

San Antonio Water System Standard Specifications for Construction

ITEM NO. 844

Temporary and Permanent Blow-off Assemblies

844.1 DESCRIPTION: This item shall consist of blow-off assemblies installed in accordance with these specifications and as directed by the Engineer.

844.2 REFERENCED STANDARDS: Reference standards cited in this Specification Item No. 844 refer to the current reference standard published at the time of the latest revision date.

1. San Antonio Water System (SAWS):
 - a. Specifications for Water and Sanitary Sewer Construction
 - b. SAWS Materials Specifications
2. City of San Antonio (COSA) Standard Specification for Construction
3. Texas Commission of Environmental Quality (TCEQ)
 - a. Chapter 210 Use of Reclaim Water
 - b. Chapter 290 Rules and Regulations for Public Regulations for Public Water Systems
 - c. Chapter 213 Edwards Aquifer.
4. American National Standard Institute
 - a. ANSI A 21.11/AWWA C111 - Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
5. ANSI/NSF Standard 61 - Drinking Water System - Health Components. American Society for Testing and Materials (ASTM) International:
Pressure Pipe and Fittings.
 - a. ASTM A 36 - Standard Specification for Carbon Structural Steel.
 - b. ASTM A 536 - Standard Specification for Ductile Iron Castings.
 - c. ASTM A 126 - Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
 - d. ASTM B 21 - Standard Specification for Naval Brass Rod, Bar, and Shapes.
 - e. ASTM B 98 - Standard Specification for Copper-Silicon Alloy Rod, Bar, and Shapes.
 - f. ASTM B 301 - Standard Specification for Free-Cutting Copper Rod and Bar.
 - g. ASTM B 584 - Standard Specification for Copper Alloy Sand Casting for General Application.
 - h. ASTM E 165 - Standard Test Method for Liquid Penetrant Examination.
 - i. ASTM E 709 - Standard Guide for Magnetic Particle Examination.
 - j. ASTM F 1674 - Standard Test Method for Joint Restraint Products for Use with PVC Pipe.
6. American Water Works Association (AWWA)

San Antonio Water System Standard Specifications for Construction

- a. AWWA C 207 - Standard for Steel Pipe Flanges for Waterworks Service - Sizes 4 Inches through 144 Inches

844.3 SUBMITTALS: Contractor shall submit manufacturer's product data, instructions, recommendations, shop drawing, and certifications. All submittals shall be in accordance with Engineer's requirements and submittals shall be approved prior to delivery.

844.4 MATERIALS: The materials for blow-off assemblies, installation and adjustment shall conform to the specifications contained within the latest revision of SAWS' Material Specification.

844.5 CONSTRUCTION: Permanent and temporary blow-off assemblies shall be installed where shown on the plans and/or at locations designated by the Engineer and at the end of the all dead end mains in accordance with the Texas Administrative Code (TAC) rules to include 30 TAC § 290.44.(d)(5), (6).

1. The permanent blow-off shall consist of all HDPE, valve, and fittings of the various sizes shown on the plans, six (6) inch valve box assembly and concrete collar around the valve box.
2. The temporary blow-off shall consist of all, DI or HDPE, valve and fittings of the various sizes shown on the plans.
3. Valve box shall be raised or installed to finished grade and installed in accordance with Standard Drawing DD-844 Series.

844.6 MEASUREMENT:

1. Permanent Blow-off assemblies will be measured by the required unit of each such assembly of the various sizes of permanent blow-offs installed.
2. Temporary Blow-off assemblies will be measured by the required unit of each such assembly of the various sizes of temporary blow-offs installed.

844.7 PAYMENT: Payment for Permanent and Temporary Blow-off Assemblies will be made at the unit price bid for each such required assembly of the various types and sizes installed in accordance with the details shown in the Standard Drawing DD-844 Series.

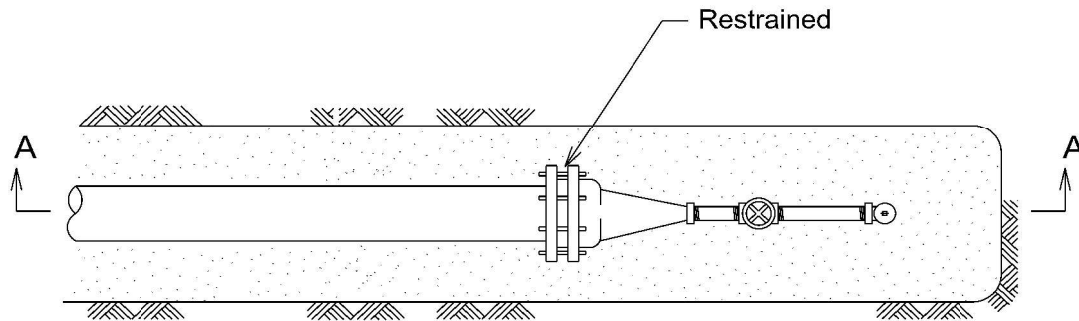
1. **844.7.1** Payment for Permanent Blow-Off Assembly shall include excavation, selected embedment material, anti-corrosion embedment when specified, and the hauling and disposition of surplus excavated materials, compaction, compaction testing, blocking, accessories and appurtenances, hauling and disposition of surplus excavated material, including all existing pipe, fittings, appurtenances to be abandoned or removed, surface and pavement restoration, installation of all-weather surface, and other required testing.
2. **844.7.2** Payment for Temporary Blow-Off Assembly shall include excavation, selected embedment material, anti-corrosion embedment when specified, removal of Temporary Blow-off assembly and the hauling and disposition of surplus

San Antonio Water System Standard Specifications for Construction

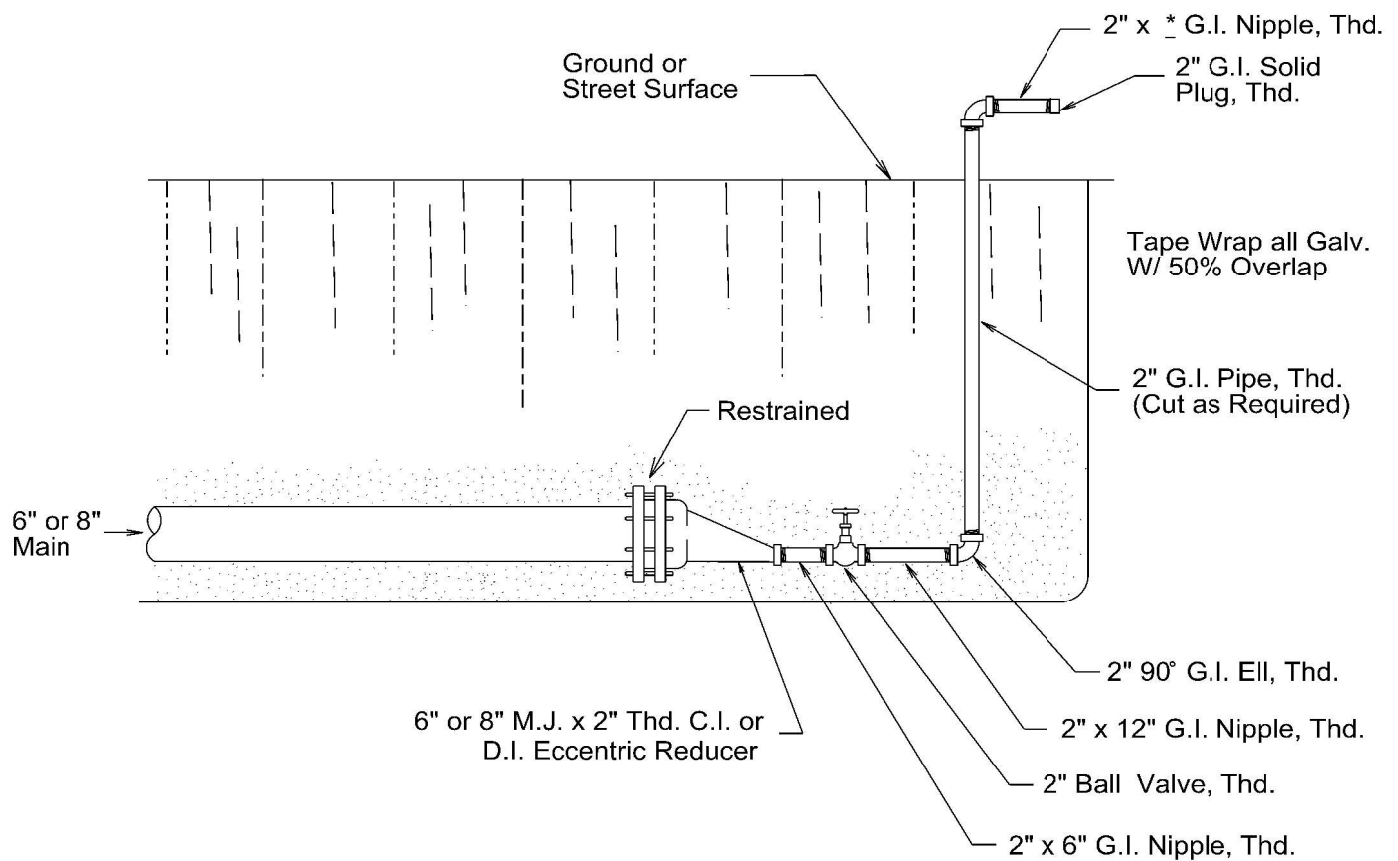
excavated materials, compaction, compaction testing, blocking, accessories and appurtenances, hauling and disposition of surplus excavated material, including all existing pipe, fittings, appurtenances to be abandoned or removed, surface and pavement restoration, installation of all-weather surface, and other required testing.

