



Potranco Tank Fence Project
Solicitation Number: B-21-008-SM
Job No.: CAP3121445

ADDENDUM 1
May 10, 2021

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

CHANGES TO THE SPECIFICATIONS

1. Remove Special Conditions in its entirety and replace with the revised version attached to this Addendum.

CLARIFICATIONS

1. Revised Scope of Work pages; SC1 and SC6. With SC 16 page (drawing) added

END OF ADDENDUM

This Addendum is sixteen (17) page(s) in its entirety.

SCOPE OF WORK

GENERAL

SCOPE OF WORK

San Antonio Water System (SAWS) is soliciting bids for the purpose of retaining a Contractor to furnish all labor, materials, equipment and supervision to construct a total of approximately **630** linear feet including chain link fence with 3-strand barbed wire, mow strip, and gates at Potranco Elevated Tank Site located at 13074 FM 1957 (Potranco), San Antonio, Texas.

Bidders are responsible to review Scope of work and any needed site measurements need for bid purposes.

To include:

- SAWS Security Fencing
- 2 - 16' double gates
- 1- Personal Gate
- 1-Grass drainage crossing with fence

PERMITS

The Contractor is responsible for obtaining any necessary permits, including tree permits.

SCHEDULING AND SEQUENCING OF WORK

1. The Contractor shall schedule and sequence the work. **Work shall be completed within 90 days of Notice to Proceed.**
2. Complete necessary site preparation and grading before installing chain link fence and gates.

Prior to the Pre-Construction Meeting, the Contractor shall submit the following for approval:

1. Detailed Work Schedule.
2. Documentation indicating that the material meets or exceeds specifications.
3. Shop Drawings: Detailed information and specifications for materials, finishes, and dimensions.
4. Drawing illustrating detail of diagonal bracing at End, Corner, Angle, and Gate posts.
5. Drawing illustrating anchoring detail of post
6. Quality Control Submittals:

- a) Manufacturers recommended installation instructions.
- b) Evidence of Supplier and installer qualifications.

MATERIALS

CHAIN LINK FENCE FABRIC

96" FABRIC, 1" PATTERN

1. Hot dipped Galvanized chain link conforming to ASTM A392-89, Class 1; **galvanized after weaving (GAW).**
2. Height: 96 inches, unless otherwise shown.
3. Wire Gauge: No. 9.
4. Pattern: 1"-inch diamond-mesh.
5. Diamond Count: Manufacturer's standard and consistent for fabric furnished of same height.
6. Loops of Knuckled Selvages: Closed or nearly closed with space not exceeding diameter of wire.
7. Wires of Twisted Selvages
 - a. Twisted in a closed helix three full turns.
 - b. Cut at an angle to provide sharp barbs that extend minimum 1/4-inch beyond twist top and bottom.
8. Do not install chain link until concrete has cured minimum 7 days.

PIPE POSTS and LINE POSTS

Steel pipe shall be galvanized and conform to ASTM F 1083-90 with strength and stiffness required by ASTM F 669-90a, Heavy Industrial Fence, except as modified herein.

1. End, Corner, Angle, and Gate posts shall have a 4 inch outside diameter and a weight of 9.11 pounds per foot, in conformance with ASTM F 900-84.
2. Line Post posts shall have a 2-3/8 inch outside diameter and a weight of 3.65 pounds per foot.
3. Installation of ground bonding is not required.

TOP RAILS, MIDDLE RAILS, BOTTOM RAILS AND BRACE RAILS

1. Galvanized steel pipe.
2. Protective Coatings: As specified for posts.
3. Strength and Stiffness Requirements: ASTM F1043-08, Top Rail, Heavy Industrial Fence.
4. Steel Pipe:
 - a. ASTM F1083-08.
 - b. Outside Diameter: 1-5/8-inch.
 - c. Weight: 2.27 pounds per foot.

FENCE FITTINGS

1. General: In conformance with ASTM F626-14, except as modified by this article.
2. Post and Line Caps:
 - a. Designed to accommodate passage of top rail through cap, where top rail required.
3. Rail and Brace Ends: Attach rails securely to each gate, corner, pull, and end post.
4. Rail Fittings: Provide the following:
 - a. Bottom and Top-Rail Sleeves: Pressed steel or round steel tubing not less than 7 inches long.
 - b. Rail Clamps: Line and corner boulevard clamps for connecting intermediate and bottom rails in the fence line to line posts.
5. Tension and Brace Bands: Pressed steel, 0.105 inch thick, minimum 0.75 inch wide, with 1.2-oz/sq. ft. metallic (zinc) coating.
6. Tension Bars: Steel, length not less than 2 inches shorter than full height of chain-link fabric with 1.2-oz/sq. ft. metallic (zinc) coating. Minimum cross section of 3/16-inch by 3/4-inch. Provide one bar for each gate and end post, and two for each corner and pull post unless fabric is integrally woven into post.
7. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment. Minimum 5/16-inch diameter truss rod.
8. Barb Arms: 45-degree arms facing outward for supporting three strands of barbed wire.
9. Tie Wires, Clips, and Fasteners: According to ASTM F 626 and ASTM F 1916.
10. High-Security Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, complying with the following:
 - a. Metallic-Coated Steel: 0.192-inch diameter wire with galvanized coating thickness matching coating thickness of chain-link fence fabric.

