 4. ANSI/ISA-5.06.01-2007 - Functional Requirements Documentation for Control Software Applications.
 - 5. ISA-TR20.00.01-2001 - Specification Forms for Process Measurement and Control Instruments Part 1: General Considerations Updated with 27 New Specification Forms in 2004-2005.
 - 6. ISA-5.4-1991 Instrument Loop Diagrams.

7. ISA-5.5-1985 Graphic Symbols for Process Displays.
8. ISA-5.1-1984 (R1992) Instrumentation Symbols and Identification.
9. ISA-5.3-1983 Graphic Symbols for Distributed Control/Shared Display Instrumentation, Logic, and Computer Systems.
10. ISA-20-1981 Specification Forms for Process Measurement and Control Instruments, Primary Elements, and Control Valves.
11. ISA-5.2-1976 (R1992) Binary Logic Diagrams for Process Operations.
12. NEMA ICS 6 Enclosures for Industrial Controls and Systems
13. National Fire Protection Association (NFPA)
14. National Electrical Manufacturers Association (NEMA)
15. American National Standards Institute (ANSI)
16. Insulated Cable Engineers Association (ICEA)
17. The International Society of Automation (ISA)
18. Underwriters Laboratories (UL)
19. UL 508, the Standard of Safety for Industrial Control Equipment
20. UL 508A, the Standard of Safety for Industrial Control Panels
21. UL 50, the Standard of Safety for Enclosures for Electrical Equipment.
22. NFPA 79, Electrical Standard for Industrial Machinery
23. Factory Mutual (FM)
24. NFPA 70 National Electrical Code (NEC)
25. NFPA 70E Standard for Electrical Safety in the Workplace
26. ANSI C37.90.2 Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers.
27. NEMA ICS 4 Terminal Blocks for Industrial Use.
28. NEMA LS1 Low Voltage Surge Protection Devices.
29. UL 1283 Standard for Safety-Electromagnetic Interference Filters.

30. UL 1449 Third Edition Surge Protective Devices
 31. City of San Antonio, Texas Electrical Code
 32. All equipment and installations shall conform to applicable Federal, State, and local codes.
- B. All equipment shall comply with the requirements of the National Electric Code and Underwriters Laboratories (UL) where applicable.
- C. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.05 QUALITY ASSURANCE

- A. The Contractor shall provide services of manufactures and subcontractors as needed for the owners training as specified herein and related sections:

1.06 SYSTEM FINAL DOCUMENTATION

- A. Prior to final acceptance of the system and owner training, operating and maintenance manuals covering instruction and maintenance on each type of equipment shall be furnished in accordance with the Section 01730.
- B. The instructions shall be bound in three ring binders with Drawings reduced or folded for inclusion. As a minimum, the following information shall be provided:
1. A comprehensive index.
 2. A complete "As Constructed" set of approved shop Drawings.
 3. A complete list of the equipment supplied, including serial numbers, ranges, and pertinent data.
 4. Full specifications on each item.
 5. System schematic drawings "As Constructed," illustrating all components, piping and electrical connections of the systems supplied under this Section.
 6. Detailed service, maintenance and operation instructions for each item supplied.
 7. Special maintenance requirements particular to this system shall be clearly defined, along with special calibration and test procedures.
 8. Operating instructions which incorporate a functional description of the entire system with references to the systems schematic Drawings and instructions.

9. Complete parts lists with stock numbers and name, address, and telephone number of the local supplier.
- C. The final documentation shall be new documentation written specifically for this project, but may include standard and modified standard documentation. Modifications to existing hardware or software manuals shall be made on the respective pages or inserted adjacent to the modified pages. All standard documentation furnished shall have all portions that apply clearly indicated. All portions that do not apply shall be lined out.
- D. The manuals shall contain all illustrations, detailed drawings and instructions necessary for installing, operating, and maintaining the equipment. The illustrated parts shall be numbered for identification. All information contained therein shall apply specifically to the equipment furnished and shall only include instructions that are applicable. All such illustrations shall be incorporated within the printing of the page to form a durable and permanent reference book.
- E. If the Contractors ASP transmits any documentation or other technical information which he considers proprietary, such information shall be designated. Documentation or technical information which is designated as being proprietary will be used only for the design, construction, operation, or maintenance of the System and, to the extent permitted by law, will not be published or otherwise disclosed.
- F. The requirements for the final documentation are as follows:
 1. As built documentation shall include all previous submittals, as described in this Specification, updated to reflect the As-Built system as well as any corrections or modifications to the System resulting from the Factory and/or Field Demonstration Tests.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 TRAINING

- A. General
 1. The cost of training programs for the Owner's personnel shall be included in the Contract price. Where practical, the training and instruction shall be directly related to the system being supplied.
 2. Training shall be conducted at the Owners facilities.
 3. All Technicians, Operators, Engineers, and Managers of the Facility shall require training on the Process Control System (PCS). The training courses shall address operation, maintenance, and troubleshooting of the

system provided. The courses shall be designed specifically for the type of personnel attending, such as Operators, Engineers, etc.