3. Materials paid on site will be in accordance with Table 1 of Specification Item No. 100 Mobilization.
4. Payment for eccentric reducers and eccentrically tapped caps and flanges will be made under Specification Item No. 836, "Cast-Iron Fittings,"
5. Payment for the pipe nipple with reaction stop ring will be made under Specification Item No. 812, "Water Main Installation."

-End of Specification-



PLAN



SECTION A-A

* Cut as required to extend beyond excavation

PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

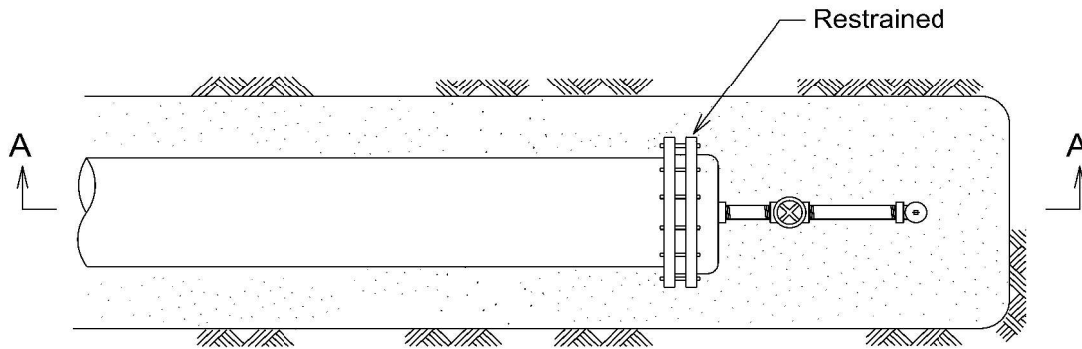
2" TEMPORARY
BLOW-OFF ASSEMBLY
ON 6" & 8" MAINS

APPROVED
MARCH 2008

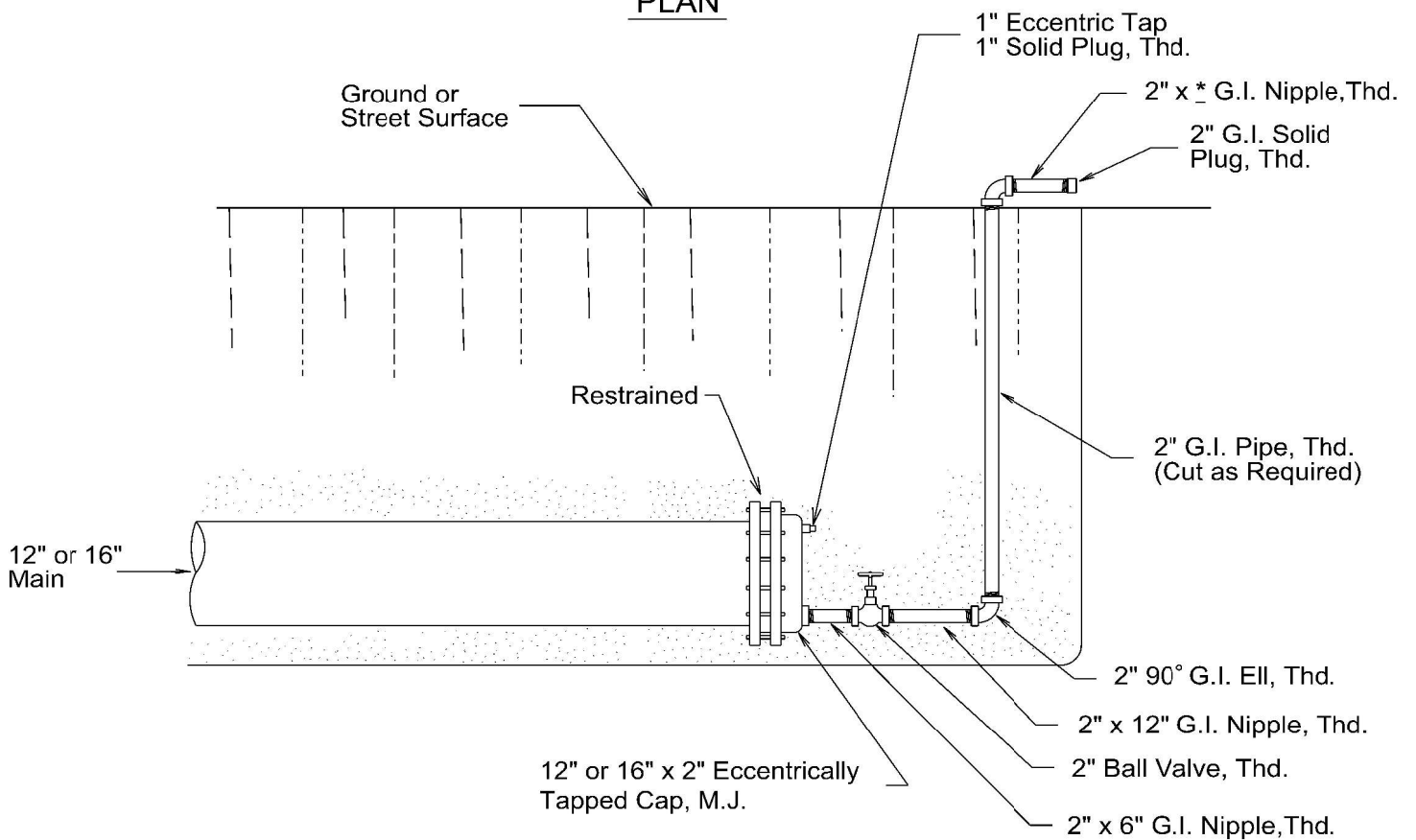
REVISED
AUG 2019

DD-844-01

SHEET
1 OF 4



PLAN



SECTION A-A

* Cut as required to extend beyond excavation.

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SAN ANTONIO, TEXAS

**2" TEMPORARY
BLOW-OFF ASSEMBLY
ON 12" & 16" MAINS**

APPROVED

March 2008

REVISED

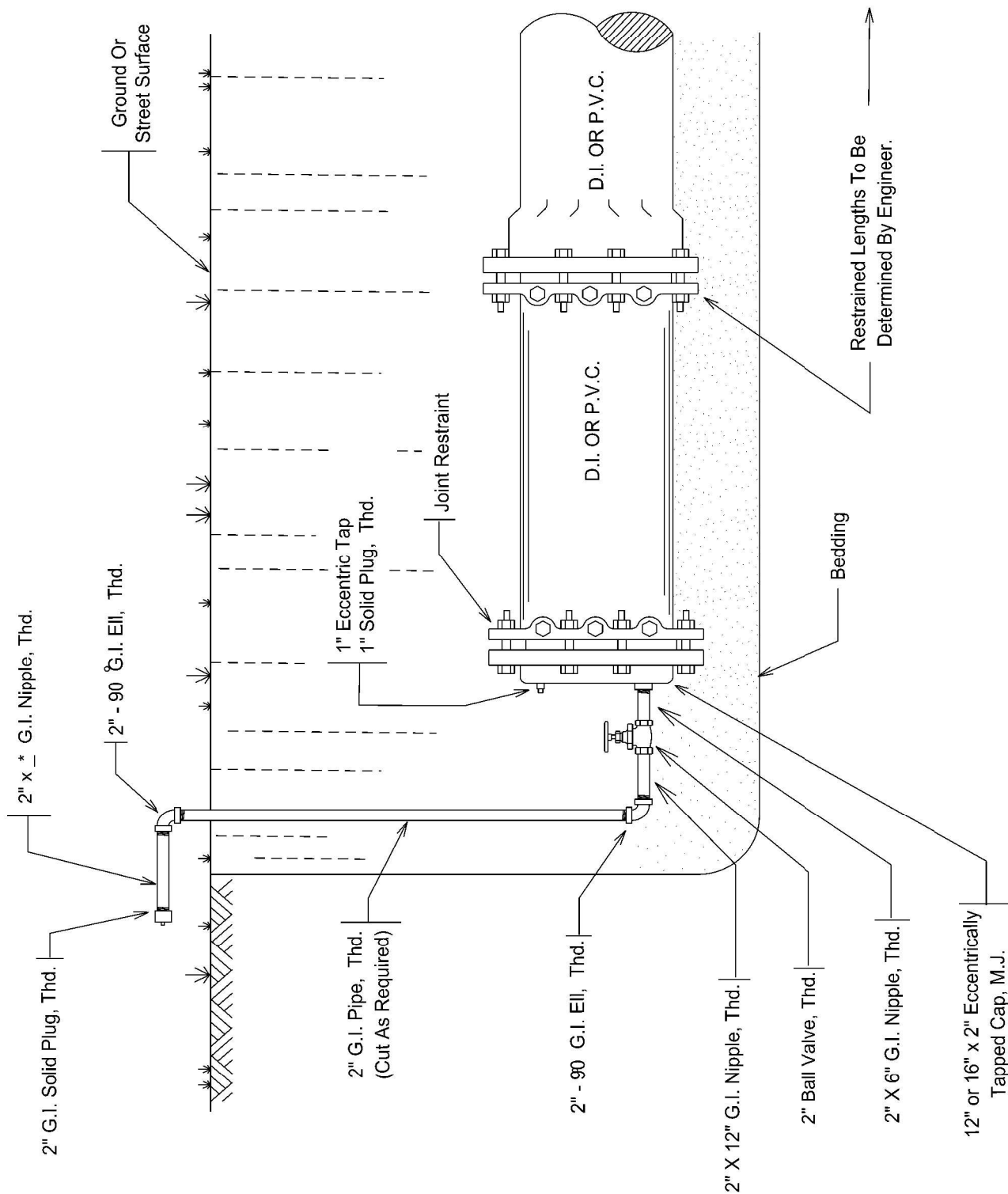
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SHEET
2 OF 4



SHEET
3 OF 4



* Cut as required to extend beyond excavation.

