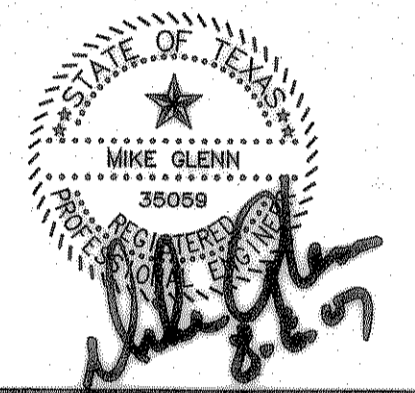


Consultants:  
 CIVIL: GLENN ENGINEERING CORP  
 STRUCTURAL: SHW GROUP, LLP  
 MEP: ESTES McCCLURE AND ASSOCIATES.  
 FOOD SERVICE: H. G. RICE Inc.  
 LANDSCAPING: GRUBBS RAMSEY

**FINAL PLANS FOR BIDDING AND CONSTRUCTION**



**Rockwall Independent School District**

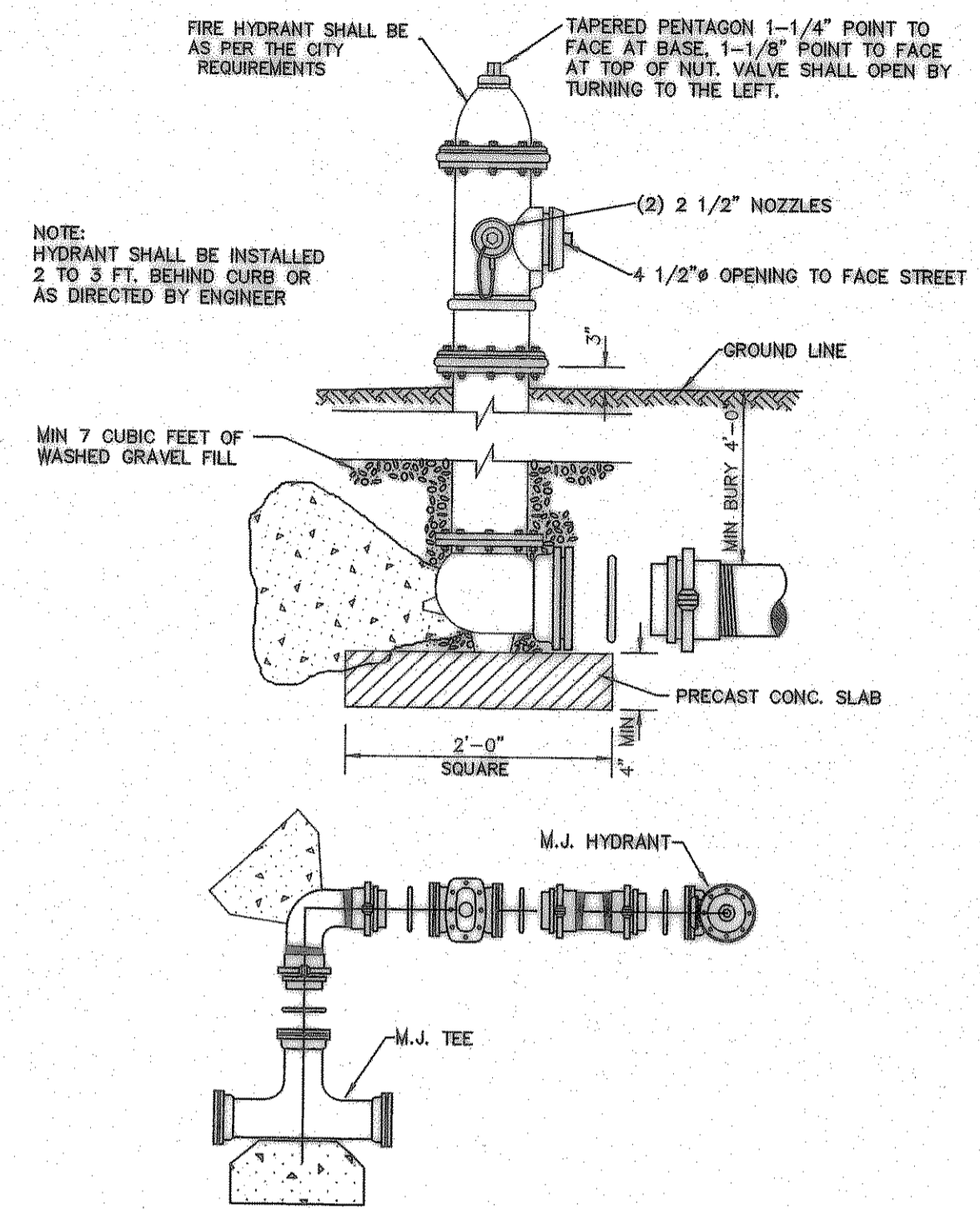
**ROCKWALL ELEMENTARY SCHOOL #12 ROCKWALL, TEXAS**

Project Number: 1441.05.020  
 Drawing Date: 7/18/2006  
 Drawn: R.HOWMAN  
 Checked: RAH  
 Scale: AS SHOWN  
 ACAD File: fontanna-Details-ALL.dwg  
 © 2006 SHW Group, LLP