- b. Pre-formed steel post ties.
 - c. Install with Easy Twist tool.
11. Finish:
- a. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz. /sq. ft. of zinc.
 - b. Aluminum: Mill finish.

TENSION WIRE

1. Metallic-Coated Steel Wire: 0.177-inch diameter, marcelled tension wire complying with ASTM A824 and the following:
2. Metallic Coating: Type II, zinc coated (galvanized) hot-dip process, with the following minimum coating weight:
Class 5: Not less than 2.0 oz./sq. ft. of uncoated wire surface.

BARBED WIRE

1. Zinc-Coated Barbed Wire: ASTM A121-13, Chain Link Fence Grade:
 - a. Line Wire: Three (3) strands of No. 12-1/2 gauge.
2. Barbs:
 - a. Number of Points: Four.
 - b. Length: 3/8-inch minimum.
 - c. Shape: Round.
 - d. Diameter: No. 14-gauge.
 - e. Spacing: 5 inches.

GATES

Gates shall be lengths as required in scope constructed of 1½ inch diameter, galvanized 16 gauge steel tubing with all joints welded. Gates shall comply with ASTM F 900-84.

1. Hinges shall be galvanized having large bearing surfaces for clamping in position and shall be designed to swing either 180 degrees outward, 180 degrees inward, or 90 degrees in and out, and not twist or turn during action of the gate. Bolt hooks shall be galvanized steel or stainless steel.
2. Installation of gatekeepers and padlock keepers are not required except for hardware at cantilevered gates. Upon beneficial completion of the gate installations, SAWS will install chains and combination locks. Refer to details and drawings for hardware on cantilever gate.

3. Gate Operation: Opened and closed easily by one person.
4. Welded Steel Joints: Paint with zinc-based paint.
5. Chain Link Fabric: Attached securely to gate frame at intervals not exceeding 15 inches.
6. Only Tubular steel swing gates as indicated on the plans will be allowed. No temporary gap-type gates or panel gates will be allowed.

CONCRETE & CONCRETE FOOTING DETAILS

1. Concrete shall achieve a 21 day compressive strength of at least 3,000 psi.
2. Installation of a continuous concrete footing throughout the entire length of the new fence with proper formwork continuous.
3. All fence posts (corner, line etc...) are to be centered and incorporated into the concrete footing.
4. Bottom of fencing shall be flush with proposed footing, fencing shall be secured to the footing by a galvanized rod at two foot intervals or as submitted by contractor and approved by the Owner.
5. Footing shall be a continuous "mow strip" 6"W x 12"D and flush with existing ground elevation. Any significant grade change will require a step in fencing and "Mow strip" footing shall step as required with fence. Contractor to verify any drops in existing grades and step in footing with owner prior to setting formwork.
6. Concrete shall conform with the A - Classification for 3,000 PSI concrete as specified in SAWS specification for construction: 300 - "CONCRETE (NATURAL AGGREGATE).
7. Footing shall have two number four (#4) rebar throughout the entire length, with #3 rebar at 10" o.c. as shown on attached drawings expansion joints shall be installed at forty foot intervals while dummy joints shall be placed every 10'.
8. Check size and spacing of rebar and footing width and depth. Ensure that there is a minimum of 3" between earth and rebar. Rebar should be centered in footing as shown on drawings.
9. Rebar must be properly supported/tied to maintain its position during concrete placement operations through the use of wire ties (18 gauge or greater), chairs, spacers or other approved supporting devices. Do not allow the use of rocks, wood blocks, or other unapproved material as support for reinforcement. Reinforcement support chairs shall be spaced typically every 5 to 6 feet. Wire tie ends shall be twisted away from concrete surfaces (toward the interior of the footer.)
10. Formwork must be properly braced and supported to prevent "blowouts" or unacceptable deformation of the formed surfaces. All formed surfaces shall be coated with approved form oil before placement of reinforcement so as to avoid coating the reinforcement.
11. During hot weather (temperatures above 80 degrees F) or during high winds, care

must be taken to prevent excessive moisture loss in the concrete which can lead to surface shrinkage cracking.