4. All training schedules shall be coordinated with and at the convenience of the Owner. Shift training may be required to correspond to the Owner's working schedule.
5. Provide detailed training manuals to supplement the training courses. The manuals shall include specific details of equipment supplied and operations specific to the project.
6. The trainer shall make use of teaching aids, manuals, slide/video presentations, etc. After the training services, all training materials shall be delivered to Owner.
7. The Owner reserves the right to videotape all training sessions. All training tapes shall become the sole property of the Owner.

B. Specific Training

1. Manufacturer's Training

- a. Human Machine Interface (HMI) Software. This training shall be performed by a manufacturer's trained and certified representative.
 - i. Provide one week's manufacturer's standard training course for eight (8) of Owner's personnel in the operation, configuration, programming, and installation of the HMI software supplied. The courses shall be conducted in two groups for one week each.
 - ii. This training shall be conducted no more than two (2) months before the Witnessed Test (WFT) as specified in related specification sections
 - iii. The following training shall be provided as a minimum:
 - a) Database generation
 - b) Display generation
 - c) Alarm system and configuration
 - d) Historical data system configuration
 - e) Report generation
 - f) Security system
 - g) Trending system
 - h) Remote communications
 - i) Software configuration

- j) OLE applications
 - k) Test, adjustment, and calibration procedures
 - l) Troubleshooting and diagnosis
 - iv. Training shall include classroom and hands-on instruction such that a student with experience in process instrumentation can configure the HMI with no guidance or with only minimal supervision when attempting complex problems.
- b. Programmable Logic Controller (PLC) Hardware and Software
 - i. Provide manufacturer's standard training course for eight (8) of the Owner's personnel in the operation, configuration, programming, installation, and maintenance of the PLC hardware and software supplied. The courses shall be conducted in two groups for one week each.
 - ii. The training shall be conducted no more than two (2) months before the Witnessed Test
 - iii. The hardware and software courses shall not be concurrent
 - iv. The following hardware training shall be provided as a minimum:
 - a) Hardware maintenance for the PLC equipment provided
 - b) Test, adjustment, and calibration procedures
 - c) Troubleshooting and diagnosis
 - d) Component removal and replacement
 - e) Periodic maintenance
 - v. The following software training shall be provided as a minimum:
 - a) System configuration
 - b) Application specific program development/programming
 - c) Uploading/downloading programs
 - d) Documenting program/configuration
 - e) System backups and reload procedures
 - f) TCP/IP addressing procedures
 - g) Network communications configuration

2. Integrated Process Control System Training

- a. Human Machine Interface (HMI)
 - i. Training personnel shall be intimately familiar with the control system equipment, its manipulation, and configuration. Training personnel shall command knowledge of system debugging, program modification, troubleshooting, maintenance procedure, system operation, and programming, and shall be capable of transferring this knowledge in an orderly fashion to technically oriented personnel.
 - ii. Training and instruction shall be specific to the system that is being supplied.
 - iii. Training shall consist of classroom and hands-on instruction utilizing the Owner's system.
 - iv. Detailed training shall be provided on the actual configuration and implementation for this Contract. Training shall cover all aspects of the system that will allow the Owner's personnel to maintain, modify, troubleshoot, and develop future additions/deletions to the system. The training shall cover the following subjects, as a minimum:
 - a) System overview
 - b) System hardware components and specific equipment arrangements
 - c) System startup, shut down, load, backup, and historical archival/retrieval procedures
 - d) Specific application configuration covering the overall design and implementation of the applications provided under this Contract. The intent is to make the student fully knowledgeable in all aspects of the system provided.
 - e) Periodic maintenance
 - f) Troubleshooting and diagnosis
 - g) Network configuration, communications, and operation
 - h) SCADA system hardware operating system operation and maintenance
 - i) System backups and reload procedures
 - j) TCP/IP addressing procedures
- b. Programmable Logic Controller (PLC) Hardware and Software

- i. A single 1-day session for eight (8) of the Owner's personnel shall be held before the FDT, but not more than one month before the FDT.
- ii. Training and instruction shall be specific to the system that is being supplied.
- iii. Training shall consist of classroom and hands-on instruction utilizing the Owner's system.
- iv. Detailed training shall be provided on the actual configuration and implementation for this Contract. Training shall cover all aspects of the system that will allow the Owner's personnel to maintain, modify, troubleshoot, and develop future additions/deletions to the system. The training shall cover the following subjects, as a minimum:
 - a) System overview
 - b) System hardware components and specific equipment arrangements
 - c) System startup, shut down, load, backup, and historical archival/retrieval procedures
 - d) Specific application configuration covering the overall design and implementation of the applications provided under this Contract. The intent is to make the student fully knowledgeable in all aspects of the system provided.
 - e) Periodic maintenance
 - f) Troubleshooting and diagnosis
 - g) Network configuration, communications, and operation