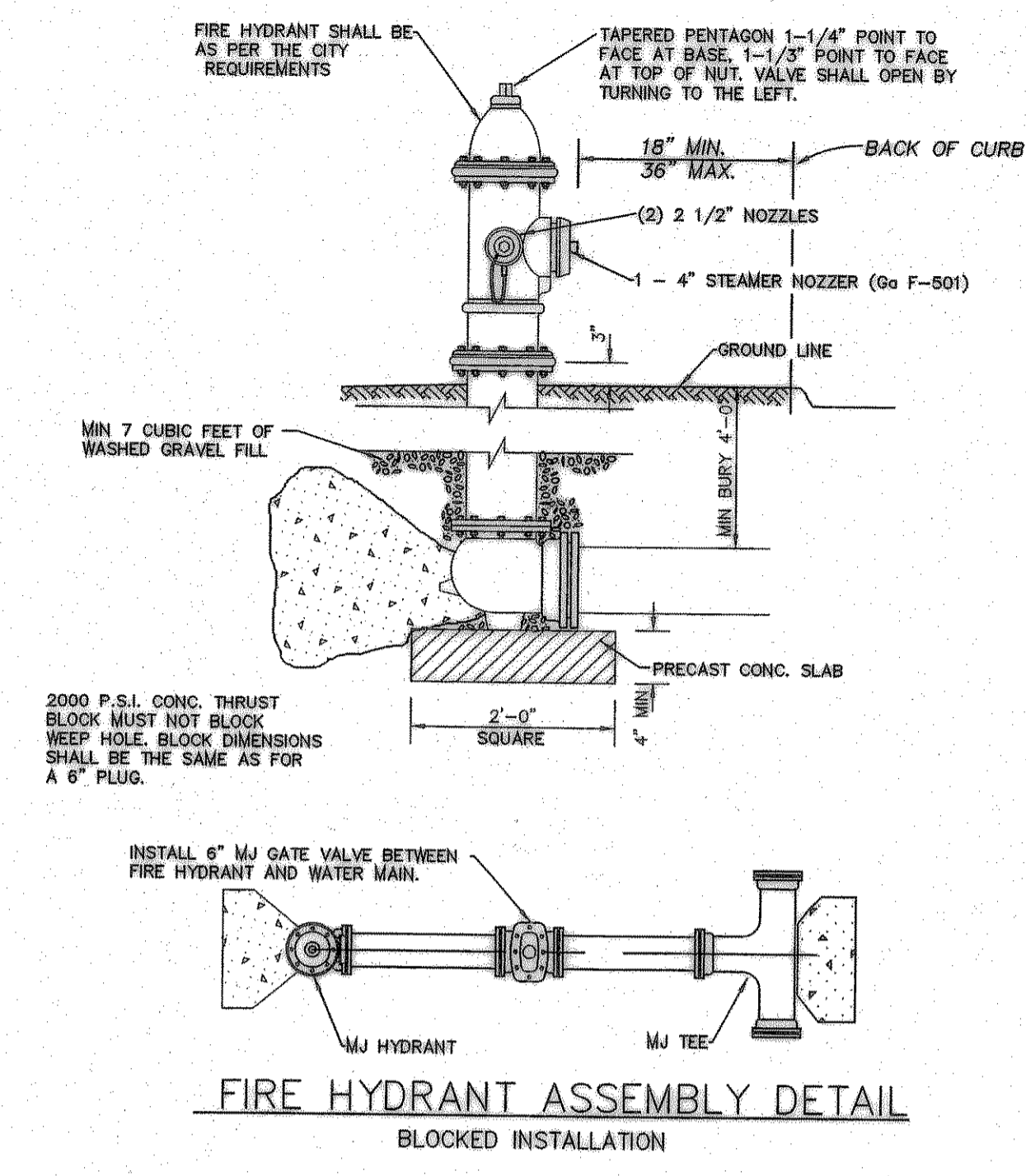
Revisions:

1	06/01/2006	CITY COMMENTS
2	08/15/2006	CITY COMMENTS
3	10/23/2006	WATER REVISIONS

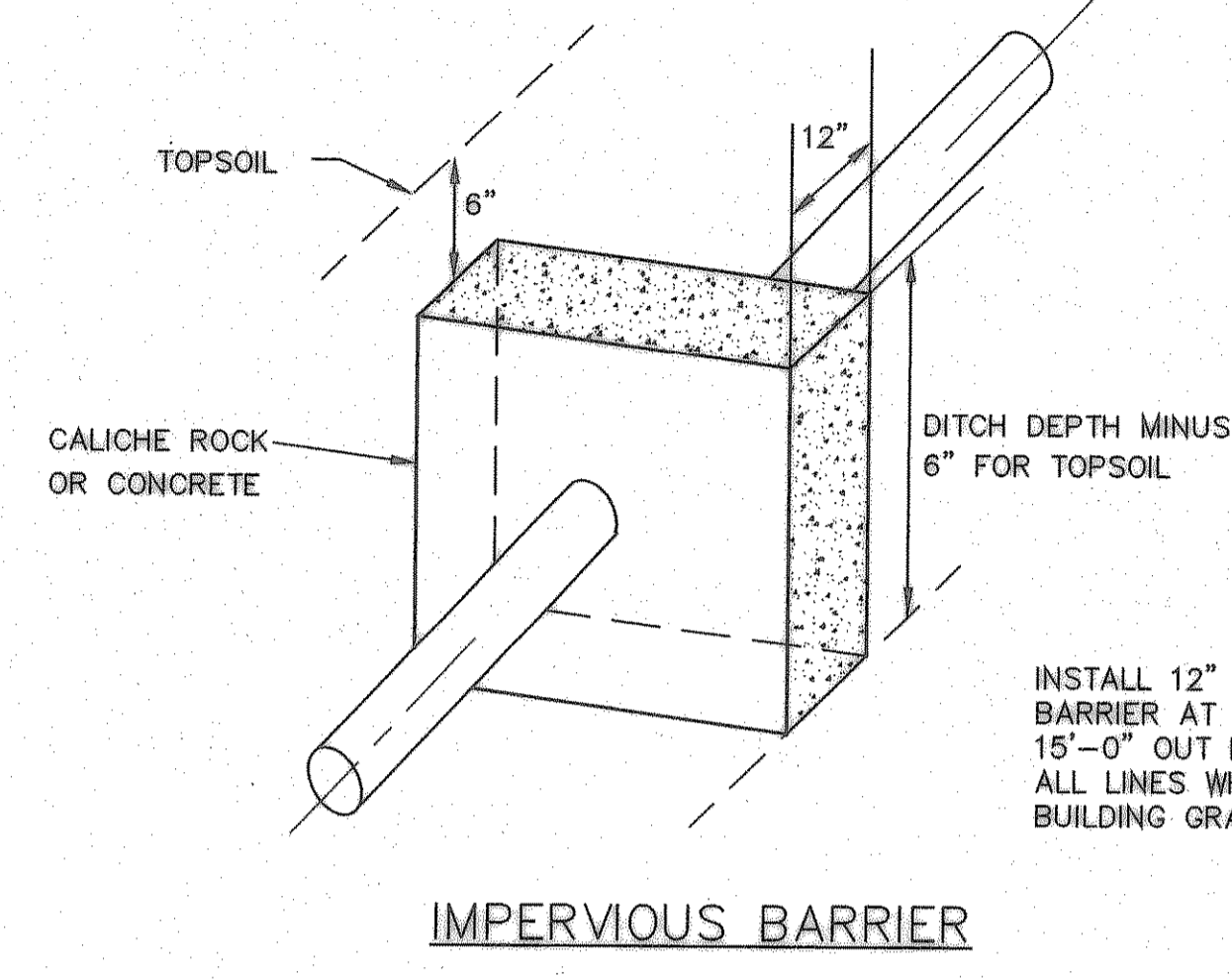
Sheet Title:  
**UTILITY DETAILS**



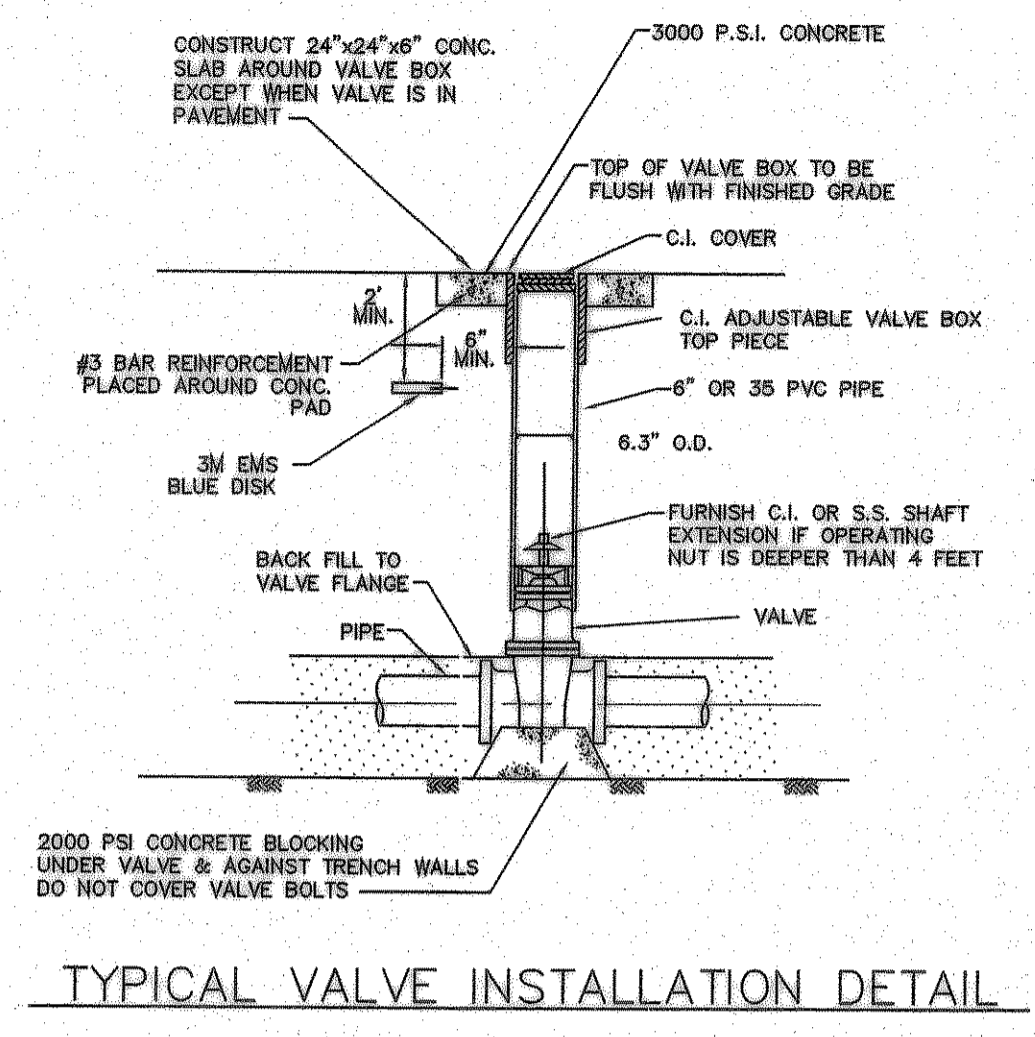
**FIRE HYDRANT ASSEMBLY DETAIL RESTRAINED JOINT INSTALLATION**  
 NOTE: USE WHERE THERE IS INSUFFICIENT UNDISTURBED TRENCH TO BLOCK HYDRANT.



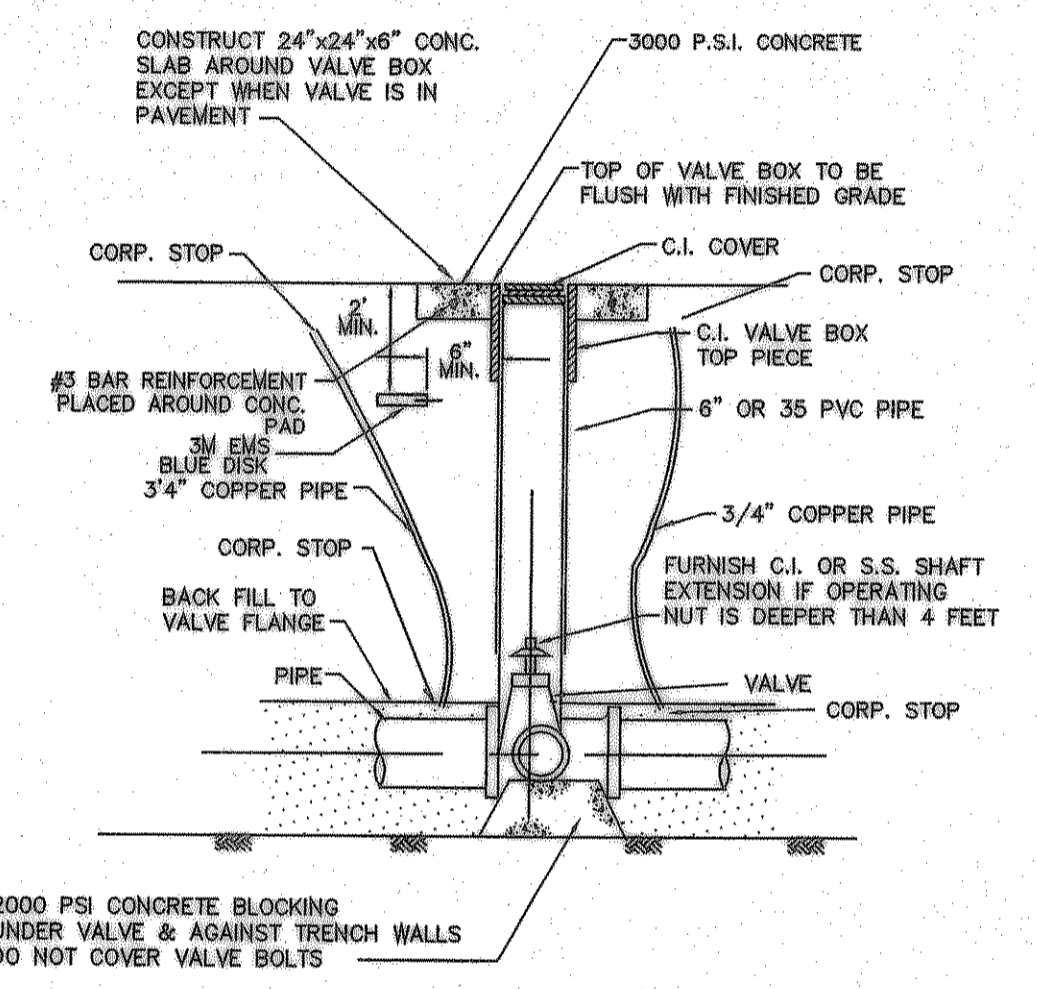
**FIRE HYDRANT ASSEMBLY DETAIL BLOCKED INSTALLATION**



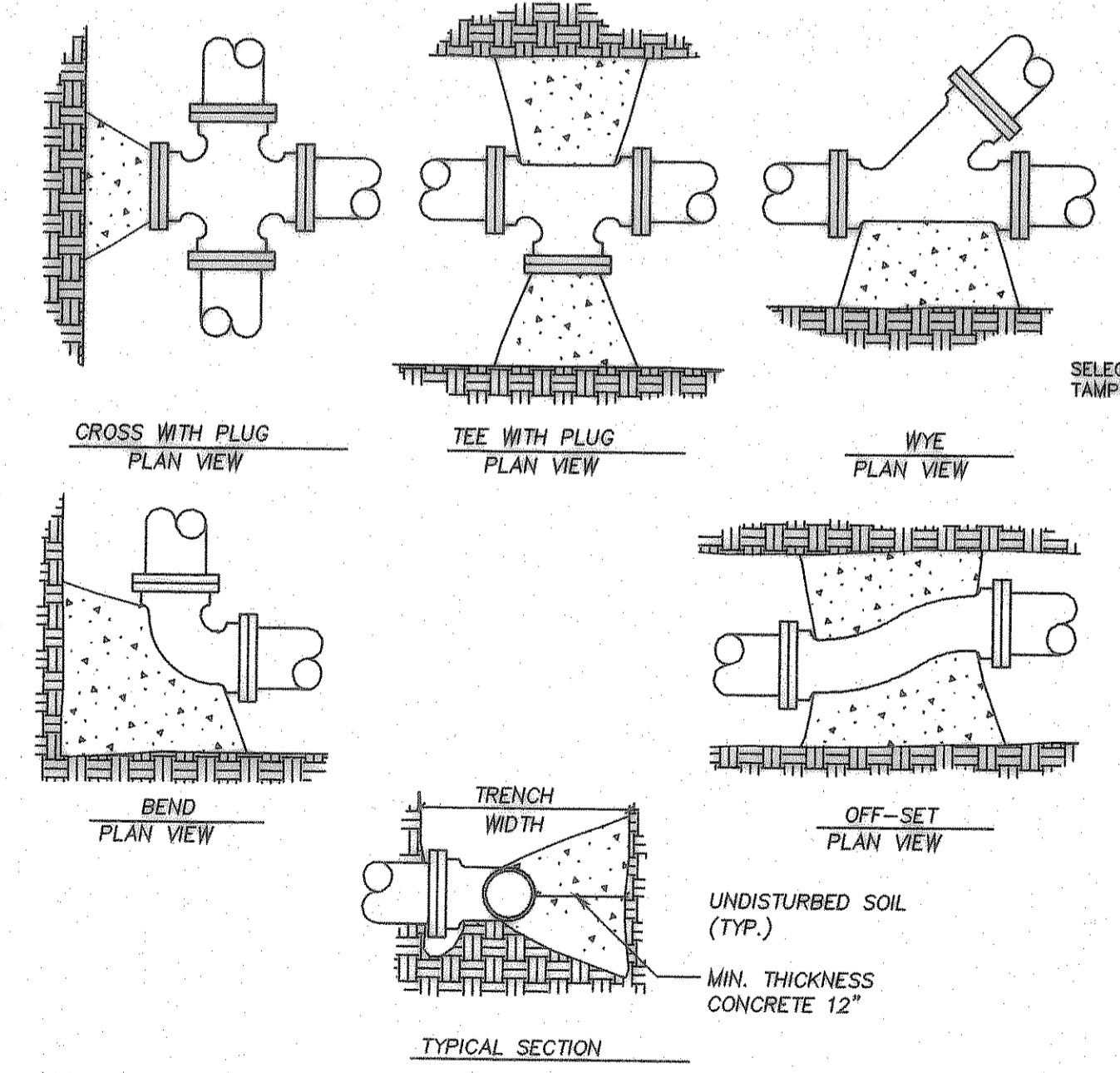
**IMPERVIOUS BARRIER**



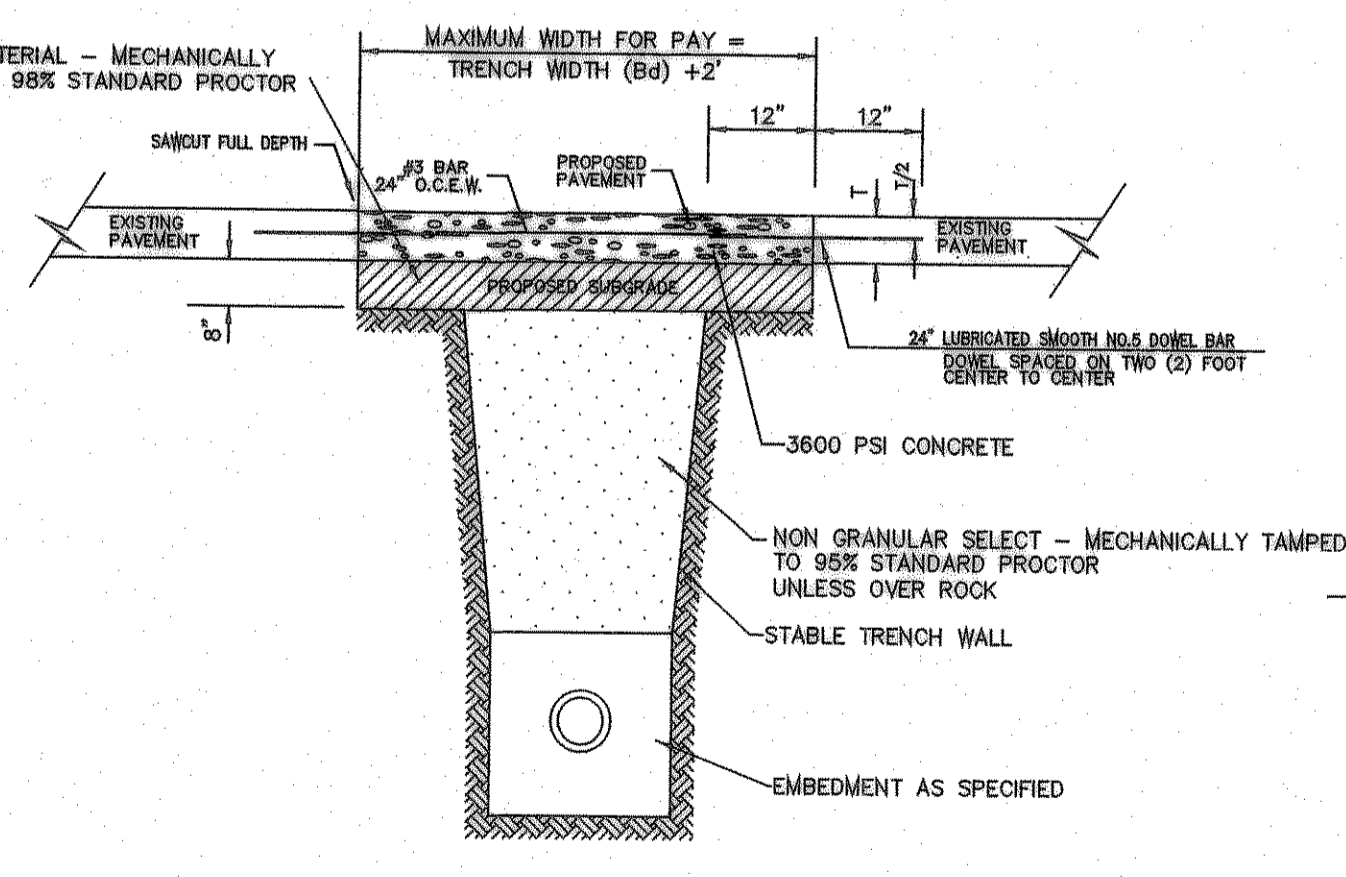
**TYPICAL VALVE INSTALLATION DETAIL**



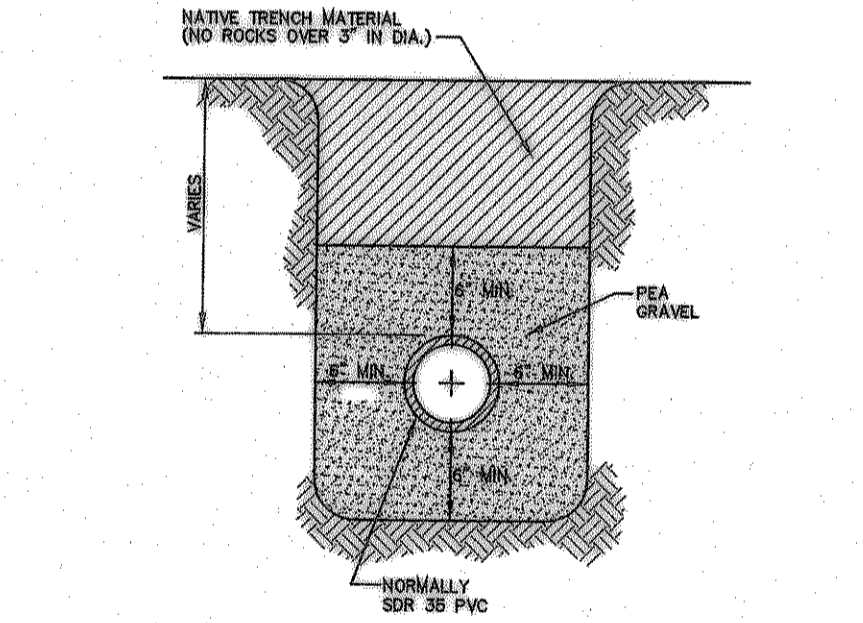