12. Top of concrete at continuous footing shall have a continuous crown to readily shed water before concrete sets.
13. Top of concrete at continuous footing shall be sloped to readily shed water away from base of posts before concrete sets.
14. Where mow-strip is installed through asphalt, the asphalt shall be saw cut to provide smooth edges. Any broken asphalt will require patching.
15. Mow Strip to be continuous across gate openings.

CHANNELS

All channel crossing to be constructed per drawings. All galvanized materials.

- Post – to meet post standards for gauge
- Piping – to meet gate standards for gauge

EXECUTION

GENERAL

Install chain link fences and gates in accordance with ASTM F567-14a except as modified in this section, and in accordance with fence manufacturer's recommendations, as approved by OWNER. Erect fencing in straight lines between angle points.

1. Provide all necessary hardware for a complete fence and gate installation.

EXAMINATION

1. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting.
2. Do not begin installation before final grading is completed, unless otherwise permitted by OWNER.
3. Proceed with installation only after unsatisfactory conditions have been corrected.

PREPARATION

1. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 100 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

POST SETTING

1. Driven posts are not acceptable.
 - a. Post Hole Depth and Diameter :
 - i. Minimum 38 inches below finished grade.
 - b. 2 inches deeper than post embedment depth below finish grade.
 - c. Diameter SAWS standard 18”.
 - d. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - e. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter. Blend with concrete mow strip.
2. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 15 degrees or more.
3. Line Posts: Space line posts uniformly at 10 feet o.c.
4. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Install braces at end and gate posts and at both sides of corner and pull posts.
 - a. Locate horizontal braces at mid-height of fabric 6 feet or higher, on fences with top rail, and at 2/3 fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.
5. Top Rail: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended by fencing manufacturer.
6. Tie Wires: Power-fastened or manually fastened ties configured to wrap a full 360 degrees around rail or post and a minimum of 1 complete diamond of fabric. Twist ends one and one-half machine twists or three full manual twists, and cut-off protruding ends to preclude untwisting by hand.
 - a. Maximum Spacing: Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.
7. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
 - a. Do not install fabric until concrete has cured minimum 7 calendar days.
 - b. Install fabric with twisted and barbed selvage at top.

8. Barbed Wire
 - a. Install three strands of barbed wire on brackets, tighten, and secure at each bracket.
 - b. Brackets to be vertical facing outward.

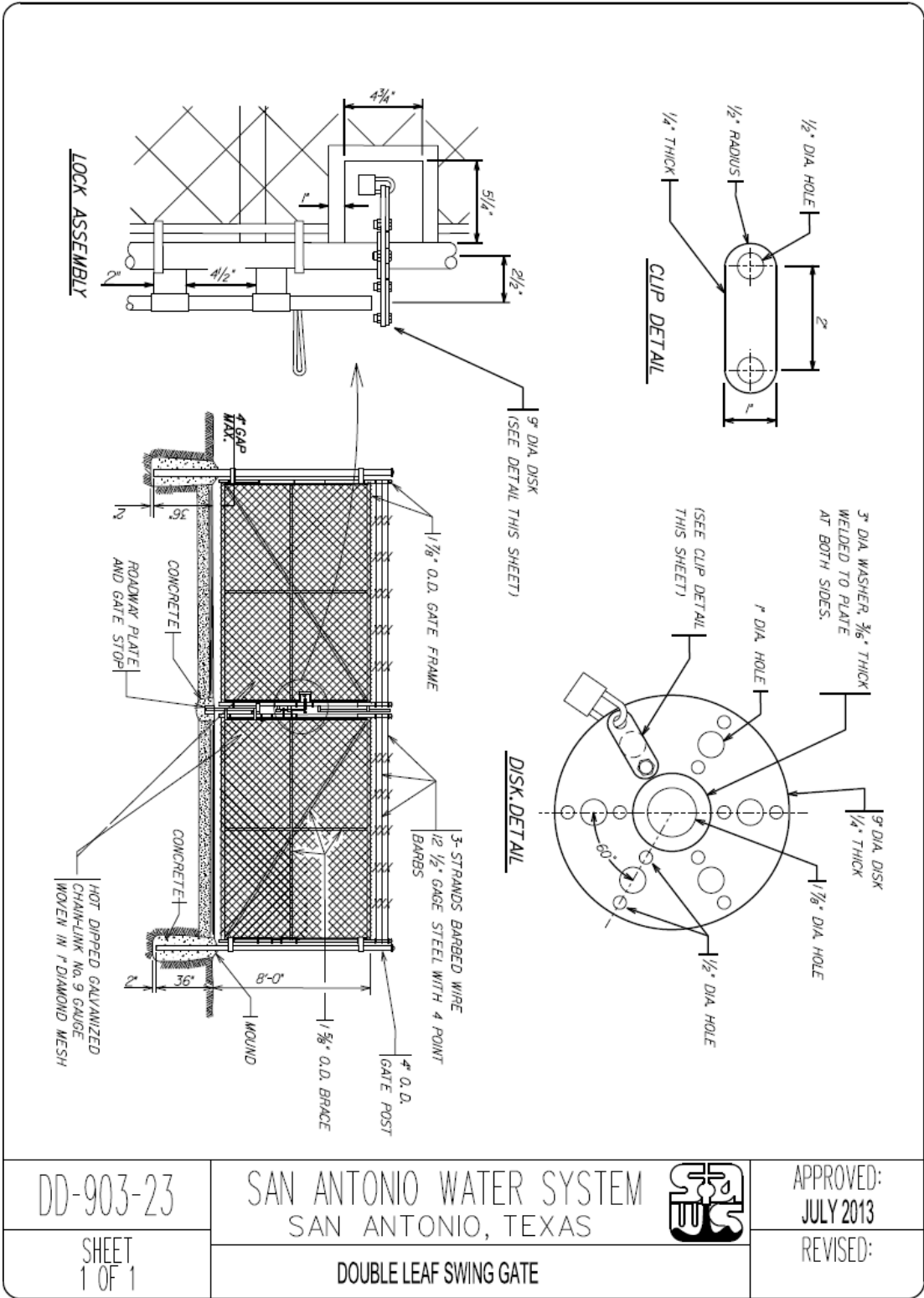
CLEAN UP:

- a. All derby to be removed from fence line area.
- b. Concrete derby to be removed from site.
- c. Corradiated with SAWS's staff, if there is possibility, to spread rock or dirt on exiting site.

WORK REQUIREMENTS

DRAWINGS AND SPECIFICATIONS

All work performed in connection with the contract shall be in accordance with details and drawings and with the requirements specified.



DD-903-23

SHEET
1 OF 1

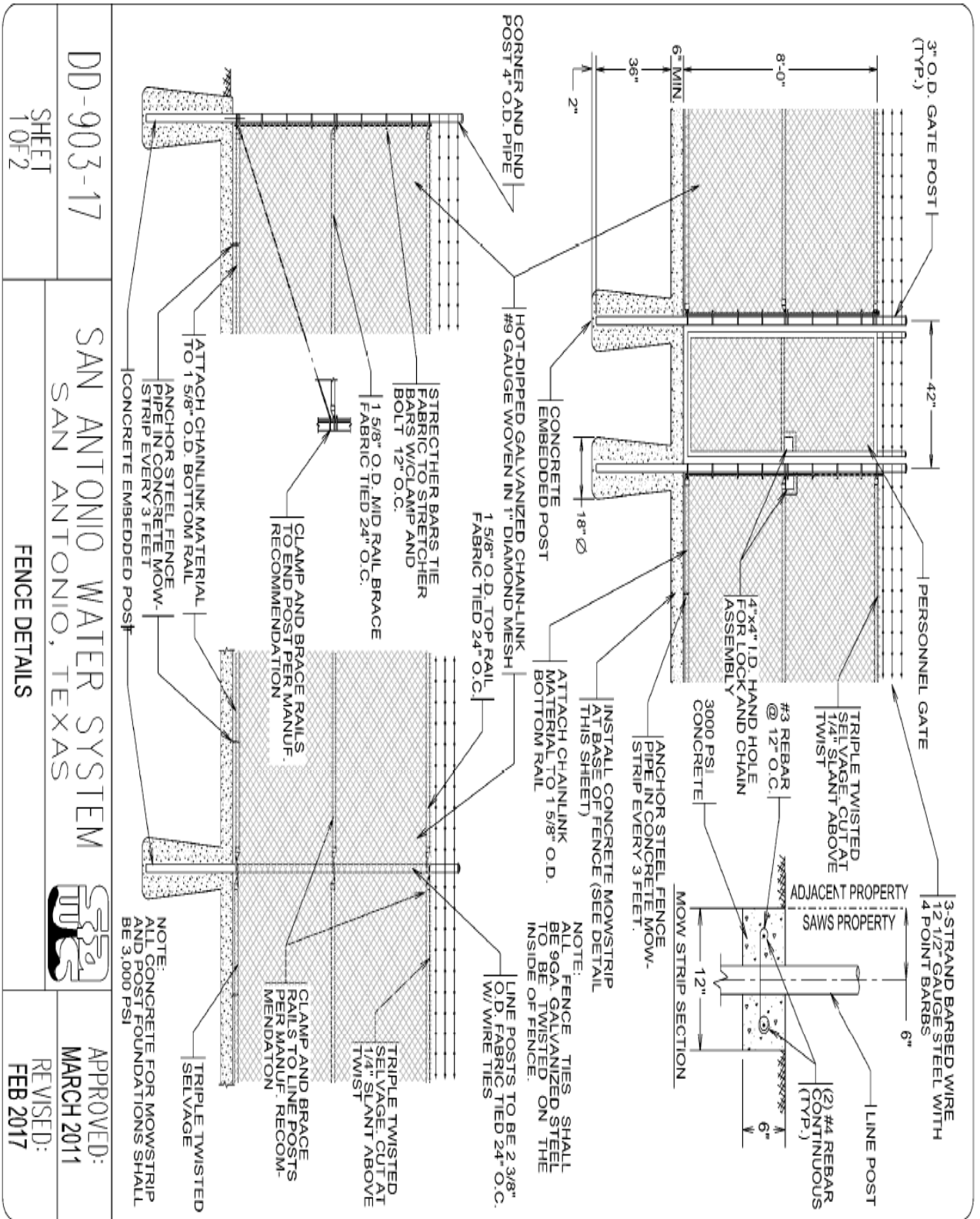
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS



APPROVED:
JULY 2013

REVISED:

DOUBLE LEAF SWING GATE



DD-903-17

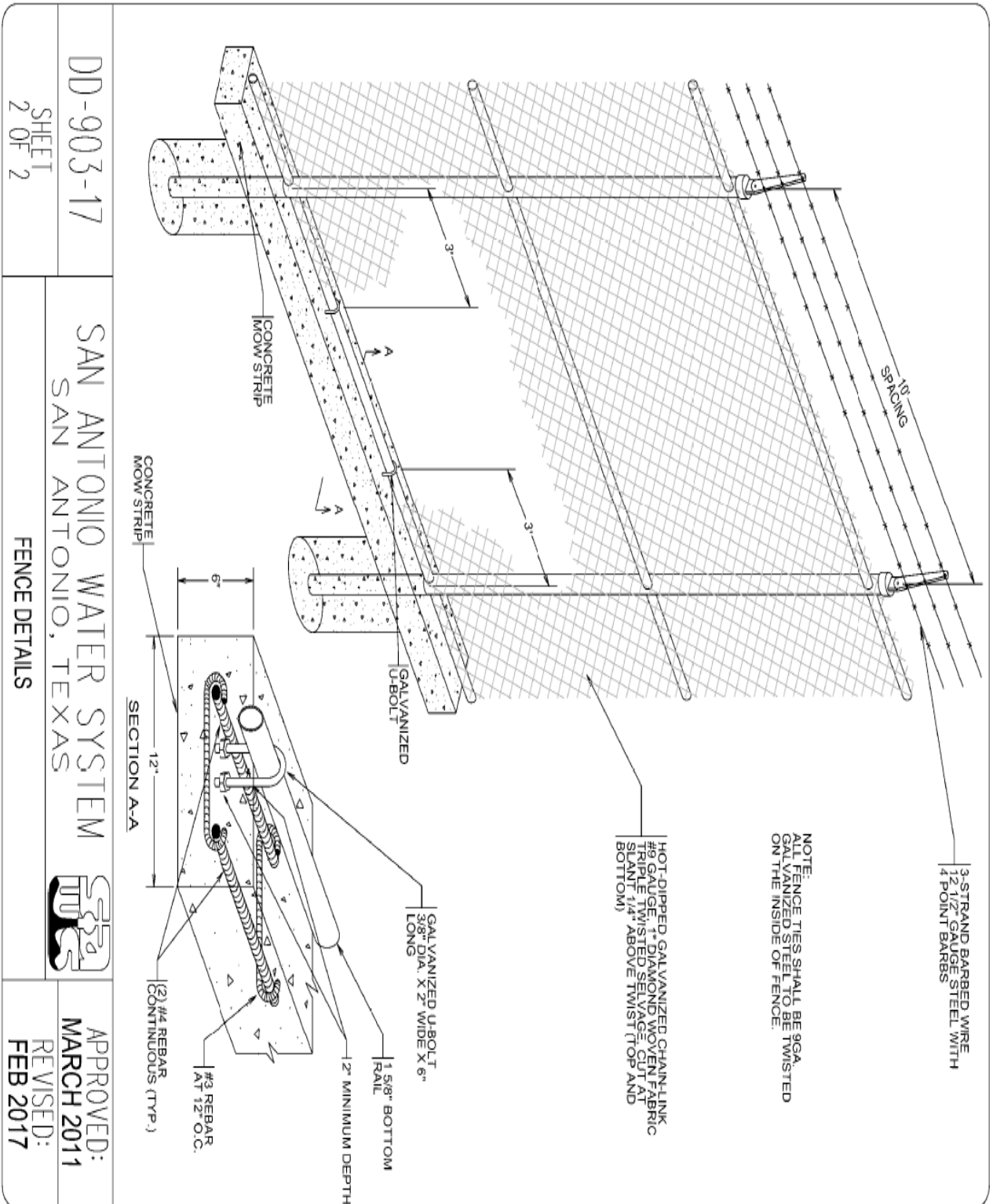
SHEET 1 OF 2

SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

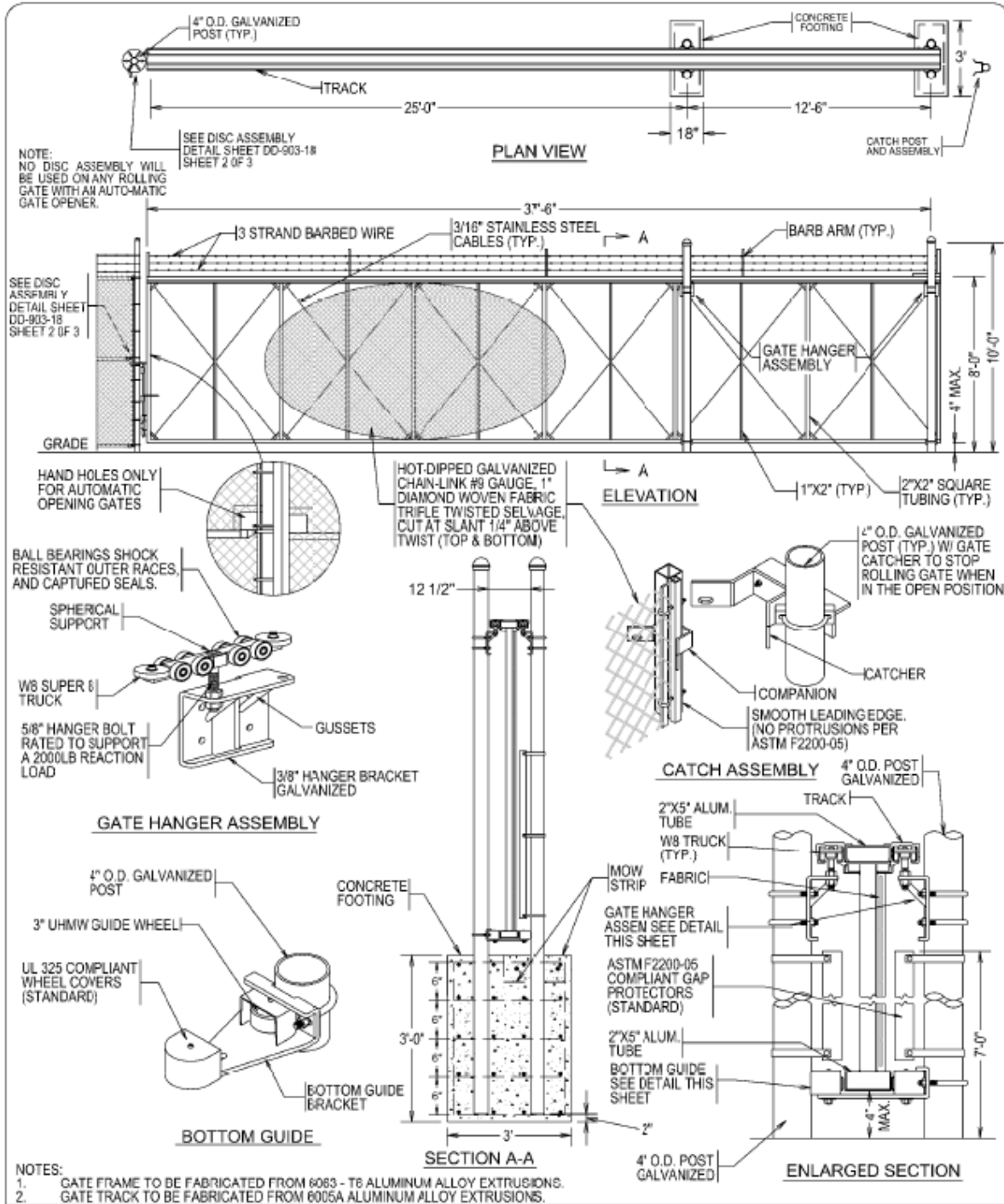


FENCE DETAILS

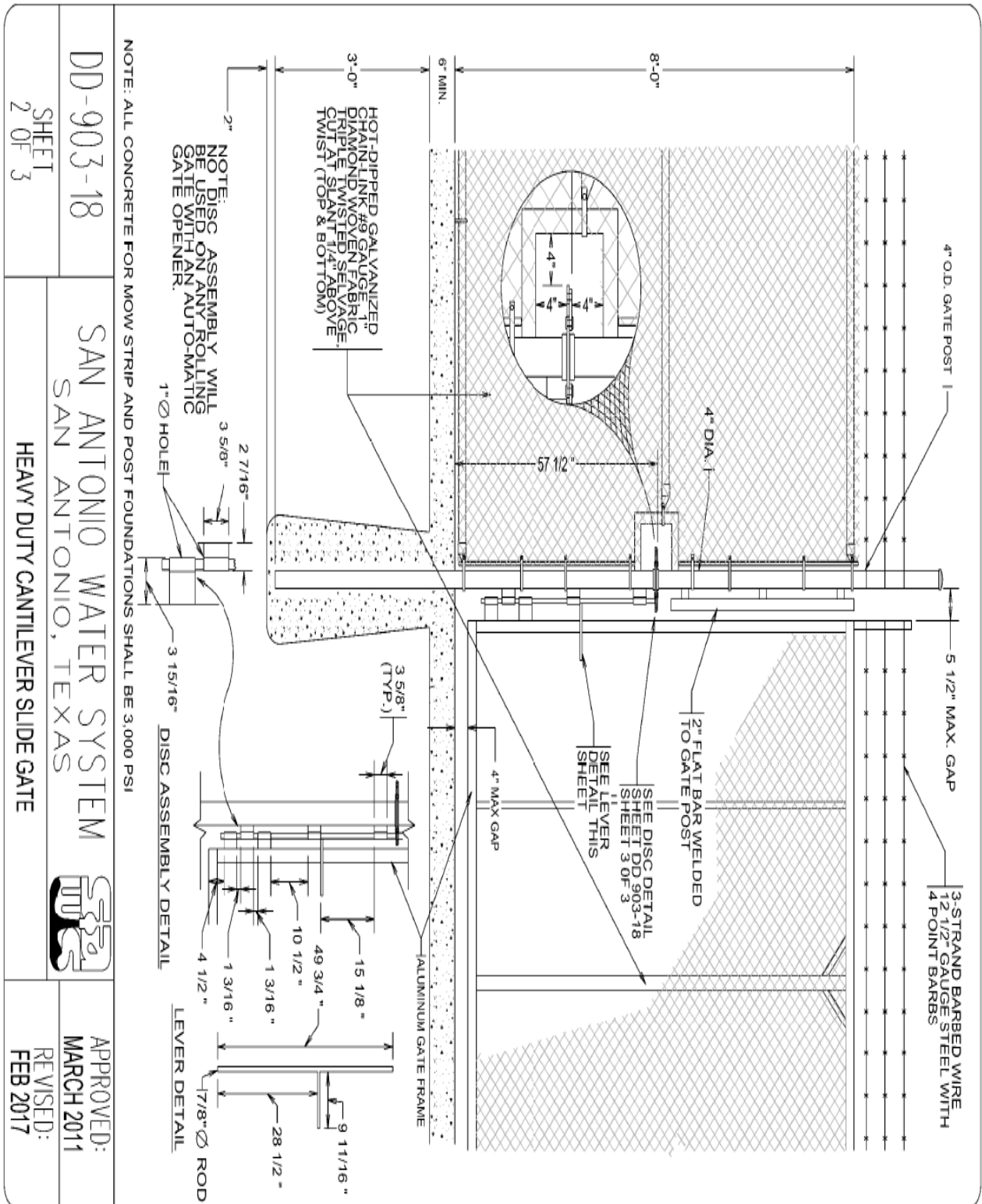
APPROVED: MARCH 2011
REVISED: FEB 2017



NO CANTILEVER GATE ON THIS PROJECT



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|-----------------|--|-------------------------|
| DD-903-18 | SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS | APPROVED: MARCH 2011 |
| SHEET 1 OF 3 | HEAVY DUTY CANTILEVER SLIDE GATE | REVISED: NOV 2018 |



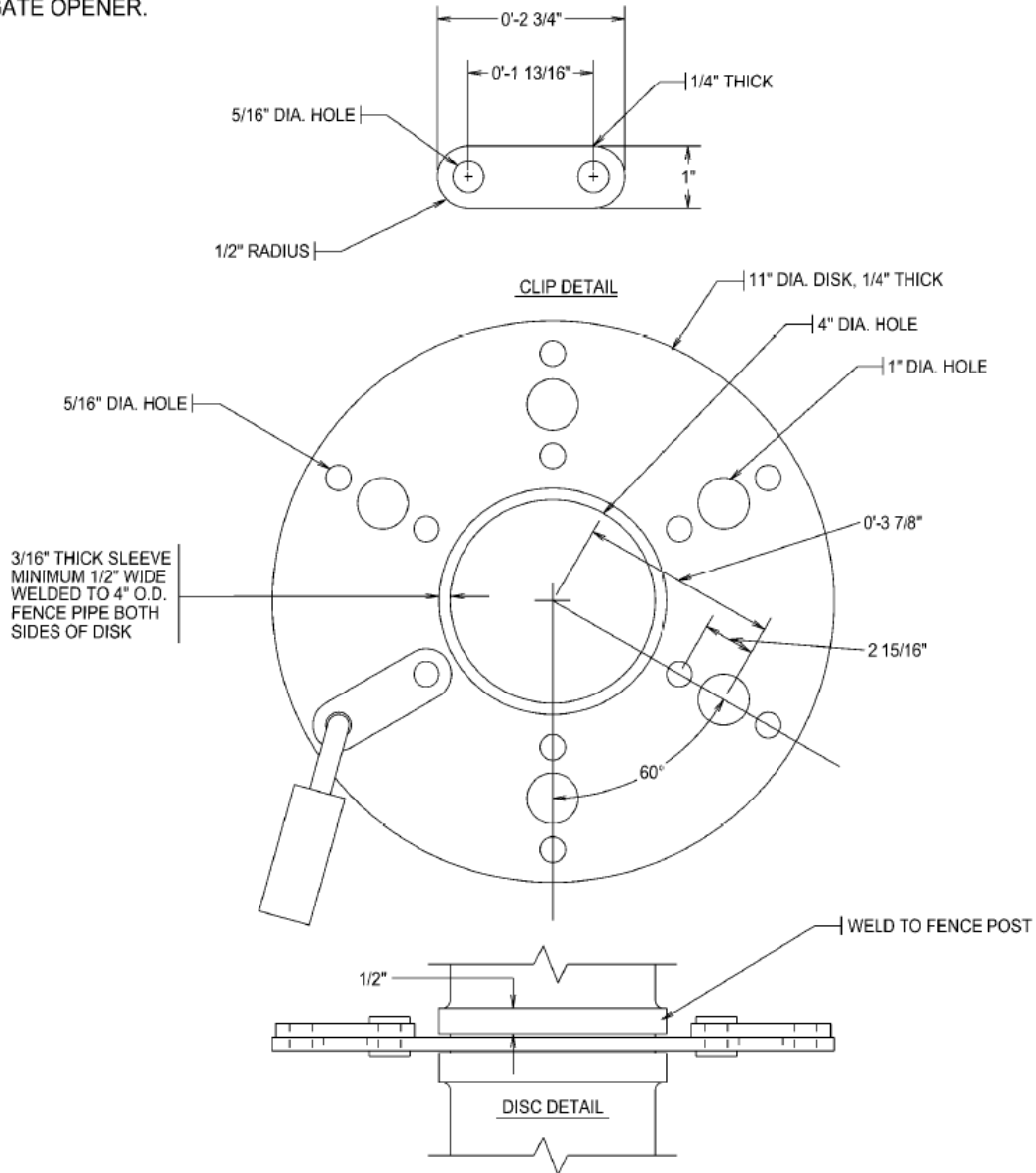
DD-903-18
SHEET
2 OF 3

SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS
HEAVY DUTY CANTILEVER SLIDE GATE



APPROVED:
MARCH 2011
REVISED:
FEB 2017

NOTE:
NO DISC ASSEMBLY WILL
BE USED ON ANY ROLLING
GATE WITH AN AUTO-MATIC
GATE OPENER.



NOTE:
1. ALL SPARE CLIPS TO BE COMPLETELY WELDED ALL AROUND. TACK WELD WILL NOT BE ACCEPTED.

| | | |
|-----------------|--|-------------------------|
| DD-903-18 | SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS | APPROVED: MARCH 2011 |
| SHEET 3 OF 3 | HEAVY DUTY CANTILEVER SLIDE GATE - DISC DETAIL | REVISED: FEB 2017 |

Approx. Fence location