3. Application Services Training

a. Controller Software

- i. The training and instruction, insofar as practicable, shall be directly related to the System being supplied. The training shall include a field training program consisting of hands-on instruction utilizing the Owner's System.
- ii. One 2-day training session shall be provided for the Owner's designated personnel on software and hardware operation and maintenance at the Owner's facility. Software training shall provide classroom and hands-on instruction such that a student with experience in process instrumentation can configure the system with no guidance

or with only minimal supervision when attempting complex problems. The training shall cover the following subjects as a minimum:

- a) System overview covering the basic system design and purpose
 - b) System hardware covering the specific hardware elements and specific equipment arrangements provided are covered.
 - c) Equipment orientation in which the student becomes familiar with the operational procedures (e.g., tape load, clear, keyboard, start/stop, and disk load).
 - d) Specific application configuration instruction shall cover the overall design and implementation of the applications as provided under this Contract. The intent shall be to make the student fully knowledgeable in all aspects of the system provided, along with methods for making additions, modifications, and deletions to the process system.
 - e) Development of new control loops and strategies.
 - f) Complete system backup and reload procedures.
 - g) These courses shall not be concurrent with those offered by the PCSI. The above listing is only a guide and is not intended to be complete.
- b. Plant Operator field training sessions shall include the following:
- i. Plant Operator field training shall be structured specifically for operations type personnel. The Operators will want to know how to run their plant using the Control System. How does one open or close a valve, turn on or off a motor, adjust a set point, etc. using the Control System. These are questions the ASP and PCSI shall be prepared to answer. Training personnel shall be prepared to walk-through the logic used to control the equipment and how the Control System executes that logic. Training personnel shall be prepared to show the Operators how to operate the Plant from the Control System level in the event of Control Room equipment failure. Additionally, such topics as changing printer ribbon, changing printer or video copier paper, printing reports on demand, copying graphic displays, signing onto the system, creating graphic generated trends, etc. shall be discussed.

- ii. The ASP and PCSI shall, at a minimum, have the following teaching aids available for distribution during Plant Operator field training sessions:
 - a) Copies of all complete generated graphic displays and reports
 - b) Operator Interface Functions
- c. Provide a minimum of two separate 2-day training sessions as scheduled by the Owner for eight (8) of the Owner's operations personnel on the detailed operation of the Operator Work Station Controls. This training should be conducted within two weeks of the completion of the Functional Demonstration Test at a time suitable to the Owner. This training shall be provided at the Owner's facility and as a minimum include the following:
- d. Specific training for the actual instrumentation configuration to provide a detailed understanding of how the equipment and components are arranged, connected, and set up for this Contract.
- e. Provide a minimum of four (4) days of instructor on-call tutoring services. After the completion of the training sessions described above, the instructor shall be at the site to provide these services.

C. Field Training

1. Field Instruments

- a. Provide a minimum of one 8-hour hardware training and instruction on the maintenance of the field instrumentation for eight (8) of the Owners instrumentation technicians. This training shall be conducted before the Functional Demonstration Test, but no more than one (1) month before and at a time suitable to the Owner. This training shall take place at the Owners facility. As a minimum the following shall be included:
 - i. Training in standard hardware maintenance for the instruments provided
 - ii. Specific training for the actual instrumentation configuration to provide a detailed understanding of how the equipment and components are arranged, connected, and set up for this Contract
 - iii. Test, adjustment, and calibration procedures
 - iv. Troubleshooting and diagnosis
 - v. Periodic maintenance

2. Panel Instruments

- a. Provide a minimum of one 8-hour hardware training and instruction in the maintenance of the panel instrumentation for eight (8) of the Owners technicians. Training should be conducted before the Functional Demonstration Test, but not more than one (1) month before and at a time suitable to the Owner. This training shall be provided at the Owners facility and at a minimum the following shall be included:
 - i. Training in standard hardware maintenance for the instruments provided
 - ii. Specific training for the actual instrumentation configuration to provide a detailed understanding of how the equipment and components are arranged, connected, and configured for this Contract
 - iii. Test, adjustment, and calibration procedures
 - iv. Troubleshooting and diagnosis
 - v. Periodic maintenance

3. Panel Functions

- a. Provide a minimum of two 2-hour training sessions for four (4) shifts of Owner's operations personnel on the detailed operation of the touch screen panel. This training shall be conducted within two (2) days of the completion of the Field Demonstration Test at times suitable to the Owner. This training shall be provided at the Owner's facility and at a minimum, the following shall be included:
 - i. Specific training for the actual instrumentation configuration to provide a detailed understanding of how the equipment and components are arranged, connected, and set up for this Contract.