NOTE:
FITTINGS FOR 12" AND 16" PIPE

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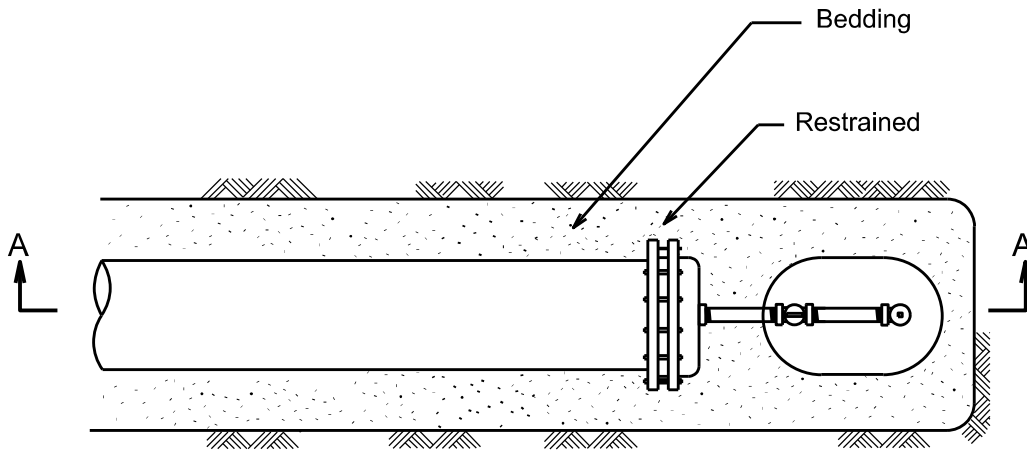
2" (TEMPORARY)
BLOW-OFF ASSEMBLY
ON 12" & 16" MAINS
(JOINT RESTRAINT)

APPROVED
March 2008

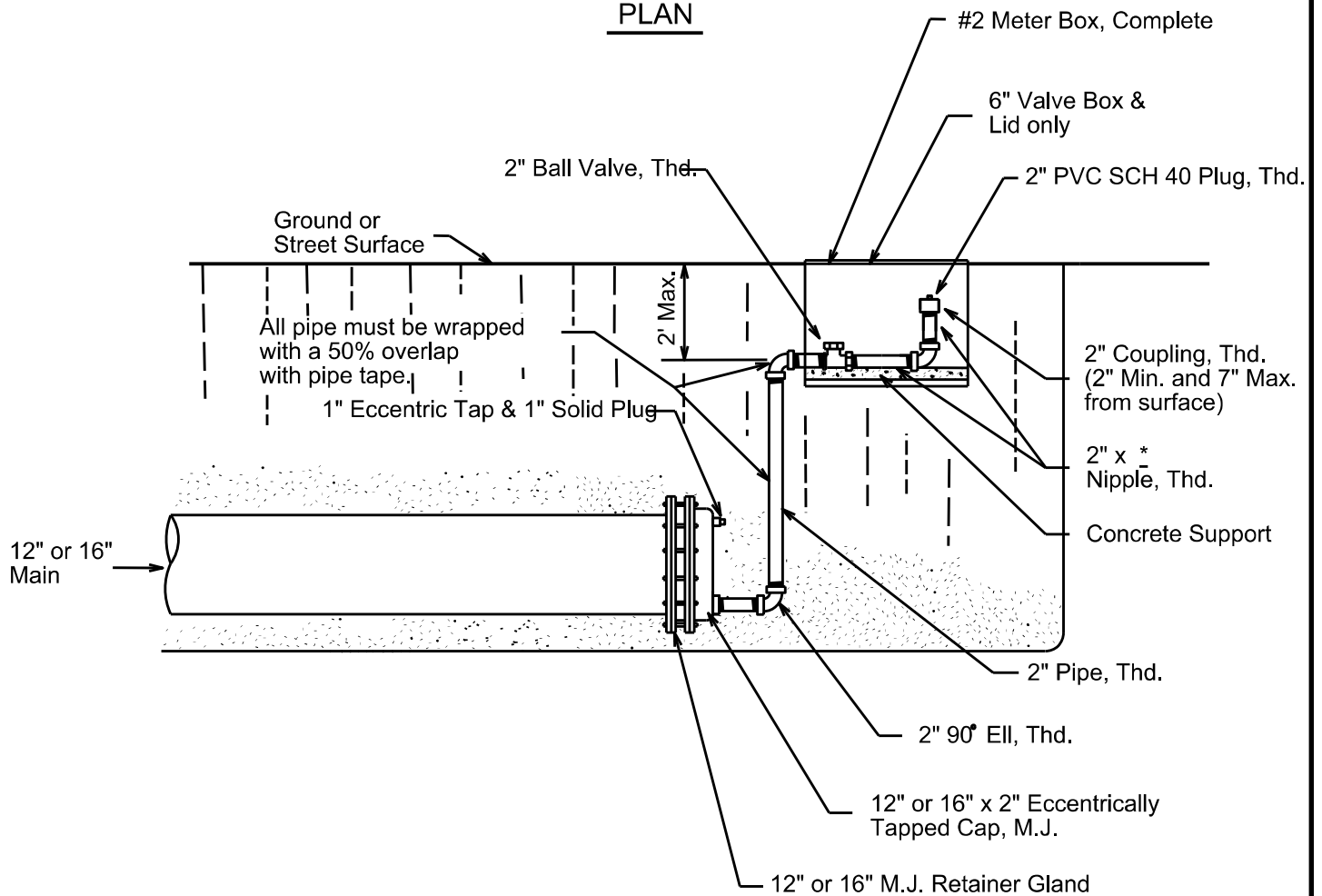
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SHEET
4 OF 4