**BUTTERFLY VALVE INSTALLATION DETAIL**



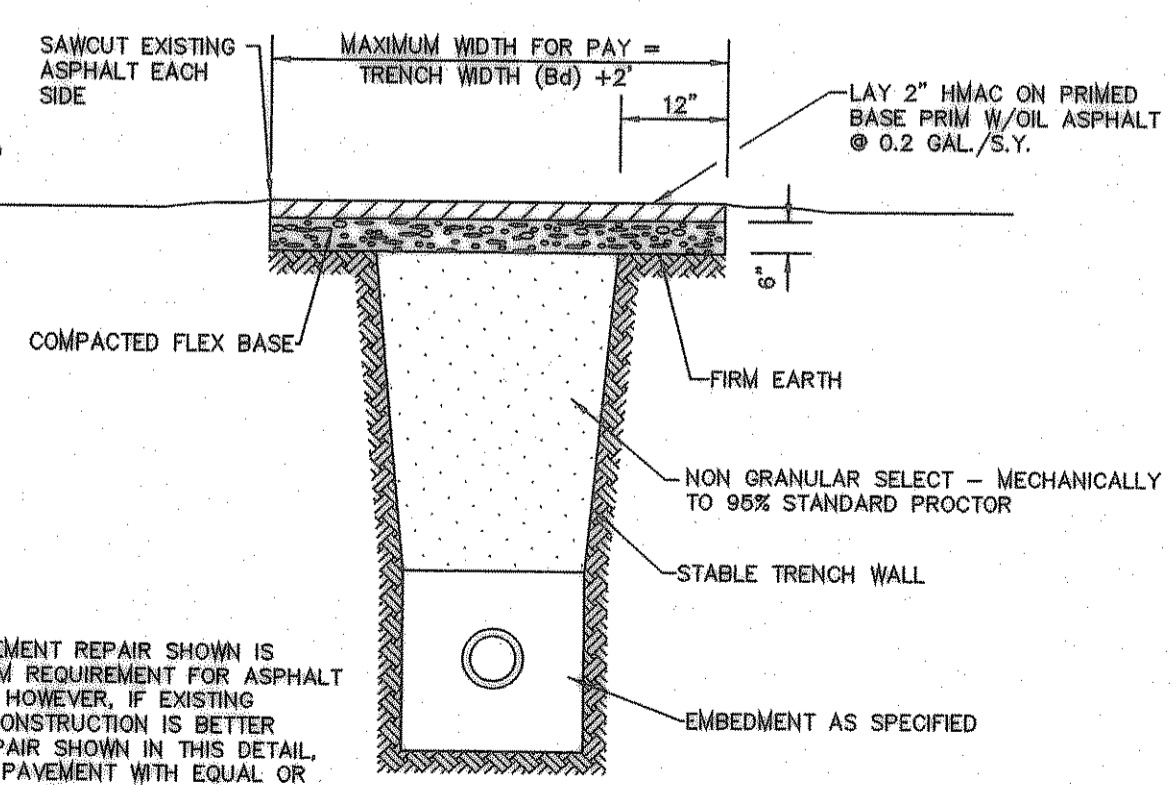
**TYPICAL THRUST BLOCKS**  
NOT TO SCALE



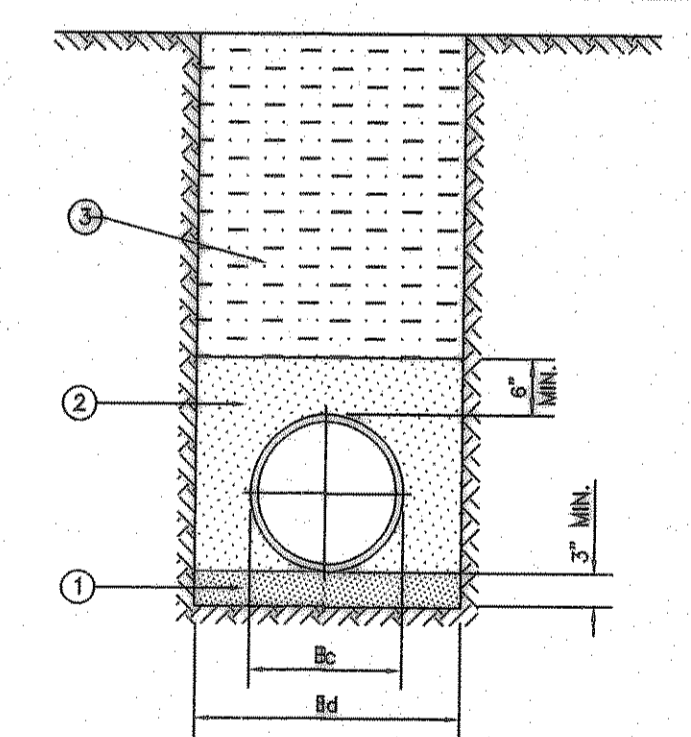
**EMBEDMENT UNDER CONCRETE STREETS & PAVEMENT REPAIR DETAIL**  
N.T.S.



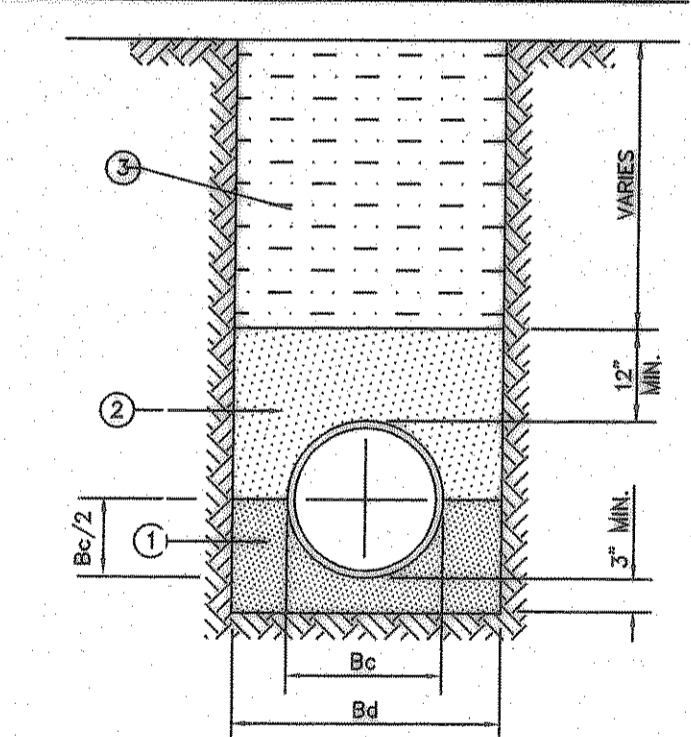
**SANITARY SEWER EMBEDMENT**  
N.T.S.



**EMBEDMENT UNDER ASPHALT STREETS & PAVEMENT REPAIR DETAIL**  
N.T.S.



**CLASS "C-2" EMBEDMENT**



**CLASS "B+" EMBEDMENT**

- 1 GRANULAR MATERIAL (SAND) - TOP OF LAYER IS TO BE PLACED TO GRADE TO PROVIDE UNIFORM SUPPORT OF PIPE BARREL. EXCAVATE BELL HOLES. COMPACT TO 95% PROCTOR DENSITY.
- 2 GRANULAR MATERIAL (SAND) - COMPACT TO 95% STANDARD PROCTOR DENSITY EXCEPT UNDER STRUCTURES, ROADWAYS AND PAVEMENT WHERE 95% DENSITY IS REQUIRED.
- 3 SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO 95% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD PROCTOR DENSITY.
- 4 NO SAND OVER ROCK

WATER ROOF DRAIN LINES, AND STORM SEWER LINES

**UTILITY DETAILS**  
AS SHOWN

**RECORD DRAWING**  
 This is to certify that changes and corrections have been made to conform to the contractor's record of this project.  
 Signed: *[Signature]* Date: 8/6/07  
 Glenn Engineering Corporation

**GLENN ENGINEERING**  
 PHONE 972-717-5811 FAX 972-717-2070  
 105 DECKER COURT - SUITE 910 IRVING, TEXAS 75062

User: Cheralyn Armijo  
 Aug 06, 2007 - 2:56pm  
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