4. Management Seminar

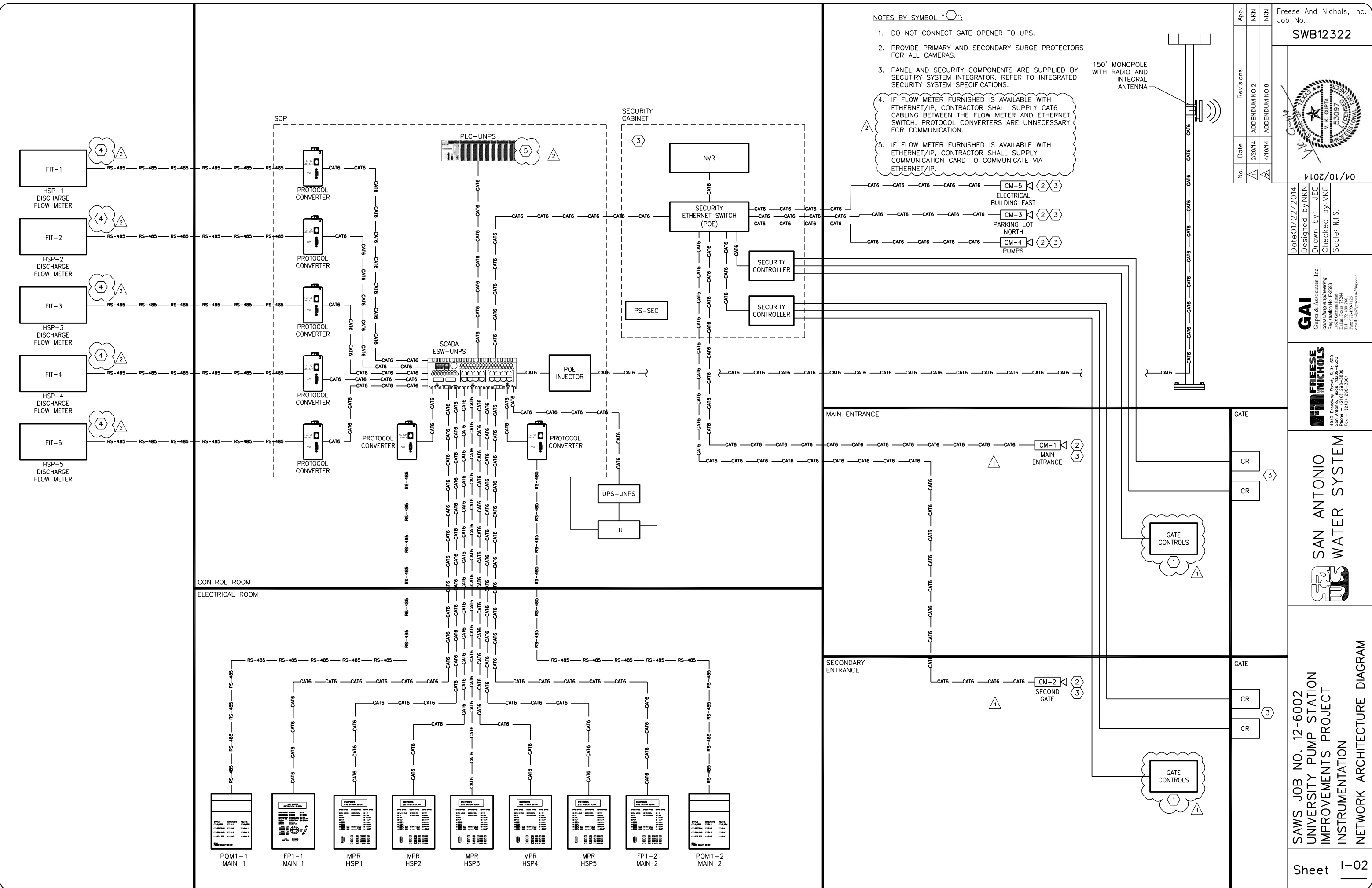
- a. Provide Management Seminar for the Owner's personnel at the Owner's facility. The objective of this seminar is to provide non-operations/maintenance personnel with an overview understanding of the process control system. The attendees will be the Owner's management, engineering, and other non-operations personnel. The seminar shall include, but not limited to, the following:
 - i. An overview of the process control system explaining how the hardware and software supplied under this Contract is used for the operation and control of the facilities.