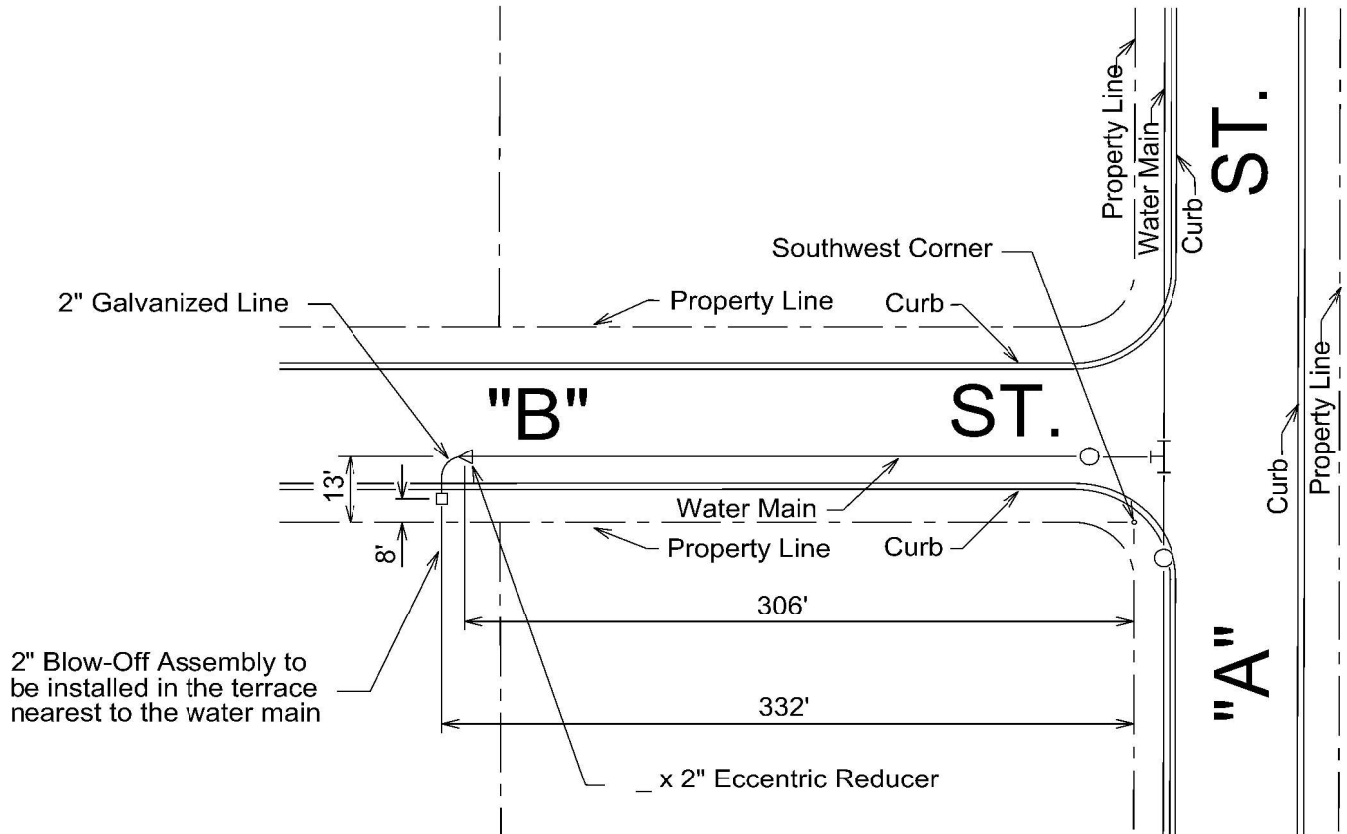
PLAN



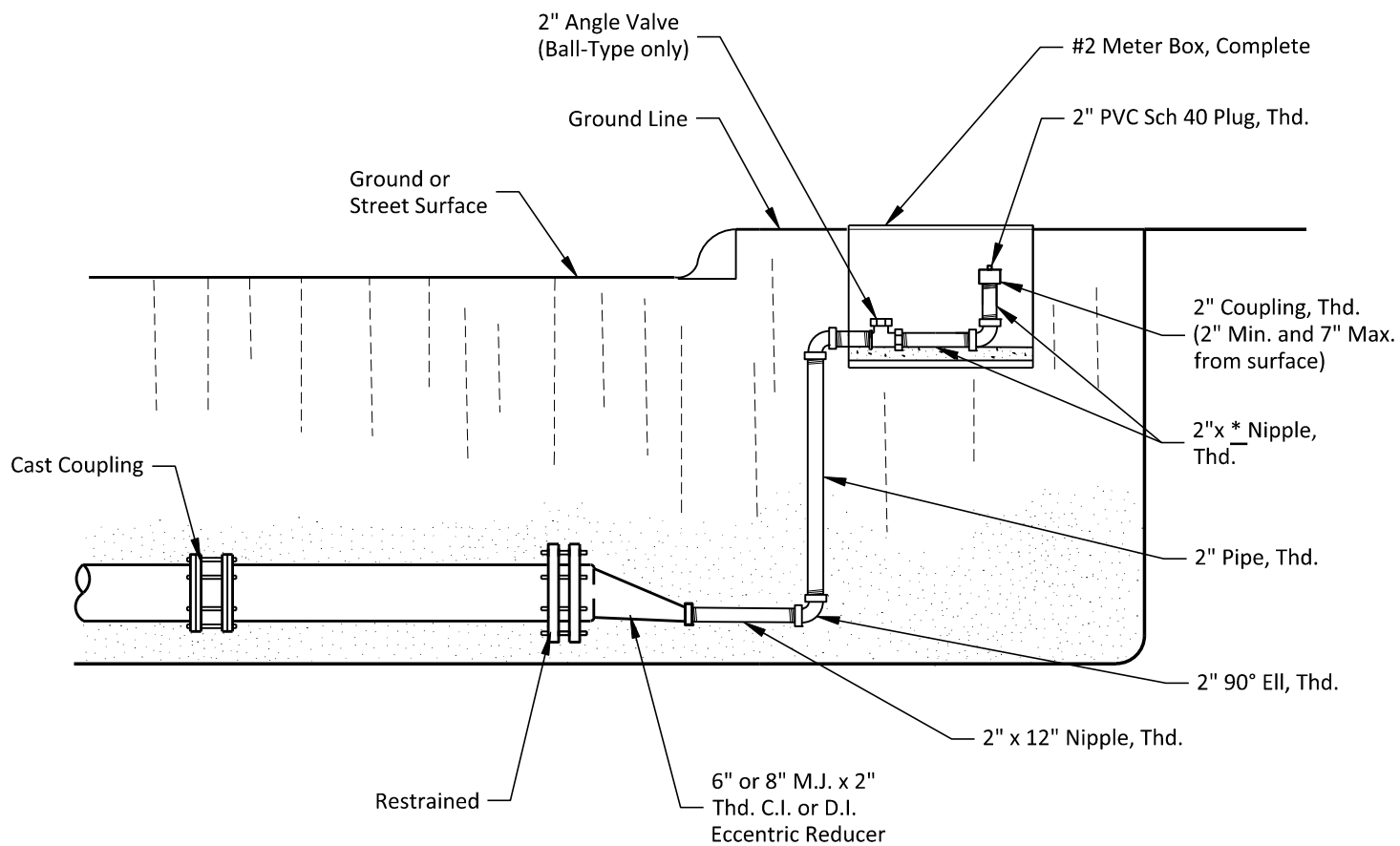
SECTION A-A

* Cut to fit in meter box.

PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	2" PERMANENT BLOW-OFF ASSEMBLY ON 12" & 16" MAINS	APPROVED	REVISED
		MARCH 2008	MAY 2013
		DD-844-02	SHEET 1 OF 5



BLOW-OFF MEASUREMENT: From the Southwest Corner of "A" St. and "B" St.
West 306' and North 13' to Eccentric Reducer, and
West 332' and North 8' to Blow-Off Assembly



* Cut to fit in meter box

PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

2" PERMANENT
BLOW-OFF ASSEMBLY ON
6" & 8" MAINS

APPROVED

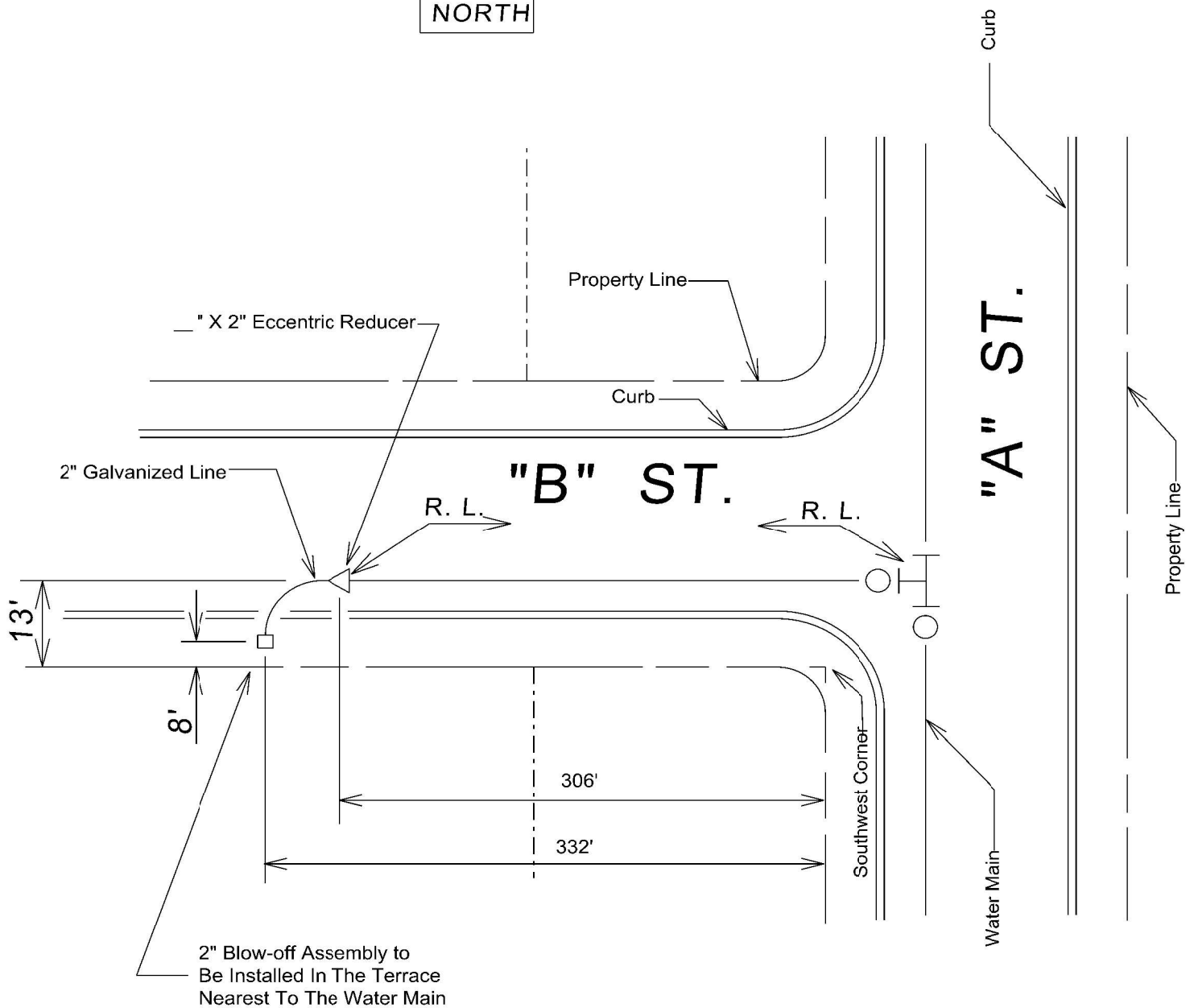
MARCH 2008

REVISED

AUG 2019

DD-844-02

SHEET
3 OF 5



2" BLOW-OFF MEASUREMENT:
FROM THE SOUTHWEST CORNER OF "A" ST. AND "B" ST.
WEST 306' AND NORTH 13' TO ECCENTRIC REDUCER, AND
WEST 332' AND NORTH 8' TO BLOW-OFF ASSEMBLY

R. L. = RESTRAINED LENGTHS TO BE
DETERMINED BY ENGINEER.

PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

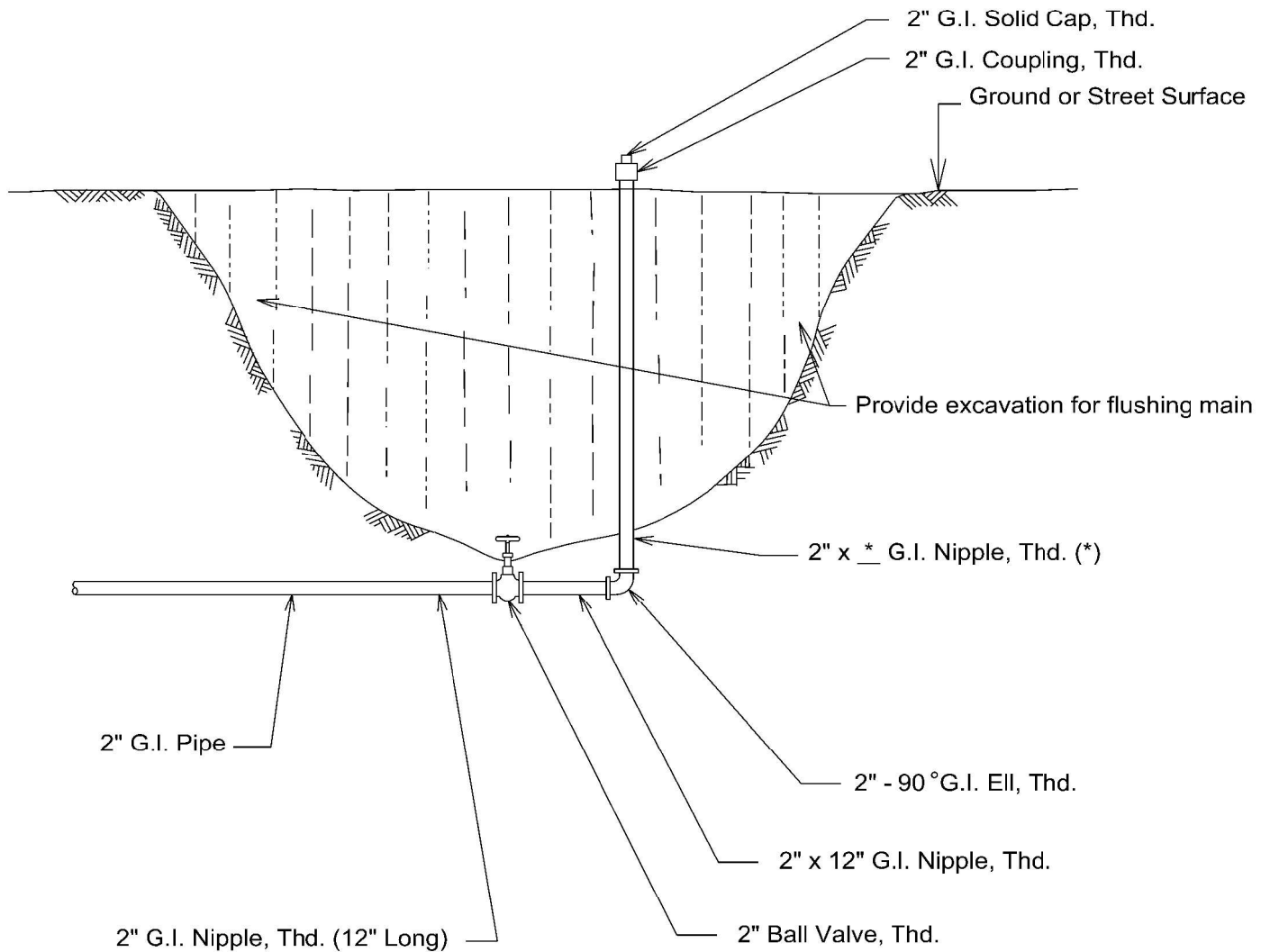
TYPICAL BLOW-OFF
ARRANGEMENT ON
DEAD END MAINS
(JOINT RESTRAINT)

APPROVED
March 2008

REVISED
AUG 2019

DD-844-02

SHEET
4 OF 5



* Cut as required to extend beyond excavation.

PROPERTY OF
SAN ANTONIO WATER SYSTEM
 SAN ANTONIO, TEXAS

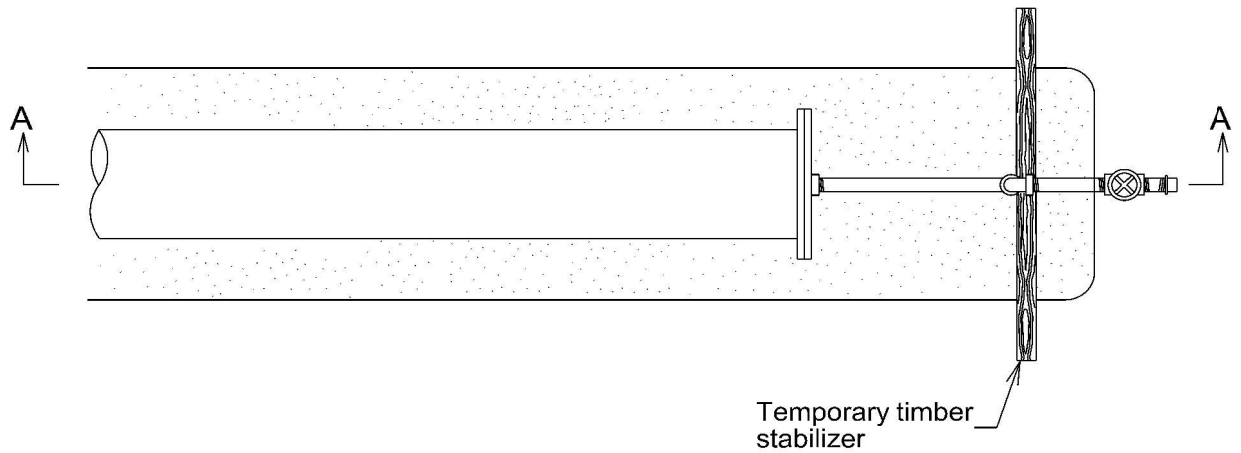
**INSTALLATION OF
 BLOW-OFF ASSEMBLY ON
 2" TEMPORARY MAIN**

APPROVED
 March 2008

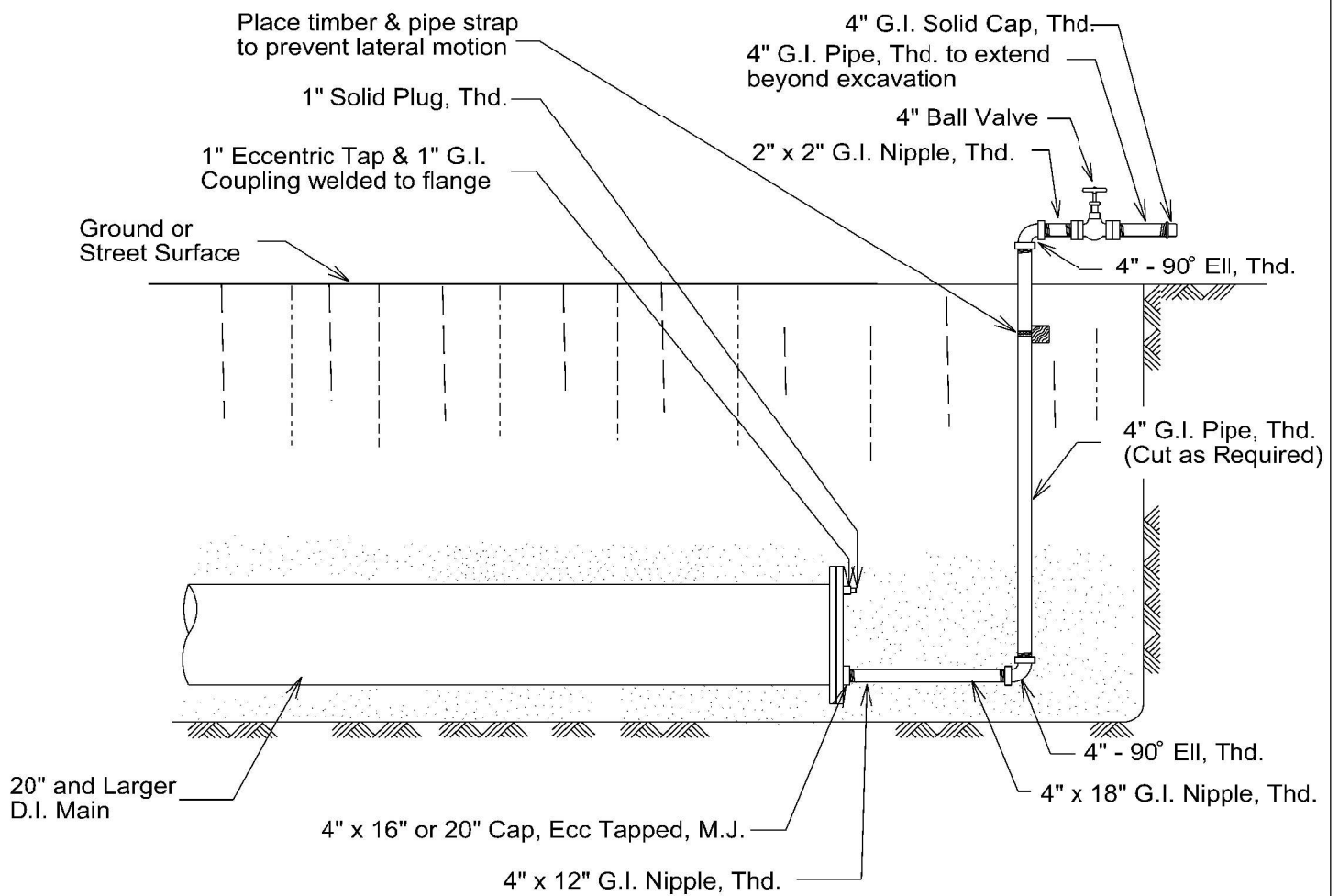
REVISED
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DD-844-03

