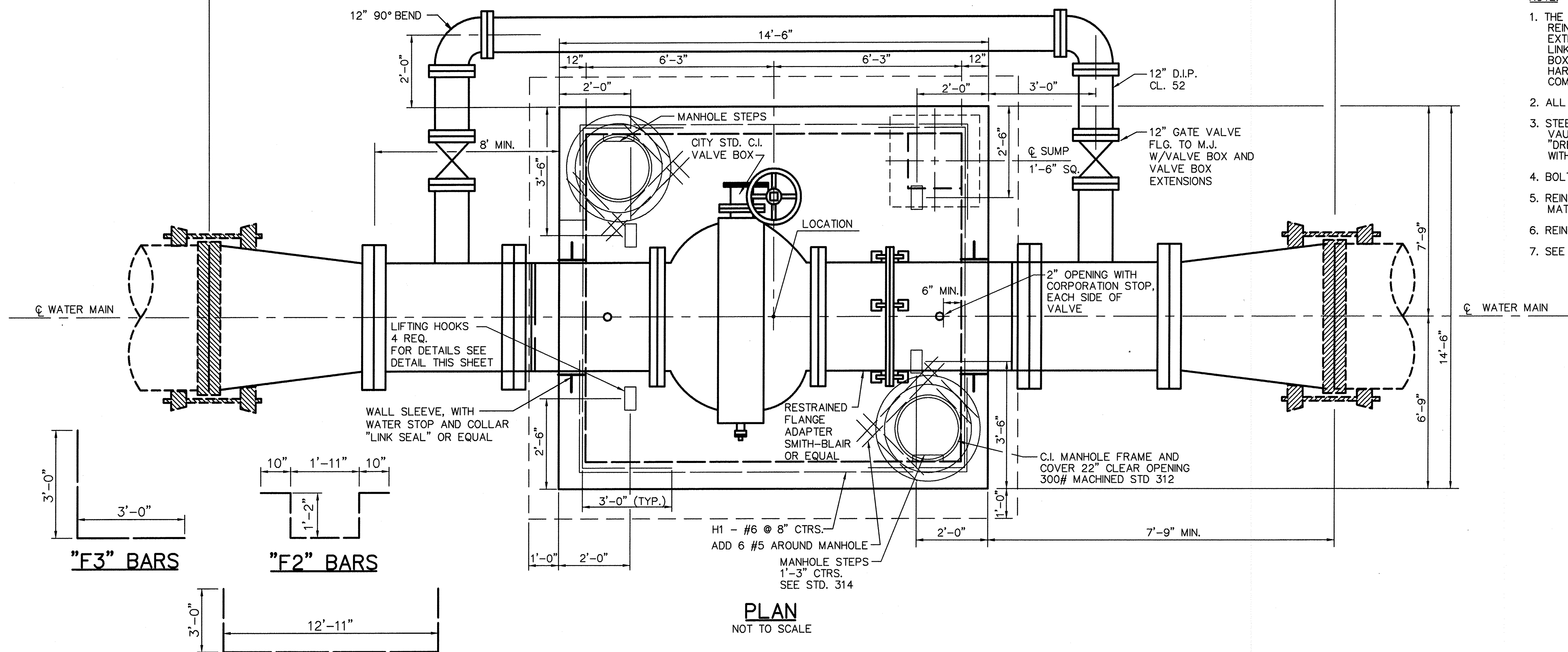
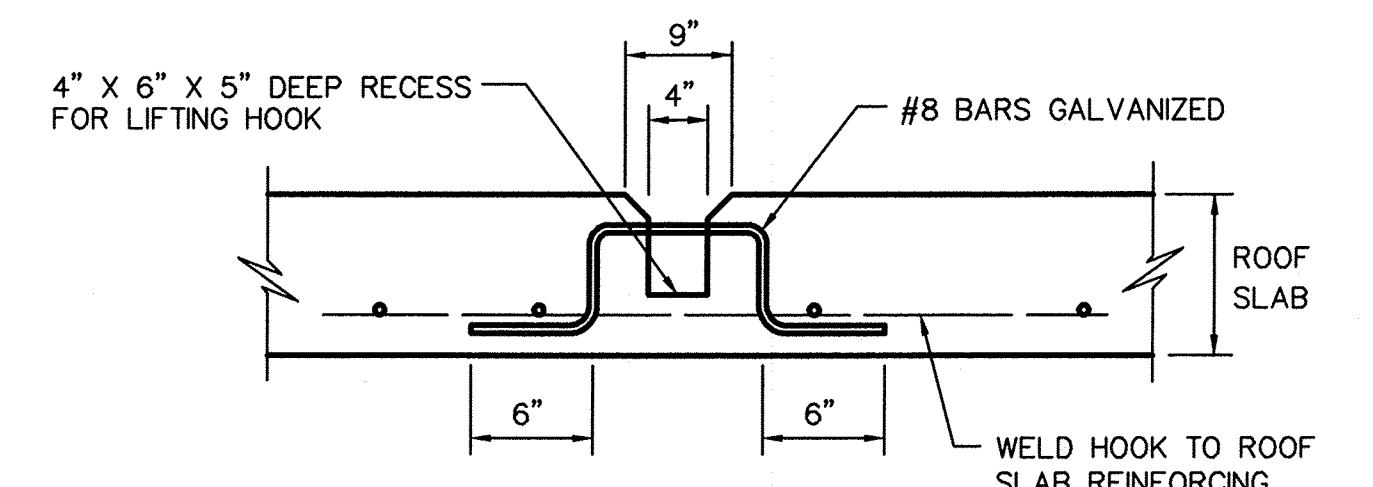