- ii. A block diagram presentation of the process control system showing how and what information flow within the System and what is done by each functional unit.
- iii. An explanation of the operator interfaces including a demonstration of how to use an Operator's CRT to access displays, reports, control, etc.
- iv. A walk-through of the installed system explaining each of the items covered in the functional unit's discussion. The features and functions of operator controls and interfaces shall be discussed.

5. Integrated Security System Training

- a. Provide the representatives, services for training of Owner's personnel in operation and maintenance of the equipment furnished under this Section.
- b. The training for each type of equipment shall be for a period of not less than five eight hour day.
- c. The cost of training program to be conducted with Owner's personnel shall be included in the Contract Price. The training and instruction, insofar as practicable, shall be directly related to the system being supplied.
- d. Provide detailed O&M manuals to supplement the training course. The manuals shall include specific details of equipment supplied and operations specific to the project.
- e. The training session shall be conducted by a manufacturer's qualified representative. Training program shall include instructions on the assembly, motor starters, protective devices, metering, and other major components.
- f. The Owner reserves the right to videotape the training sessions for the Owner's use.

-END OF SECTION-



NOTES BY SYMBOL "⬡":

- DO NOT CONNECT GATE OPENER TO UPS.
- PROVIDE PRIMARY AND SECONDARY SURGE PROTECTORS FOR ALL CAMERAS.
- PANEL AND SECURITY COMPONENTS ARE SUPPLIED BY SECURITY SYSTEM INTEGRATOR. REFER TO INTEGRATED SECURITY SYSTEM SPECIFICATIONS.
- IF FLOW METER FURNISHED IS AVAILABLE WITH ETHERNET/IP, CONTRACTOR SHALL SUPPLY CAT6 CABLING BETWEEN THE FLOW METER AND ETHERNET SWITCH. PROTOCOL CONVERTERS ARE UNNECESSARY FOR COMMUNICATION.
- IF FLOW METER FURNISHED IS AVAILABLE WITH ETHERNET/IP, CONTRACTOR SHALL SUPPLY COMMUNICATION CARD TO COMMUNICATE VIA ETHERNET/IP.

App.	Freese And Nichols, Inc.		
Job No.	SWB12322		
Revisions			
No.	Date	2/20/14	ADDENDUM NO.2
		4/10/14	ADDENDUM NO.8



Date: 04/10/2014
 Designed by: JEC
 Drawn by: JEC
 Checked by: VKG
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SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 12-6002
 UNIVERSITY PUMP STATION
 IMPROVEMENTS PROJECT
 INSTRUMENTATION
 NETWORK ARCHITECTURE DIAGRAM

APPENDIX F
IMPLEMENTATION OF AMERICAN
IRON AND STEEL PROVISIONS



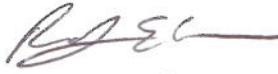
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460


MAR 20 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76,
Consolidated Appropriations Act, 2014

FROM: For Andrew D. Sawyers, Director 
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director 
Office of Ground Water and Drinking Water (4601M)

TO: Water Management Division Directors
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an “American Iron and Steel (AIS)” requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

Implementation

The Act states:

Sec. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds for carrying out

the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

The following questions and answers provide guidance for implementing and complying with the AIS requirements:

Project Coverage

1) What classes of projects are covered by the AIS requirement?

All treatment works projects funded by a CWSRF assistance agreement, and all public water system projects funded by a DWSRF assistance agreement, from the date of enactment through the end of Federal Fiscal Year 2014, are covered. The AIS requirements apply to the entirety of the project, no matter when construction begins or ends. Additionally, the AIS requirements apply to all parts of the project, no matter the source of funding.

2) Does the AIS requirement apply to nonpoint source projects or national estuary projects?

No. Congress did not include an AIS requirement for nonpoint source and national estuary projects unless the project can also be classified as a 'treatment works' as defined by section 212 of the Clean Water Act.

3) Are any projects for the construction, alteration, maintenance, or repair of a public water system or treatment works excluded from the AIS requirement?

Any project, whether a treatment works project or a public water system project, for which engineering plans and specifications were approved by the responsible state agency prior to January 17, 2014, is excluded from the AIS requirements.

4) What if the project does not have approved engineering plans and specifications but has signed an assistance agreement with a CWSRF or DWSRF program prior to January 17, 2014?

The AIS requirements do not apply to any project for which an assistance agreement was signed prior to January 17, 2014.

5) What if the project does not have approved engineering plans and specifications, but bids were advertised prior to January 17, 2014 and an assistance agreement was signed after January 17, 2014?

If the project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the approval date for purposes of the exemption in section 436(f).