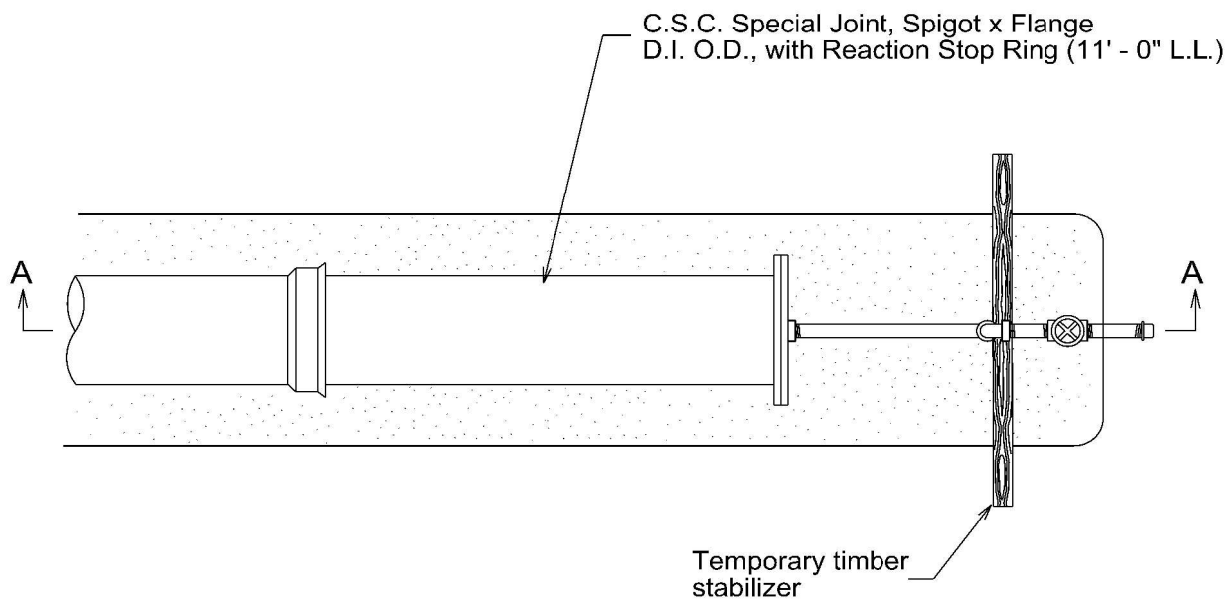
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1 OF 1



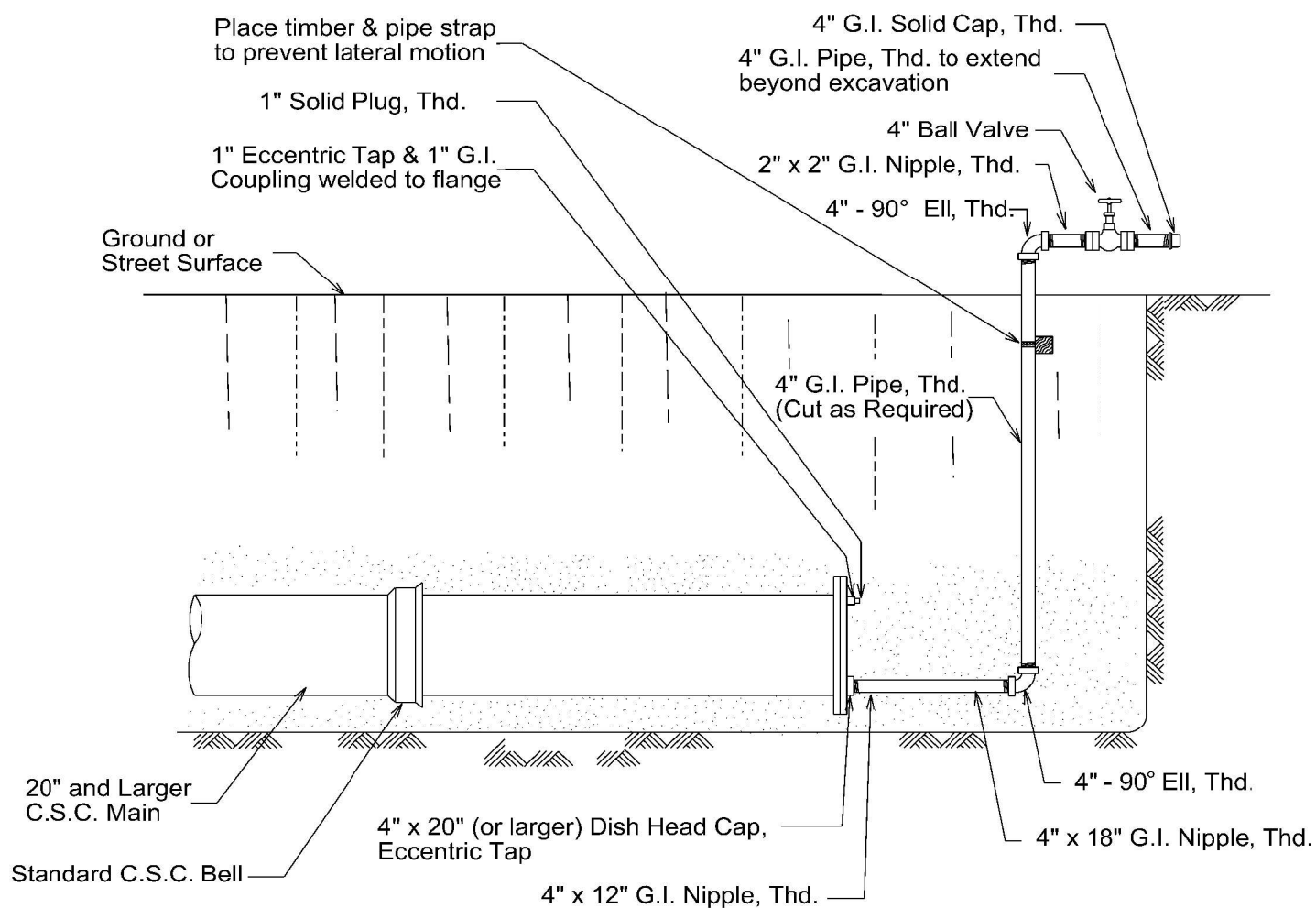
PLAN



SECTION A-A



PLAN



SECTION A-A

* Resilient Seat

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SAN ANTONIO, TEXAS

**4" TEMPORARY
BLOW-OFF ASSEMBLY
20" AND LARGER C.S.C. MAIN**

APPROVED

March 2008

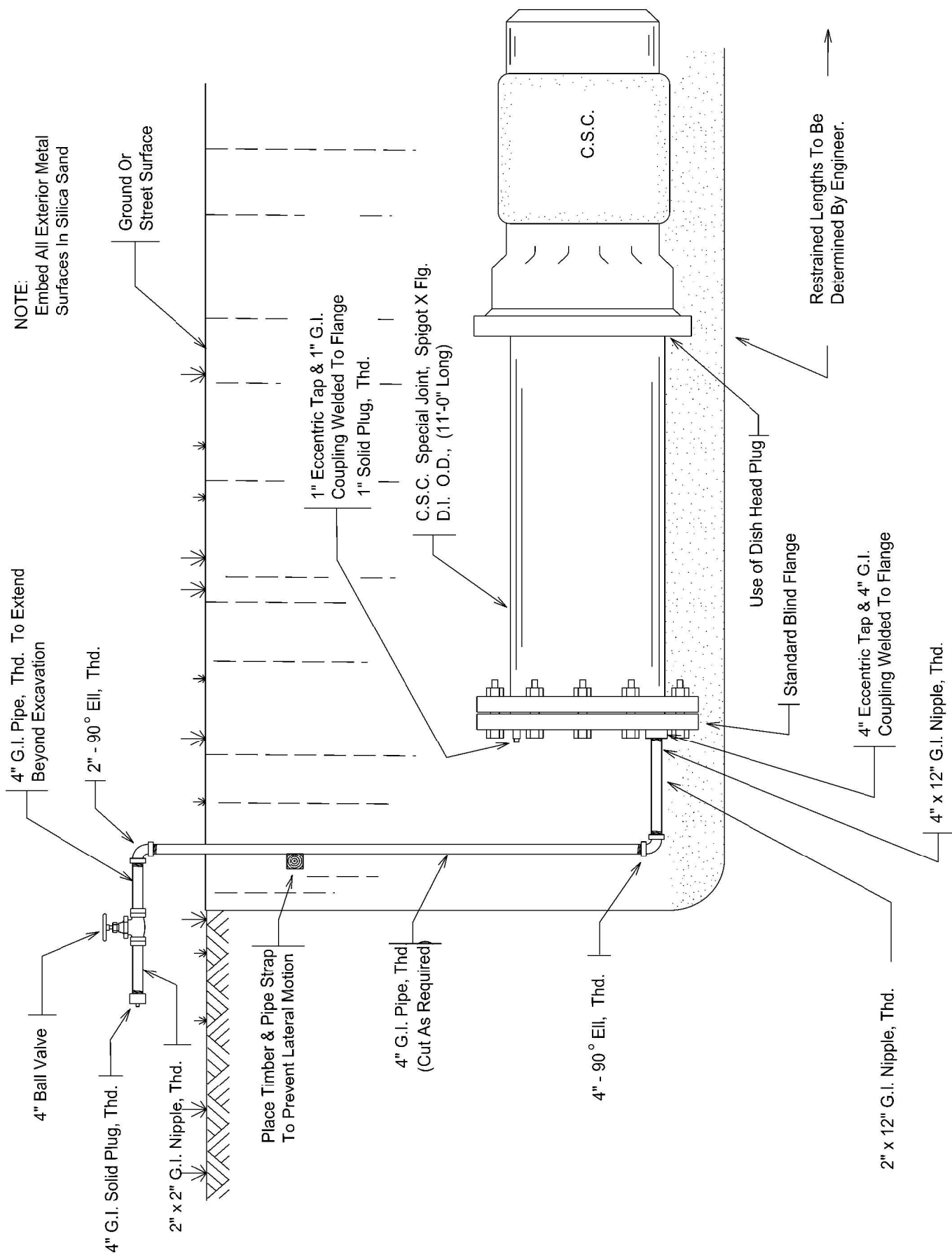
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DD-844-04

SHEET
2 OF 4

NOTE:
Embed All Exterior Metal
Surfaces In Silica Sand



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SAN ANTONIO, TEXAS

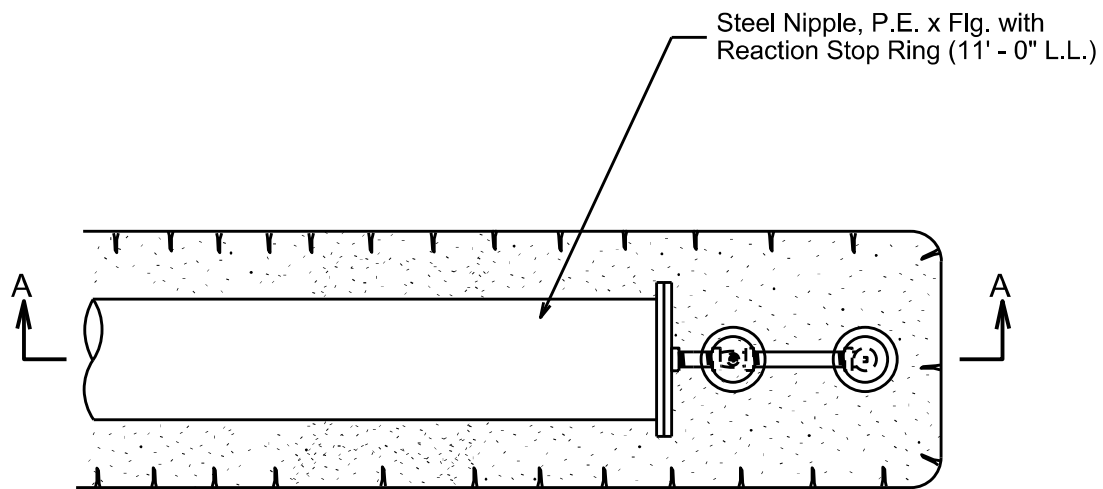
4" (TEMPORARY)
BLOW-OFF ASSEMBLY
20" AND LARGER C.S.C. MAIN
(JOINT RESTRAINT)

APPROVED
March 2008

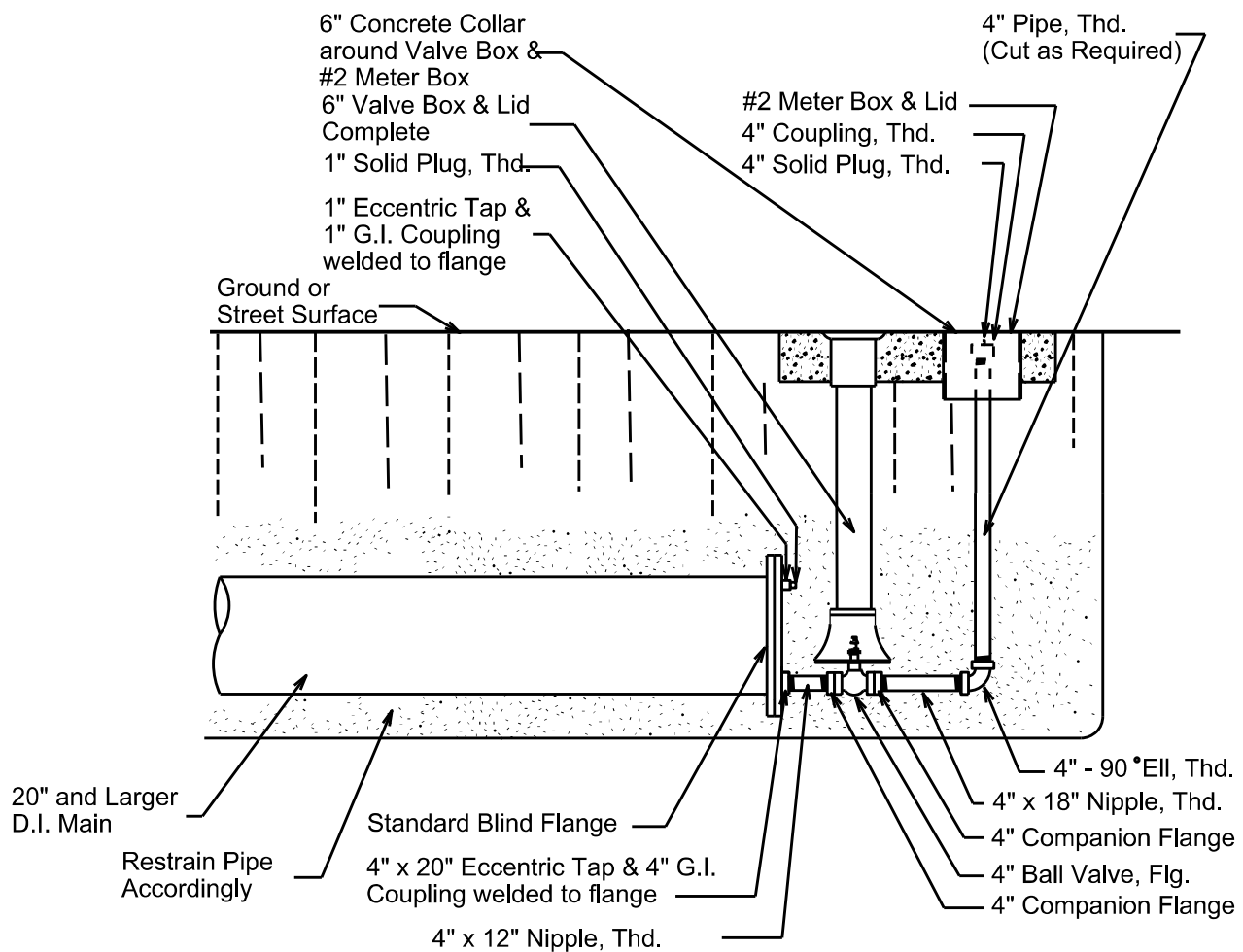
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AUG 2019

DD-844-04

SHEET
4 OF 4



PLAN



SECTION A-A

PROPERTY OF
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SAN ANTONIO, TEXAS

**4" PERMANENT
BLOW-OFF ASSEMBLY
20" AND LARGER D.I. MAIN**

APPROVED

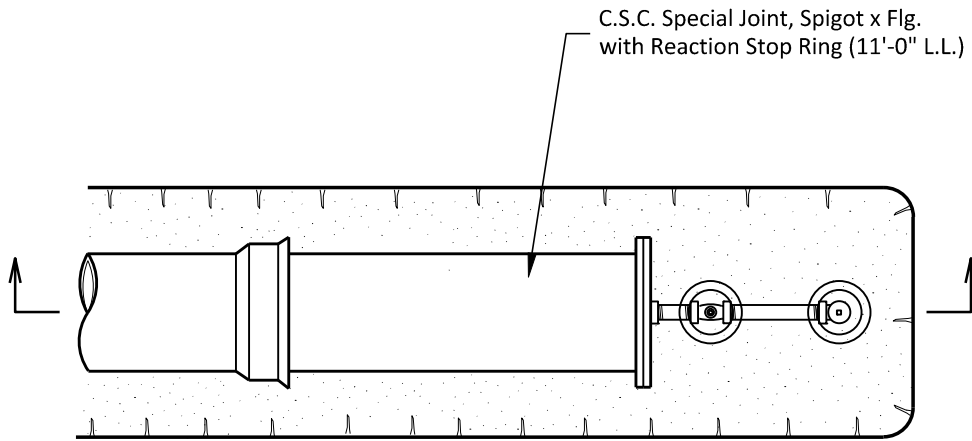
March 2008

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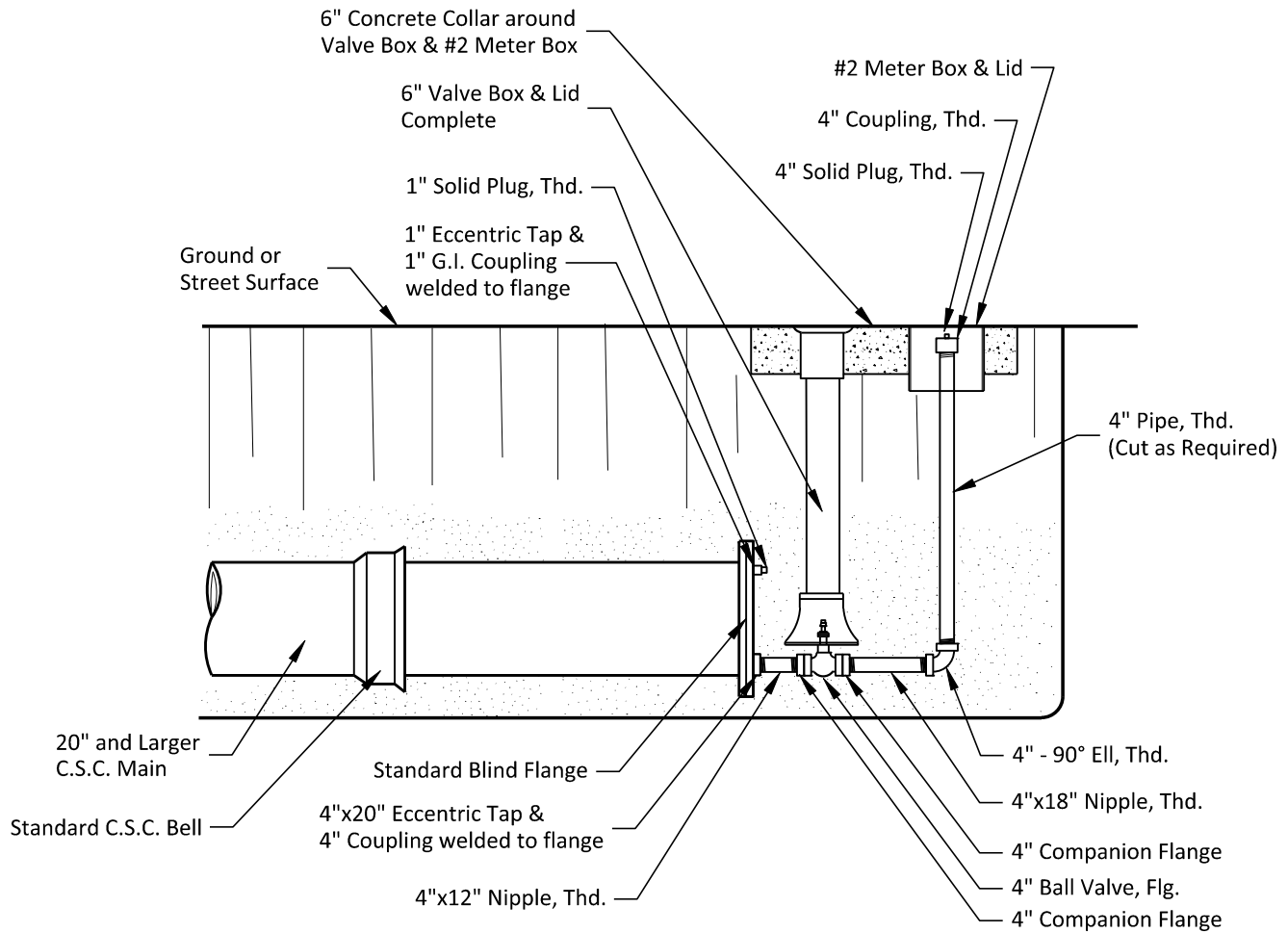
MAY 2013

DD-844-05

SHEET
1 OF **4**



PLAN



SECTION A-A

PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

**4" PERMANENT
BLOW-OFF ASSEMBLY
20" AND LARGER C.S.C. MAIN**

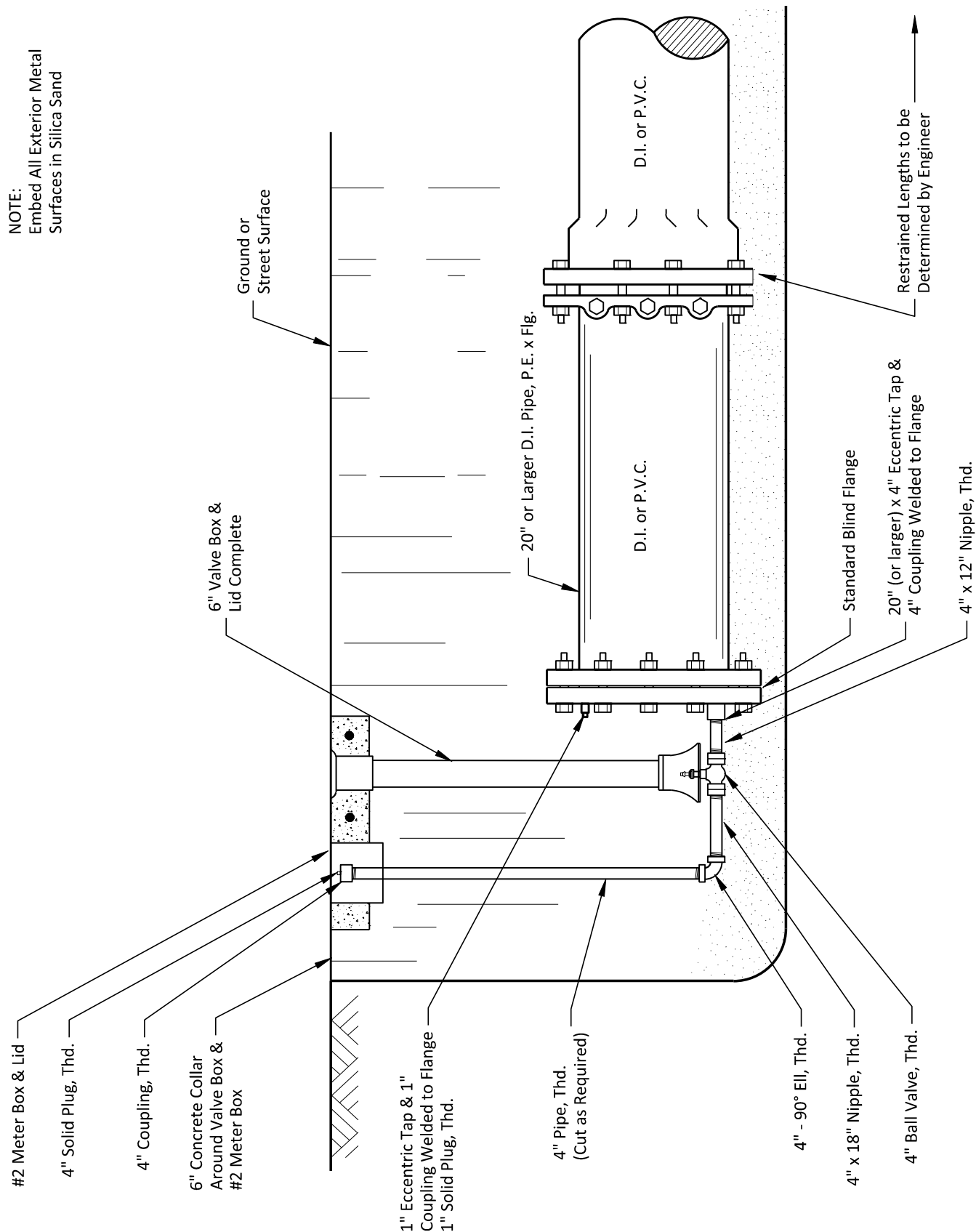
APPROVED
MARCH 2008

REVISED
AUGUST 2019

DD-844-05

SHEET
2 OF 4

NOTE:
Embed All Exterior Metal
Surfaces in Silica Sand



PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

**4" (PERMANENT)
BLOW-OFF ASSEMBLY ON 20"
AND LARGER D.I./P.V.C. MAIN
(JOINT RESTRAINT)**

APPROVED
MARCH 2008

REVISED
AUGUST 2019

DD-844-05

SHEET
3 OF 4