PAY LIMITS OF BALL VALVE ASSEMBLY AND VAULT  
RESTRAINED JOINTS



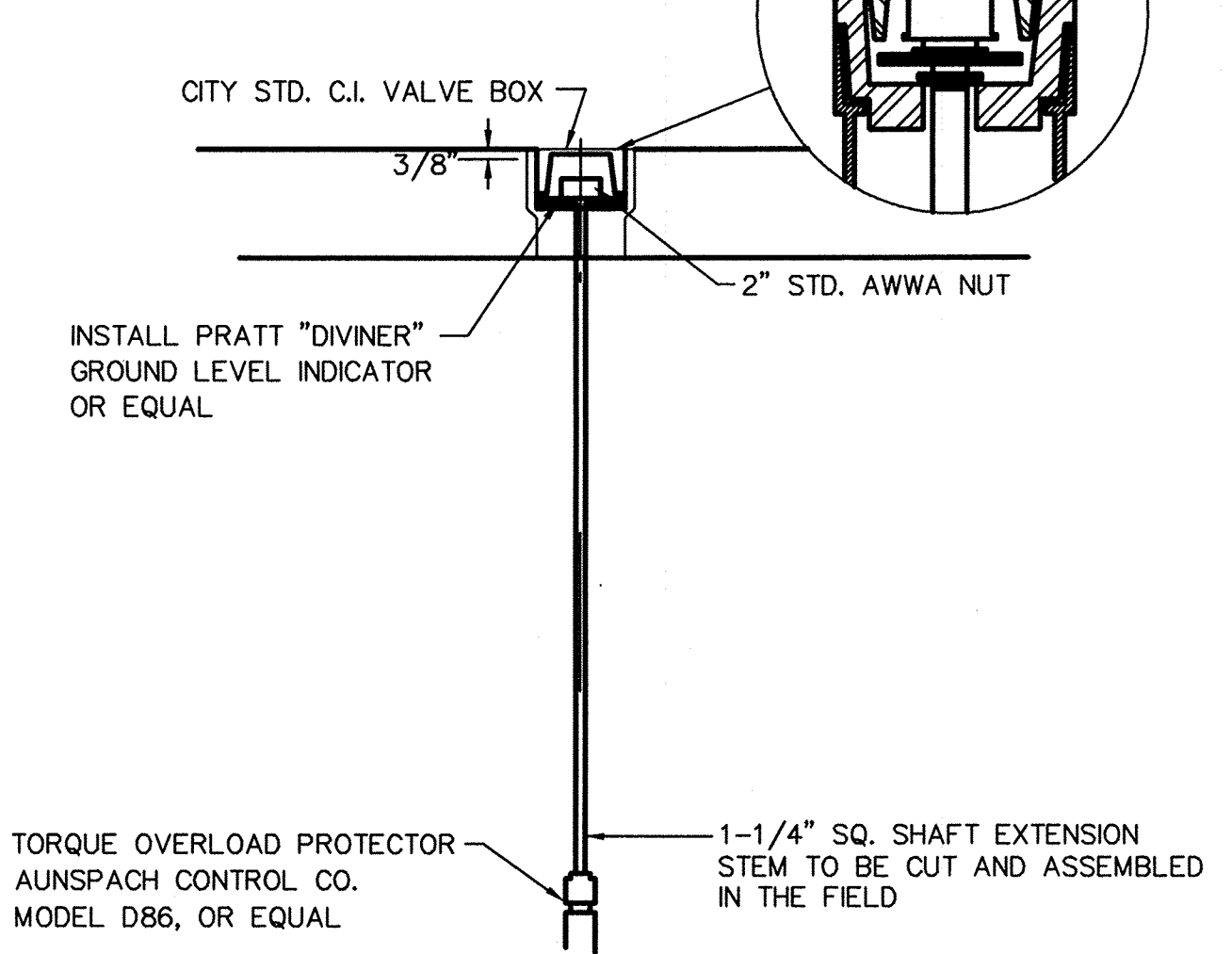
NOTE:

1. THE BALL VALVE ASSEMBLY AND VAULT SHALL INCLUDE, BUT NOT LIMITED TO, CLEARING, EXCAVATION, REINFORCED CONCRETE, LIFTING HOOKS, CASTINGS, BALL VALVE WITH WHEEL AND OPERATOR NUT VALVE EXTENSION STEM WITH HORIZONTAL SUPPORTS, INDICATOR, RESTRAINED ADAPTERS, REDUCER, WALL SLEEVE, LINK SEAL, ALL PIPING, FITTINGS, BYPASS PIPING, GATE VALVES, GATE VALVE WITH VALVE BOX AND VALVE BOX EXTENSION, CATHODIC PROTECTION, 2" CORPORATION COCK, TRANSITION COUPLING WITH AWWA M11 HARNESS AND LUG ASSEMBLY, IF USED, BACKFILL, RESTORATION, AND APPURTENANCES REQUIRED FOR A COMPLETE INSTALLATION.
2. ALL BYPASS PIPING TO BE RESTRAINED MECHANICAL JOINTS, EBBA MEGALUGS SERIES #1100, OR EQUAL.
3. STEEL PIPE, CONCRETE PIPE (AWWA 301), OR DUCTILE IRON PIPE (CLASS 52) SHALL BE USED THROUGH VALVE VAULTS. DRESSER COUPLINGS, STYLE 38, TO BE INSTALLED AT A MINIMUM DISTANCE OF 8' FROM VALVE VAULT. "DRESSERLOY" BOLTS SHALL BE USED ON ALL DRESSER COUPLINGS. HARNESS AND LUG ASSEMBLY REQUIRED WITH EITHER IRON OR STEEL. ROTATE LUG ASSEMBLY SO AS NOT TO INTERFERE WITH GATE VALVE.
4. BOLTS AND NUTS SHALL CONFORM TO ASTM A307 GRADE B AND ASTM A563, GRADE A, RESPECTIVELY.
5. REINFORCING STEEL SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO MATERIAL DELIVERED TO THE JOB SITE.
6. REINFORCING STEEL SHALL BE GR. 60.
7. SEE STD 330 FOR CATHODIC PROTECTION.