6) What if the assistance agreement that was signed prior to January 17, 2014, only funded a part of the overall project, where the remainder of the project will be funded later with another SRF loan?

If the original assistance agreement funded any construction of the project, the date of the original assistance agreement counts for purposes of the exemption. If the original assistance agreement was only for planning and design, the date of that assistance agreement will count for purposes of the exemption only if there is a written commitment or expectation on the part of the assistance recipient to fund the remainder of the project with SRF funds.

7) What if the assistance agreement that was signed prior to January 17, 2014, funded the first phase of a multi-phase project, where the remaining phases will be funded by SRF assistance in the future?

In such a case, the phases of the project will be considered a single project if all construction necessary to complete the building or work, regardless of the number of contracts or assistance agreements involved, are closely related in purpose, time and place. However, there are many situations in which major construction activities are clearly undertaken in phases that are distinct in purpose, time, or place. In the case of distinct phases, projects with engineering plans and specifications approval or assistance agreements signed prior to January 17, 2014 would be excluded from AIS requirements while those approved/signed on January 17, 2014, or later would be covered by the AIS requirements.

8) What if a project has split funding from a non-SRF source?

Many States intend to fund projects with “split” funding, from the SRF program and from State or other programs. Based on the Act language in section 436, which requires that American iron and steel products be used in any project for the construction, alteration, maintenance, or repair of a public water system or treatment works receiving SRF funding between and including January 17, 2014 and September 30, 2014, any project that is funded in whole or in part with such funds must comply with the AIS requirement. A “project” consists of all construction necessary to complete the building or work regardless of the number of contracts or assistance agreements involved so long as all contracts and assistance agreements awarded are closely related in purpose, time and place. This precludes the intentional splitting of SRF projects into separate and smaller contracts or assistance agreements to avoid AIS coverage on some portion of a larger

project, particularly where the activities are integrally and proximately related to the whole. However, there are many situations in which major construction activities are clearly undertaken in separate phases that are distinct in purpose, time, or place, in which case, separate contracts or assistance agreement for SRF and State or other funding would carry separate requirements.

9) What about refinancing?

If a project began construction, financed from a non-SRF source, prior to January 17, 2014, but is refinanced through an SRF assistance agreement executed on or after January 17, 2014 and prior to October 1, 2014, AIS requirements will apply to all construction that occurs on or after January 17, 2014, through completion of construction, unless, as is likely, engineering plans and specifications were approved by a responsible state agency prior to January 17, 2014. There is no retroactive application of the AIS requirements where a refinancing occurs for a project that has completed construction prior to January 17, 2014.

10) Do the AIS requirements apply to any other EPA programs, besides the SRF program, such as the Tribal Set-aside grants or grants to the Territories and DC?

No, the AIS requirement only applies to funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12)

Covered Iron and Steel Products

11) What is an iron or steel product?

For purposes of the CWSRF and DWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings (defined in more detail below);
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel (defined in more detail below);
- Reinforced precast concrete; and
- Construction materials (defined in more detail below).

12) What does the term ‘primarily iron or steel’ mean?

‘Primarily iron or steel’ places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

13) Can you provide an example of how to perform a cost determination?

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

14) If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

15) What is the definition of steel?

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

16) What does ‘produced in the United States’ mean?

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the

material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

17) Are the raw materials used in the production of iron or steel required to come from US sources?

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

18) If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

19) What is the definition of ‘municipal castings’?

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;

Meter Boxes;
Service Boxes;
Steel Hinged Hatches, Square and Rectangular;
Steel Riser Rings;
Trash receptacles;
Tree Grates;
Tree Guards;
Trench Grates; and
Valve Boxes, Covers and Risers.

20) What is ‘structural steel’?

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

21) What is a ‘construction material’ for purposes of the AIS requirement?

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

22) What is not considered a ‘construction material’ for purposes of the AIS requirement?

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and

data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

23) If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

24) What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

Compliance

25) How should an assistance recipient document compliance with the AIS requirement?

In order to ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, starting with the assistance agreement, all the way down to the purchase agreements. Sample language for assistance agreements and contracts can be found in Appendix 3 and 4.

EPA recommends the use of a step certification process, similar to one used by the Federal Highway Administration. The step certification process is a method to ensure that producers adhere to the AIS requirement and assistance recipients can verify that products comply with the AIS requirement. The process also establishes accountability and better enables States to take enforcement actions against violators.

Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer,

processor, etc) of the iron and steel products certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification can be quite simple. Typically, it includes the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached, as Appendix 5, are sample certifications. These certifications should be collected and maintained by assistance recipients.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US. While this type of certification may be acceptable, it may not provide the same degree of assurance. Additional documentation may be needed if the certification is lacking important information. Step certification is the best practice.

26) How should a State ensure assistance recipients are complying with the AIS requirement?

