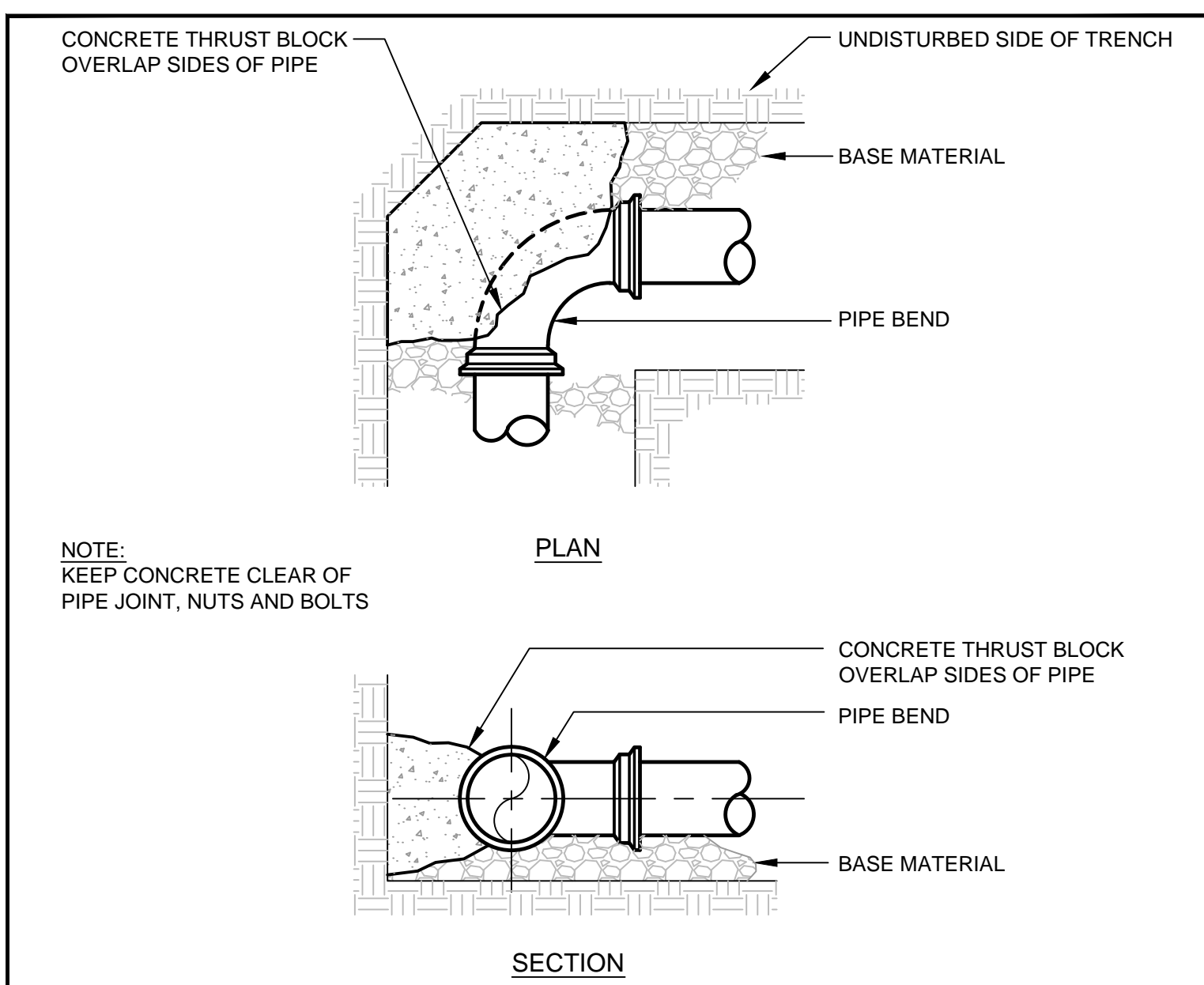


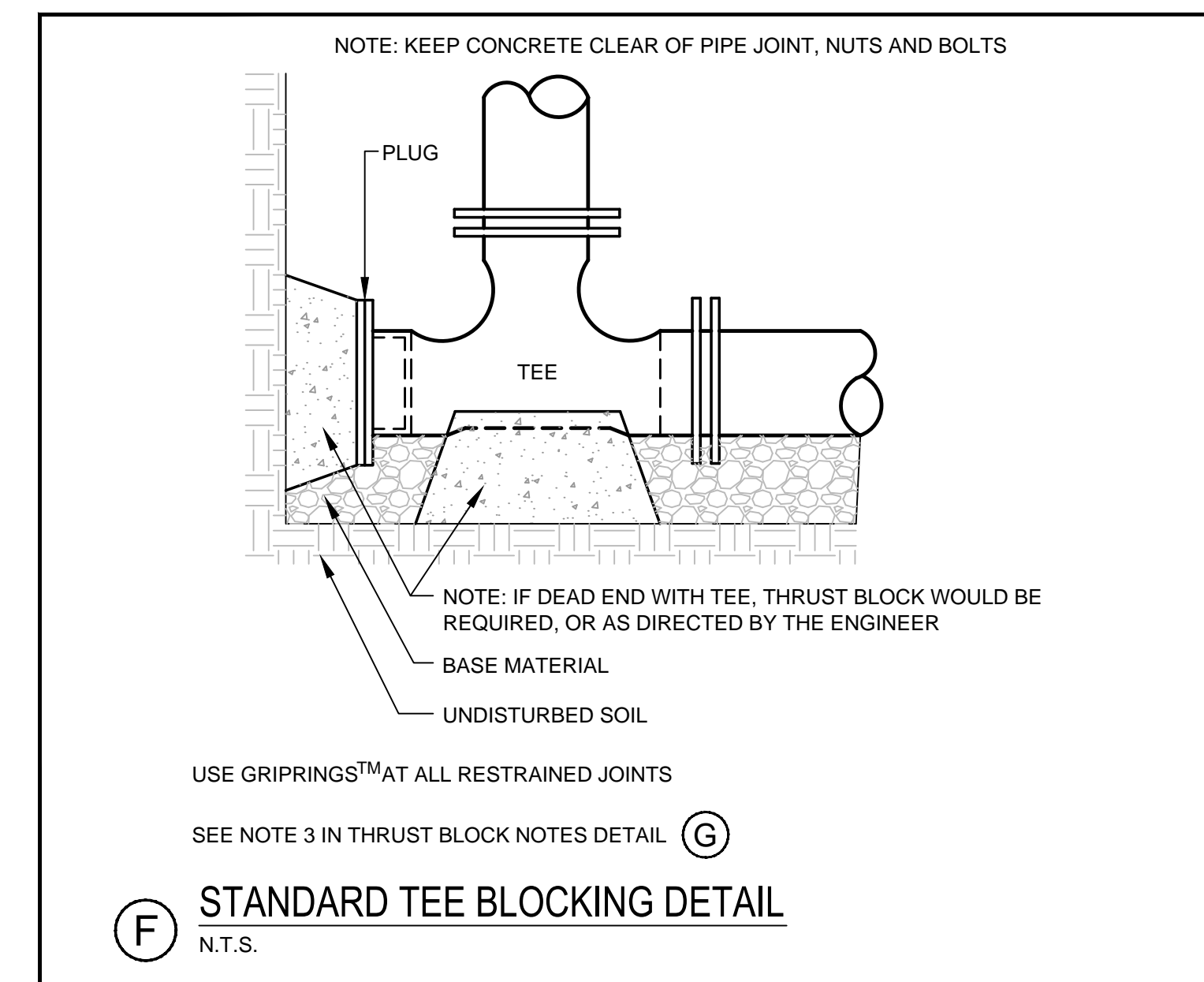
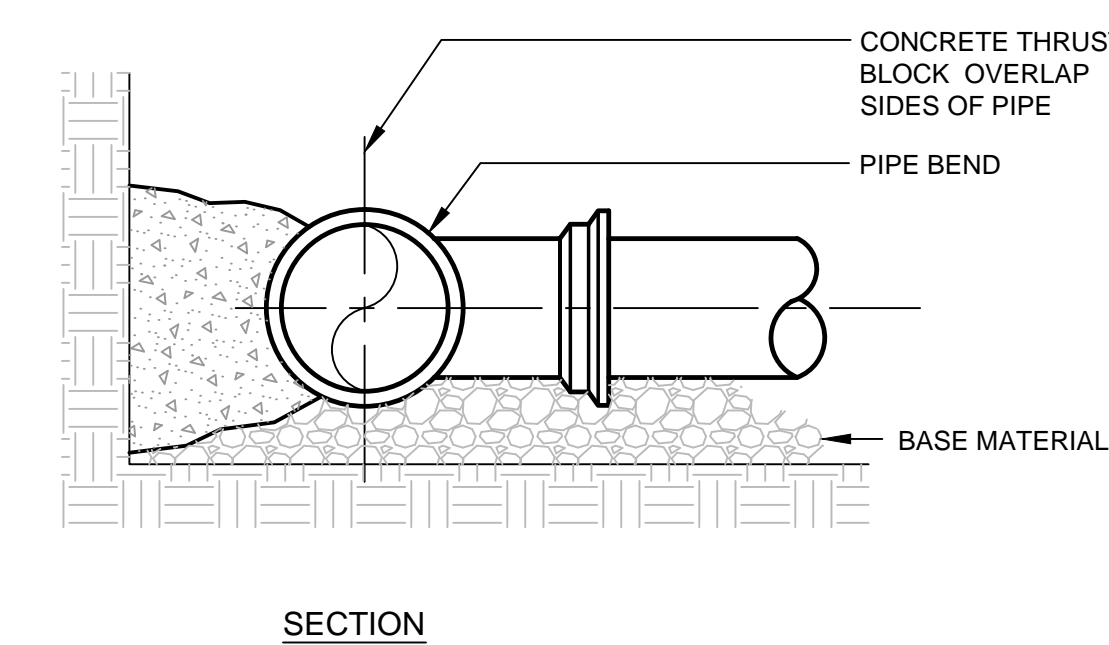