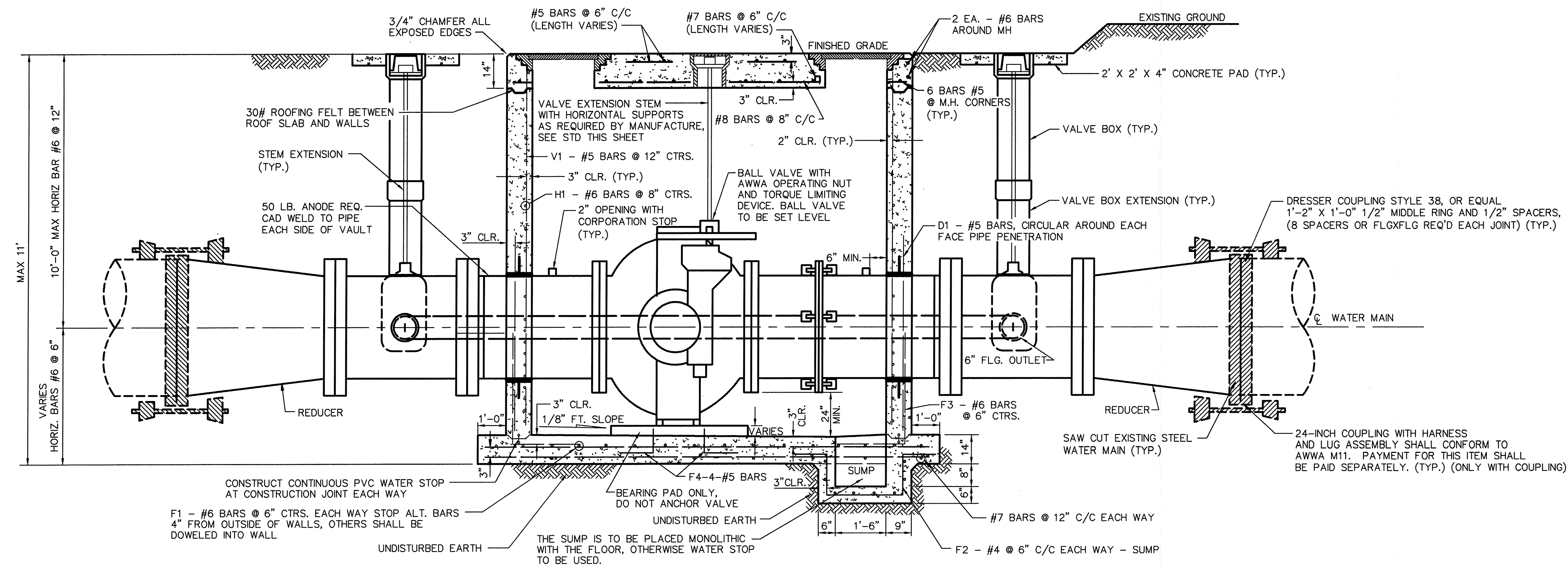
NOTE:  
IN SIDEWALKS, COVER HOOK OPENING WITH A STEEL PLATE, SECURE WITH SCREWS AND EXPANSION SLEEVE ANCHORS

DETAIL OF C.I. ADAPTOR



STEM EXTENSION FOR BALL VALVE  
NOT TO SCALE

FOR REFERENCE ONLY



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*[Signature]*  
CITY ENGINEER  
*[Signature]*  
DESIGN MANAGER

CITY OF TULSA, OKLAHOMA  
ENGINEERING SERVICES DEPARTMENT  
30" THRU 48" BALL VALVE VAULT  
UNDER H-20 LOADING  
DATE: OCTOBER 2013  
STD. 326

| REVISION | BY | DATE |
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