In order to ensure compliance with the AIS requirement, States SRF programs must include specific AIS contract language in the assistance agreement. Sample language for assistance agreements can be found in Appendix 3.

States should also, as a best practice, conduct site visits of projects during construction and review documentation demonstrating proof of compliance which the assistance recipient has gathered.

27) What happens if a State or EPA finds a non-compliant iron and/or steel product permanently incorporated in the project?

If a potentially non-compliant product is identified, the State should notify the assistance recipient of the apparent unauthorized use of the non-domestic component, including a proposed corrective action, and should be given the opportunity to reply. If unauthorized use is confirmed, the State can take one or more of the following actions: request a waiver where appropriate; require the removal of the non-domestic item; or withhold payment for all or part of the project. Only EPA can issue waivers to authorize the use of a non-domestic item. EPA may use remedies available to it under the Clean Water Act, the Safe Drinking Water Act, and 40 CFR part 31 grant regulations, in the event of a violation of a grant term and condition.

It is recommended that the State work collaboratively with EPA to determine the appropriate corrective action, especially in cases where the State is the one who identifies the item in noncompliance or there is a disagreement with the assistance recipient.

If fraud, waste, abuse, or any violation of the law is suspected, the Office of Inspector General (OIG) should be contacted immediately. The OIG can be reached at 1-

888-546-8740 or OIG_Hotline@epa.gov. More information can be found at this website: <http://www.epa.gov/oig/hotline.htm>.

28) How do international trade agreements affect the implementation of the AIS requirements?

The AIS provision applies in a manner consistent with United States obligations under international agreements. Typically, these obligations only apply to direct procurement by the entities that are signatories to such agreements. In general, SRF assistance recipients are not signatories to such agreements, so these agreements have no impact on this AIS provision. In the few instances where such an agreement applies to a municipality, that municipality is under the obligation to determine its applicability and requirements and document the actions taken to comply for the State.

Waiver Process

The statute permits EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent.

In order to implement the AIS requirements, EPA has developed an approach to allow for effective and efficient implementation of the waiver process to allow projects to proceed in a timely manner. The framework described below will allow States, on behalf of the assistance recipients, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from states will be considered. Pursuant to the Act, EPA has the responsibility to make findings as to the issuance of waivers to the AIS requirements.

Definitions

The following terms are critical to the interpretation and implementation of the AIS requirements and apply to the process described in this memorandum:

Reasonably Available Quantity: The quantity of iron or steel products is available or will be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.

Satisfactory Quality: The quality of iron or steel products, as specified in the project plans and designs.

Assistance Recipient: A borrower or grantee that receives funding from a State CWSRF or DWSRF program.

Step-By-Step Waiver Process

Application by Assistance Recipient

Each local entity that receives SRF water infrastructure financial assistance is required by section 436 of the Act to use American made iron and steel products in the construction of its project. However, the recipient may request a waiver. Until a waiver is granted by EPA, the AIS requirement stands, except as noted above with respect to municipalities covered by international agreements.

The waiver process begins with the SRF assistance recipient. In order to fulfill the AIS requirement, the assistance recipient must in good faith design the project (where applicable) and solicit bids for construction with American made iron and steel products. It is essential that the assistance recipient include the AIS terms in any request for proposals or solicitations for bids, and in all contracts (see Appendix 3 for sample construction contract language). The assistance recipient may receive a waiver at any point before, during, or after the bid process, if one or more of three conditions is met:

1. Applying the American Iron and Steel requirements of the Act would be inconsistent with the public interest;
2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Proper and sufficient documentation must be provided by the assistance recipient. A checklist detailing the types of information required for a waiver to be processed is attached as Appendix 1.

Additionally, it is strongly encouraged that assistance recipients hold pre-bid conferences with potential bidders. A pre-bid conference can help to identify iron and steel products needed to complete the project as described in the plans and specifications that may not be available from domestic sources. It may also identify the need to seek a waiver prior to bid, and can help inform the recipient on compliance options.

In order to apply for a project waiver, the assistance recipient should email the request in the form of a Word document (.doc) to the State SRF program. It is strongly recommended that the State designate a single person for all AIS communications. The State SRF designee will review the application for the waiver and determine whether the necessary information has been included. Once the waiver application is complete, the State designee will forward the application to either of two email addresses. For CWSRF waiver requests, please send the application to: cwsrfwaiver@epa.gov. For DWSRF waiver requests, please send the application to: dwsrfwaiver@epa.gov.