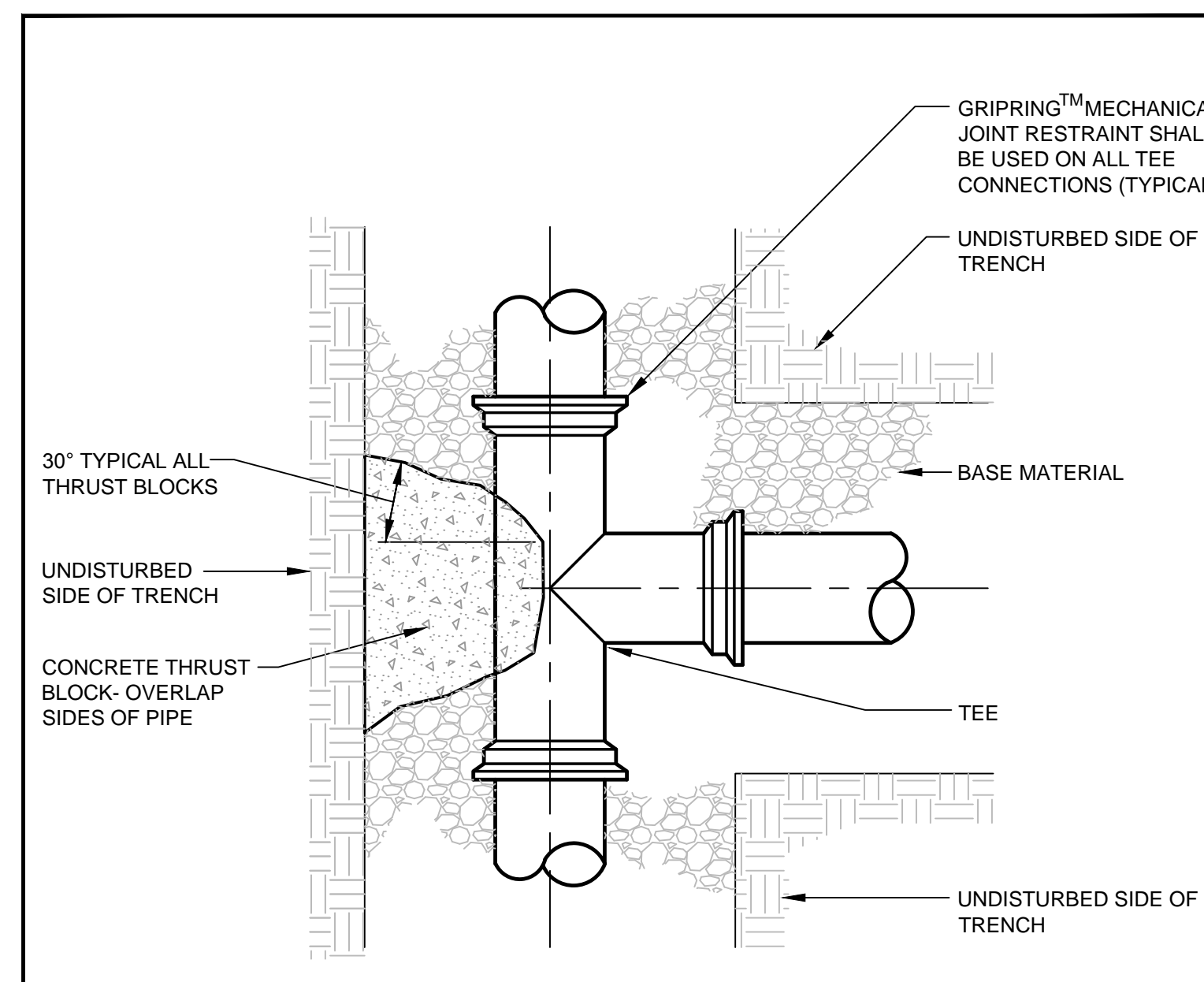
PIPE SIZE IN.	BOLT SIZE IN.	RANGE OF TORQUE FT-LB.	LENGTH OF WRENCH IN.*
2 - 3	5/8	45 - 60	8
4 - 24	3/4	75 - 90	10
30 - 36	1	85 - 100	12
42 - 48	1 1/4	105 - 120	14

* THE TORQUE LOADS MAY BE APPLIED WITH TORQUE MEASURING OR TORQUE INDICATING WRENCHES, WHICH MAY ALSO BE USED TO CHECK THE APPLICATION OF APPROXIMATE TORQUE LOADS APPLIED BY A PERSON TRAINED TO GIVE AN AVERAGE PULL ON A DEFINITE LENGTH OF REGULAR SOCKET WRENCH.



THRUST/RETAINER GLAND SCHEDULE		
1/4 BEND	(90°)	USE POURED-IN-PLACE THRUST BLOCK WITH GRIPRING™ MECHANICAL JOINT RESTRAINT
1/8 BEND	(45°)	THRUST BLOCK w/ GRIPRING™
1/16 BEND	(22 1/2°)	THRUST BLOCK w/ GRIPRING™
1/32 BEND	(11 1/4°)	THRUST BLOCK w/ GRIPRING™

- THE ABOVE SCHEDULE IS SUBJECT TO THE APPROVAL OF THE ON-SITE INSPECTOR DUE TO SOILS AND WORKING PRESSURES IN THE AREA.
- NOTES:
- THE PORTLAND WATER DISTRICT MAY HAVE INSPECTION FEES AND REQUIRE OBSERVATION OF ALL PIPING INSTALLATION BEFORE BURIAL. REFER TO SPECIFICATIONS.
 - FOR WATER MAIN LAYOUT SEE DRAWINGS C-4.0
 - FOR WATER MAIN PROFILE SEE CONSTRUCTION DRAWINGS C-11.0
 - FOR WATER MAIN TRENCH SEE DETAILS ON THIS SHEET
 - REFER TO PORTLAND WATER DISTRICT SPECIFICATIONS FOR TESTING AND CHLORINATION REQUIREMENTS.
 - ALL HYDRANTS AND VALVES TO BE EPOXY COATED, NUTS AND BOLTS TO BE STAINLESS STEEL.
 - SERVICE RODS FOR DOMESTIC SERVICE OR AIR VALVES TO BE STAINLESS STEEL.



BEARING SURFACE REQUIRED IN SQUARE FEET

PIPE SIZE	1/32 BEND	1/16 BEND	1/8 BEND	1/4 BEND	TEES/CAPS
6\"/>					

(B) TYPICAL THRUST BLOCK PLACEMENT BENDS
N.T.S.

(D) TYPICAL THRUST BLOCK PLACEMENT ON TEES
N.T.S.

(G) THRUST BLOCK NOTES
N.T.S.

17.03.29
YJAW/DD
By
SRB
Appr.
Revision
1. SUBMITTED TO CITY FOR PRELIMINARY SHEET APPLICATION

File Name: 195350337 DETAILS DED SRB SRB 16.11.29
DWN. CHKO. DSGN. DATE

Permit-Seal

 Client/Project
BRUNER/COTT

CHILDREN'S MUSEUM & THEATRE OF MAINE
THOMPSON'S POINT - PORTLAND, MAINE

Title
WATER SERVICE DETAILS

Project No. 195350337 Scale AS NOTED

Sheet

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