Evaluation by EPA

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

In the event that EPA finds that adequate documentation and justification has been submitted, the Administrator may grant a waiver to the assistance recipient. EPA will notify the State designee that a waiver request has been approved or denied as soon as such a decision has been made. Granting such a waiver is a three-step process:

1. Posting – After receiving an application for a waiver, EPA is required to publish the application and all material submitted with the application on EPA’s website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to EPA. The website can be found at: http://water.epa.gov/grants_funding/aisrequirement.cfm
2. Evaluation – After receiving an application for waiver of the AIS requirements, EPA Headquarters will use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.
3. Signature of waiver approval by the Administrator or another agency official with delegated authority – As soon as the waiver is signed and dated, EPA will notify the State SRF program, and post the signed waiver on our website. The assistance recipient should keep a copy of the signed waiver in its project files.

Public Interest Waivers

EPA has the authority to issue public interest waivers. Evaluation of a public interest waiver request may be more complicated than that of other waiver requests so they may take more time than other waiver requests for a decision to be made. An example of a public interest waiver that might be issued could be for a community that has standardized on a particular type or manufacturer of a valve because of its performance to meet their specifications. Switching to an alternative valve may require staff to be trained on the new equipment and additional spare parts would need to be purchased and stocked, existing valves may need to be unnecessarily replaced, and portions of the system may need to be redesigned. Therefore, requiring the community to install an alternative valve would be inconsistent with public interest.

EPA also has the authority to issue a public interest waiver that covers categories of products that might apply to all projects.

EPA reserves the right to issue national waivers that may apply to particular classes of assistance recipients, particular classes of projects, or particular categories of iron or steel products. EPA may develop national or (US geographic) regional categorical waivers through the identification of similar circumstances in the detailed justifications presented to EPA in a waiver request or requests. EPA may issue a national waiver based on policy decisions regarding the public's interest or a determination that a particular item is not produced domestically in reasonably available quantities or of a sufficient quality. In such cases, EPA may determine it is necessary to issue a national waiver.

If you have any questions concerning the contents of this memorandum, you may contact us, or have your staff contact Jordan Dorfman, Attorney-Advisor, State Revolving Fund Branch, Municipal Support Division, at dorfman.jordan@epa.gov or (202) 564-0614 or Kiri Anderer, Environmental Engineer, Infrastructure Branch, Drinking Water Protection Division, at anderer.kirsten@epa.gov or (202) 564-3134.

Attachments

Appendix 1: Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	✓	Notes
<p>General</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> — Description of the foreign and domestic construction materials — Unit of measure — Quantity — Price — Time of delivery or availability — Location of the construction project — Name and address of the proposed supplier — A detailed justification for the use of foreign construction materials • Waiver request was submitted according to the instructions in the memorandum • Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor 		
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> — Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products — Relevant excerpts from the bid documents used by the contractors to complete the comparison — Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers 		
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> • Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested: <ul style="list-style-type: none"> — Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials — Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers. — Project schedule — Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials • Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought • Has the State received other waiver requests for the materials described in this waiver request, for comparable projects? 		

Appendix 2: HQ Review Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Comments
Cost Waiver Requests <ul style="list-style-type: none"> • Does the waiver request include the following information? <ul style="list-style-type: none"> – Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products – Relevant excerpts from the bid documents used by the contractors to complete the comparison – A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market • Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%? 				
Availability Waiver Requests <ul style="list-style-type: none"> • Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested? <ul style="list-style-type: none"> – Supplier information or other documentation indicating availability/delivery date for materials – Project schedule – Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials • Does supporting documentation provide sufficient evidence that the contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers? • Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information) • Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested? Examples include: <ul style="list-style-type: none"> – Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State – Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States – Correspondence with construction trade associations indicating the non-availability of the materials • Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits? 				

Appendix 3: Example Loan Agreement Language

ALL ASSISTANCE AGREEMENT MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN SRF ASSISTANCE AGREEMENTS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE LAW:

Comply with all federal requirements applicable to the Loan (including those imposed by the 2014 Appropriations Act and related SRF Policy Guidelines) which the Participant understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States (“American Iron and Steel Requirement”) unless (i) the Participant has requested and obtained a waiver from the Agency pertaining to the Project or (ii) the Finance Authority has otherwise advised the Participant in writing that the American Iron and Steel Requirement is not applicable to the Project.

Comply with all record keeping and reporting requirements under the Clean Water Act/Safe Drinking Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act/Safe Drinking Water Act and this Agreement may be a default hereunder that results in a repayment of the Loan in advance of the maturity of the Bonds and/or other remedial actions.

Appendix 4: Sample Construction Contract Language

ALL CONTRACTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN ALL CONTRACTS IN PROJECTS THAT USE SRF FUNDS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE OR LOCAL LAW:

The Contractor acknowledges to and for the benefit of the City of _____ (“Purchaser”) and the _____ (the “State”) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Appendix 5: Sample Certifications

The following information is provided as a sample letter of **step** certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative