

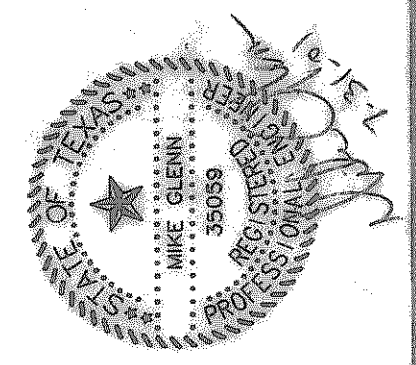
# ROCKWALL ELEMENTARY #9

## ROCKWALL INDEPENDENT SCHOOL DISTRICT

### TEXAS

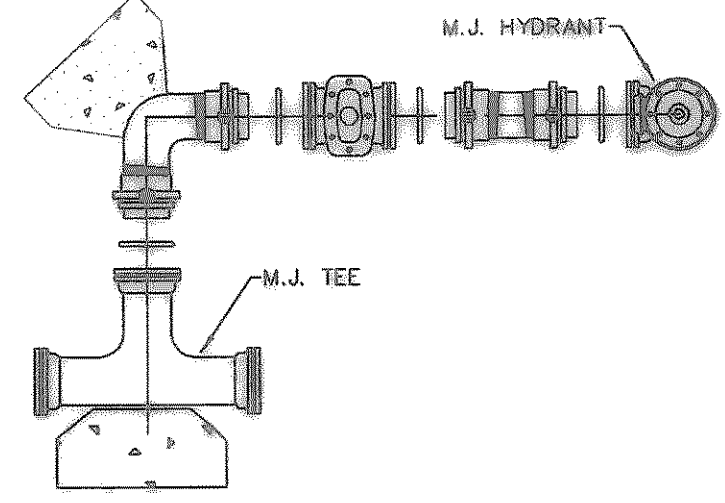
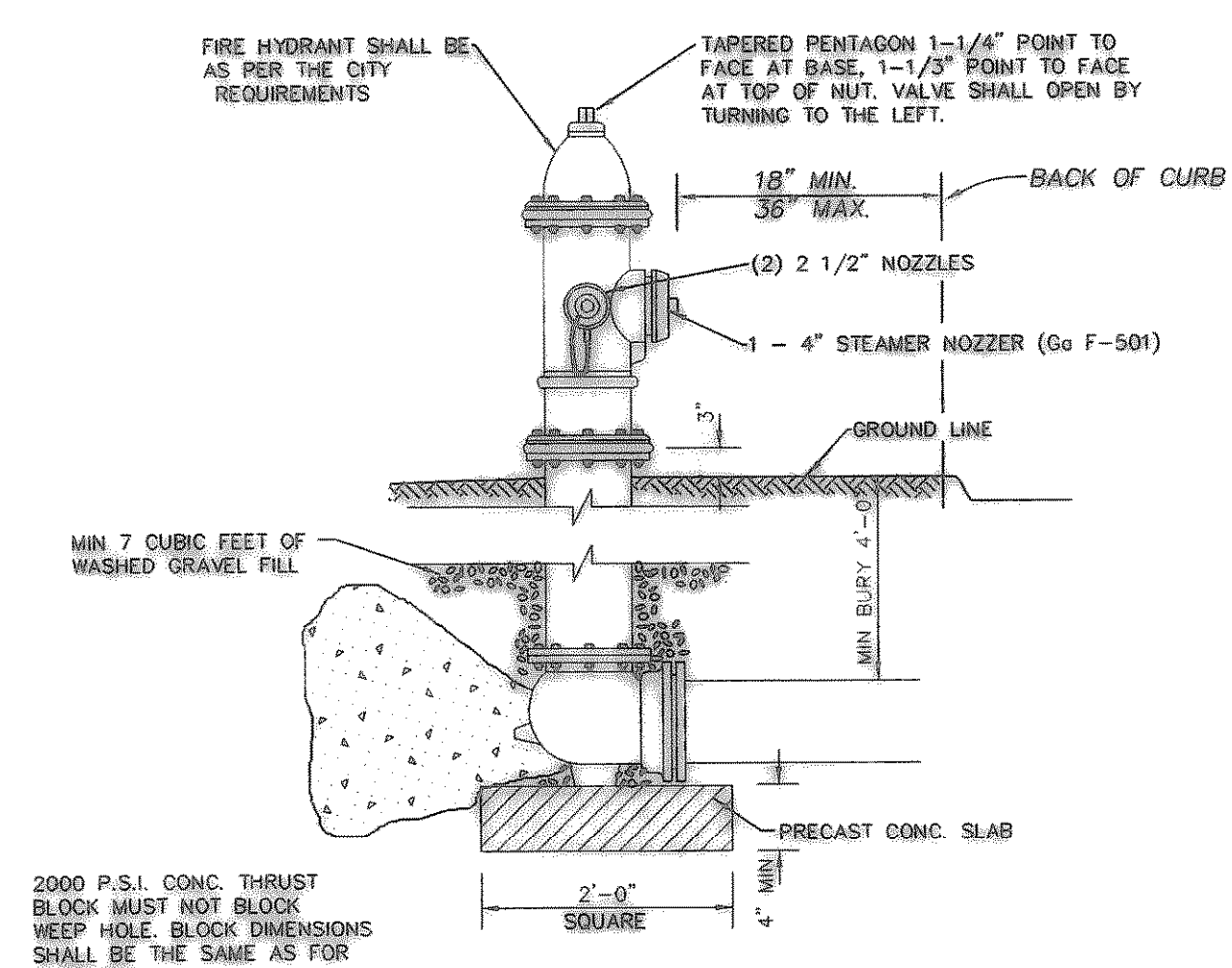
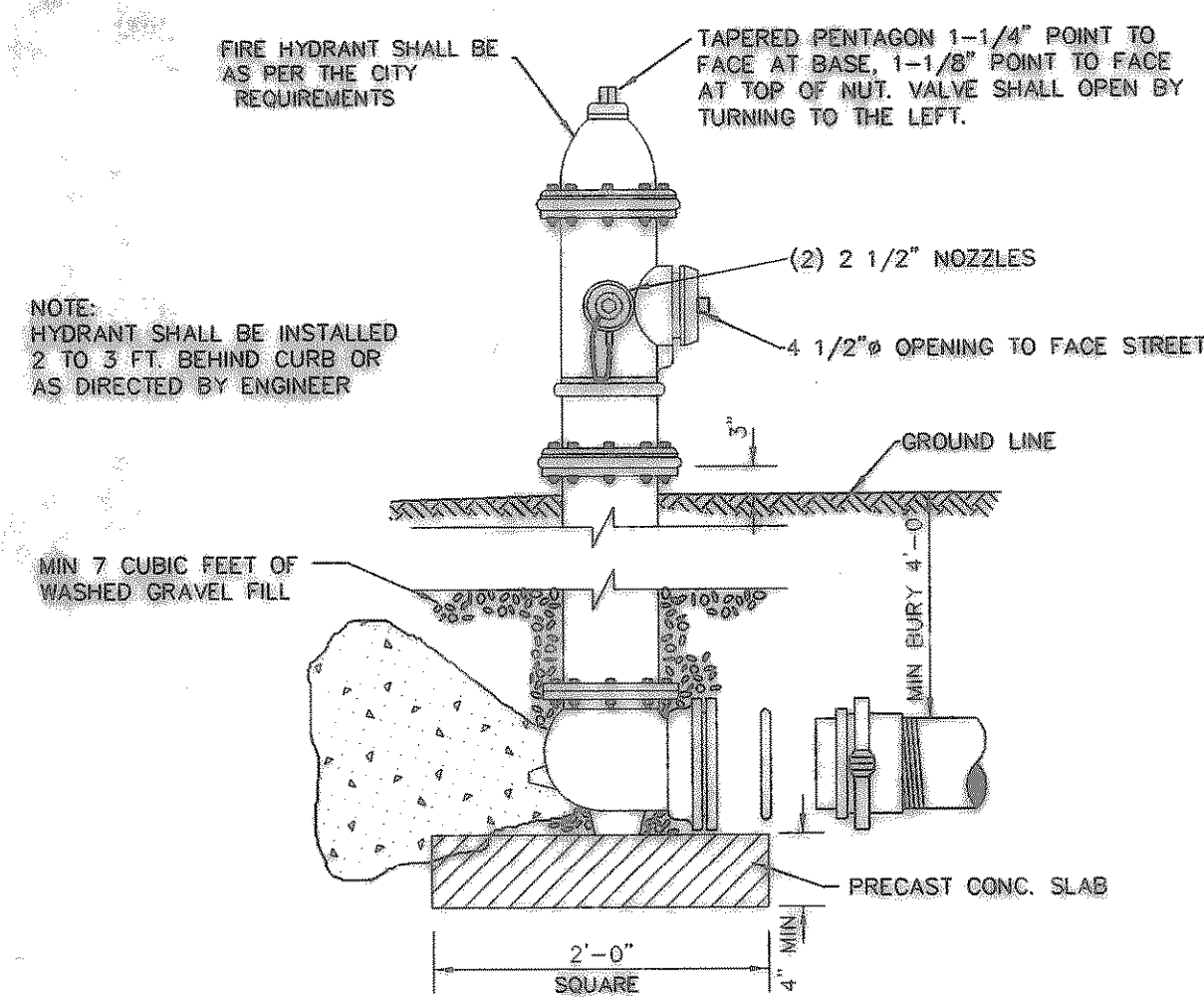
#### ROCKWALL, TEXAS

FINAL PLANS FOR BIDDING AND CONSTRUCTION



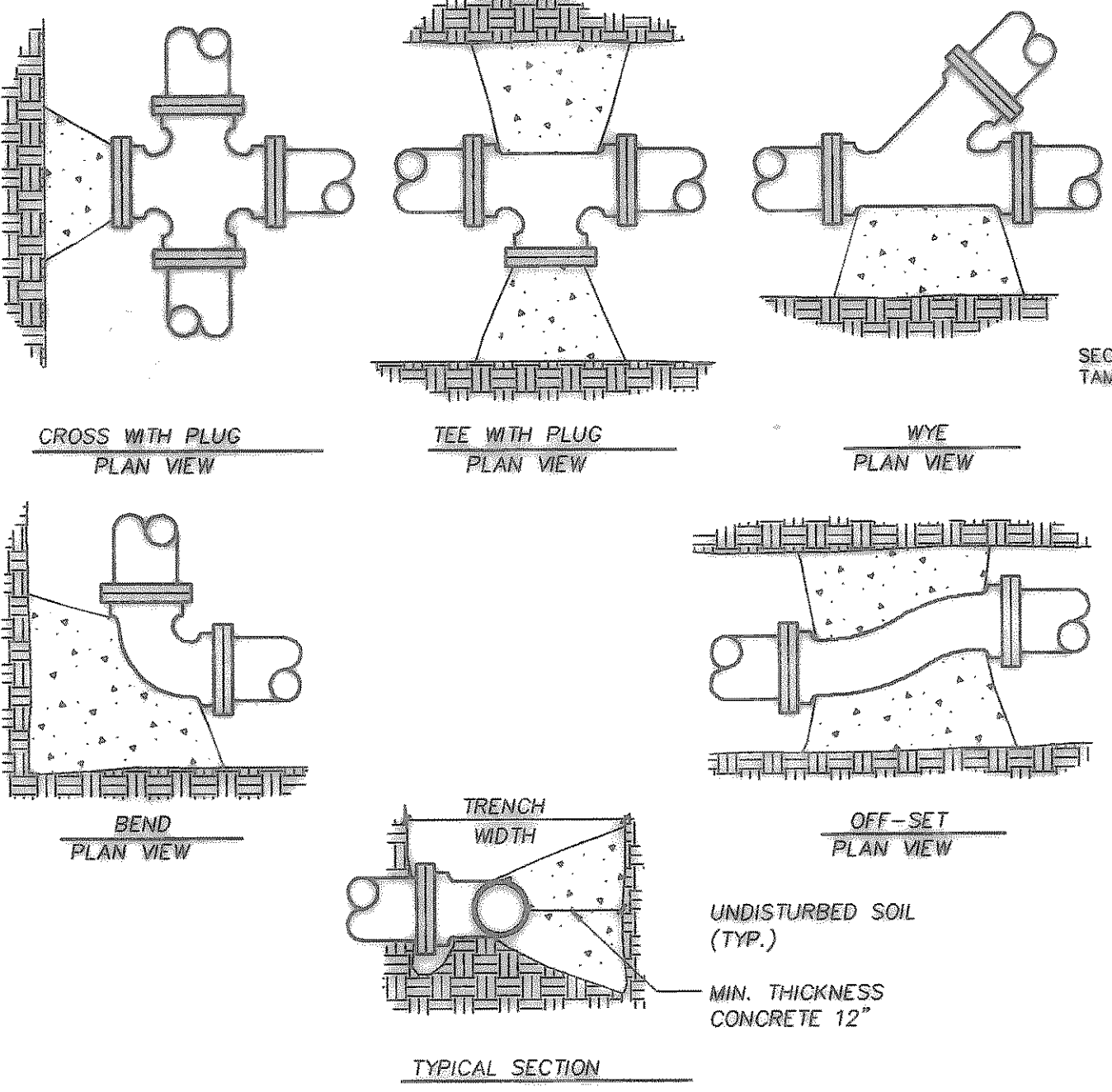
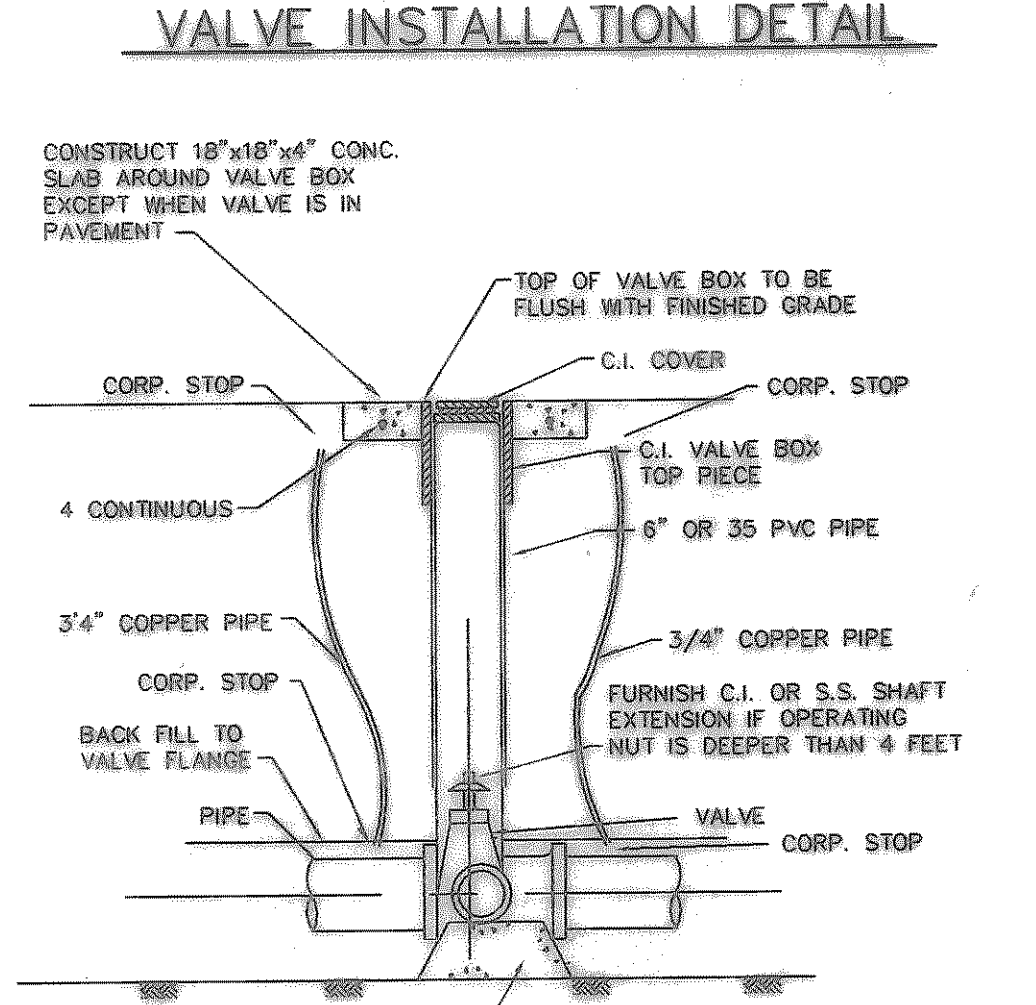
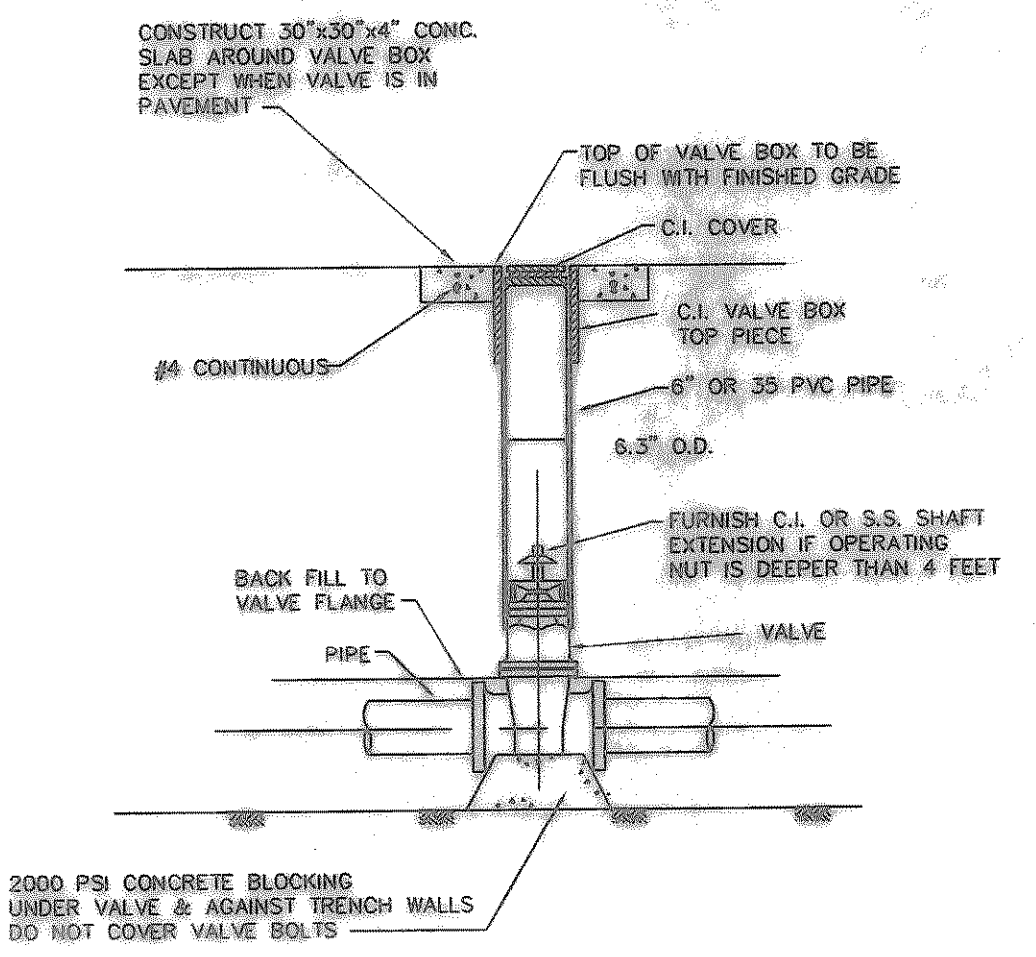
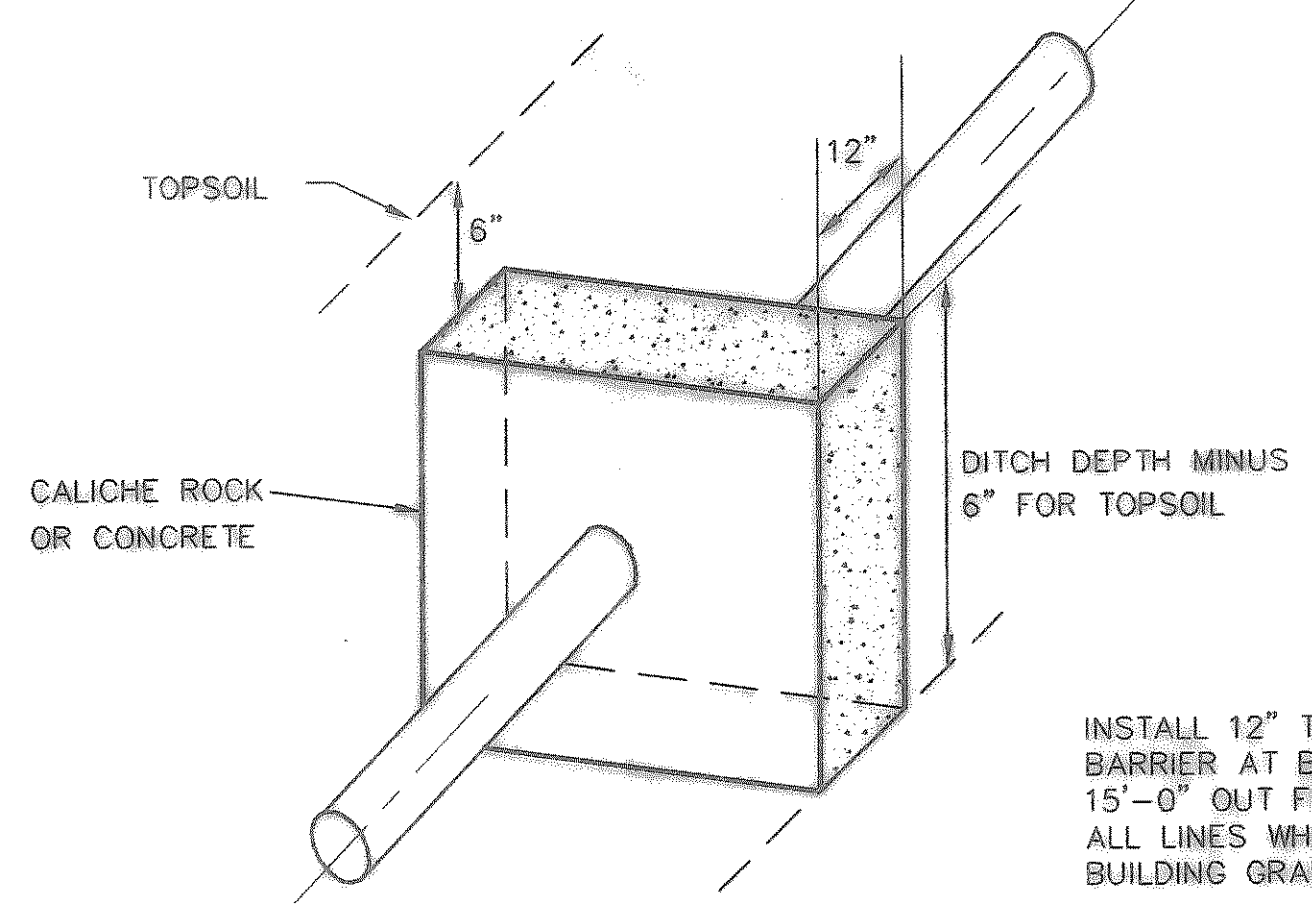
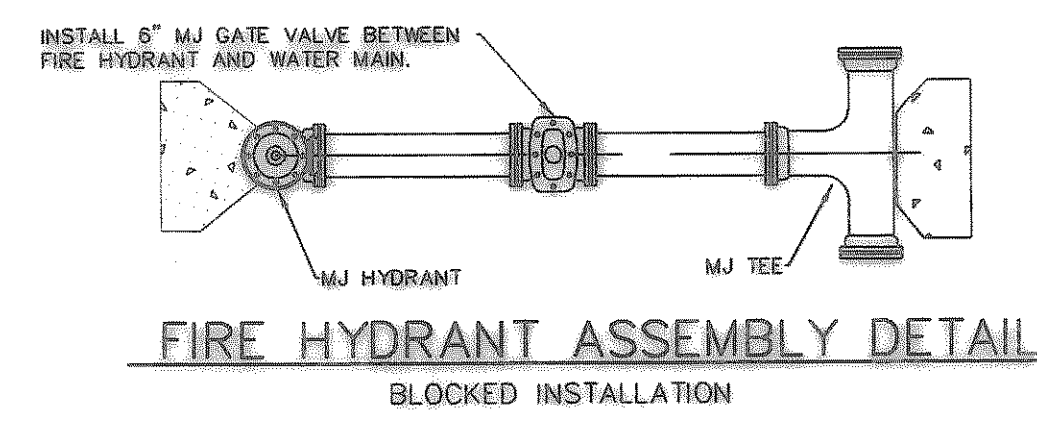
**shw Group Inc.**  
 Architects + Engineers

SHEET NUMBER	C
14	2.17
OF 22	
SET NUMBER	



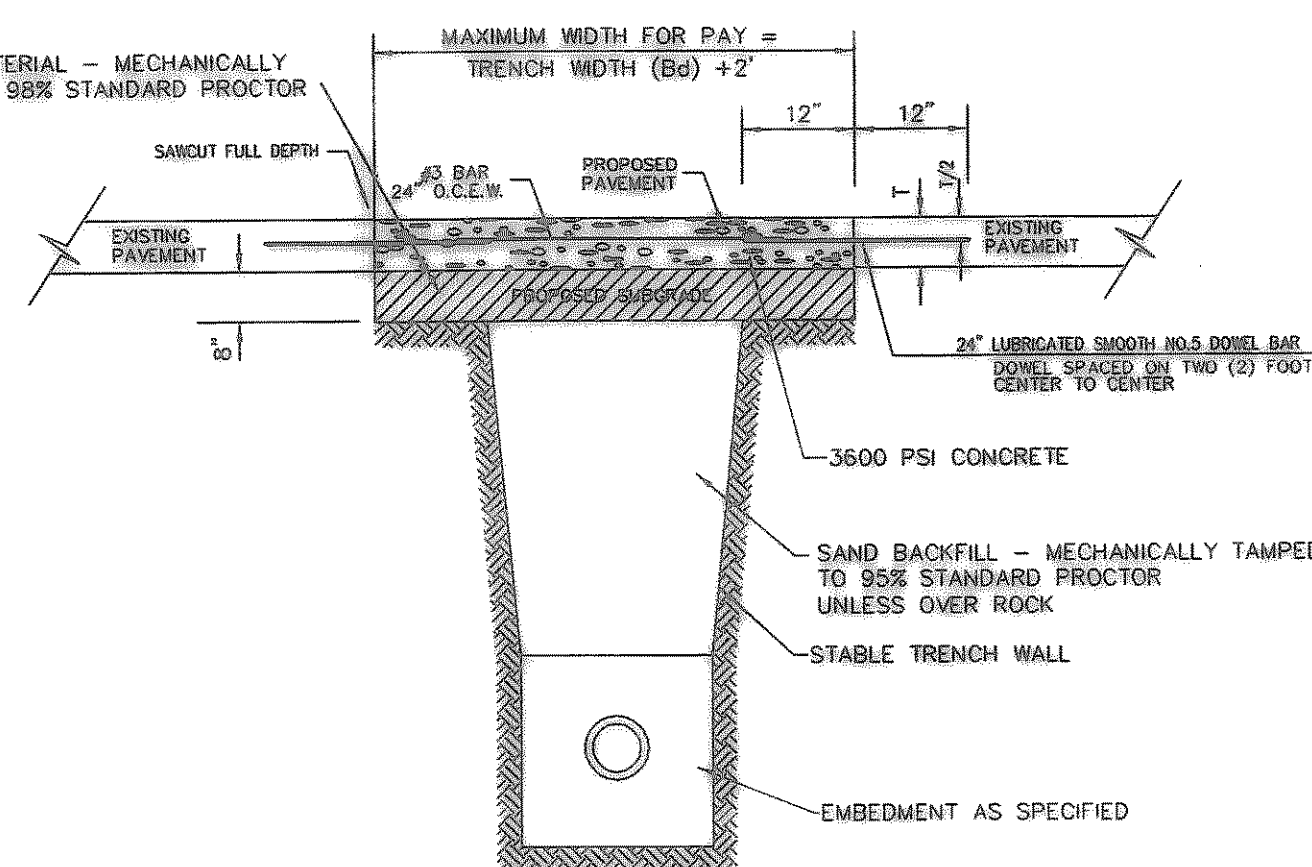
**FIRE HYDRANT ASSEMBLY DETAIL - RESTRAINED JOINT INSTALLATION**

NOTE: USE WHERE THERE IS INSUFFICIENT UNDISTURBED TRENCH TO BLOCK HYDRANT.



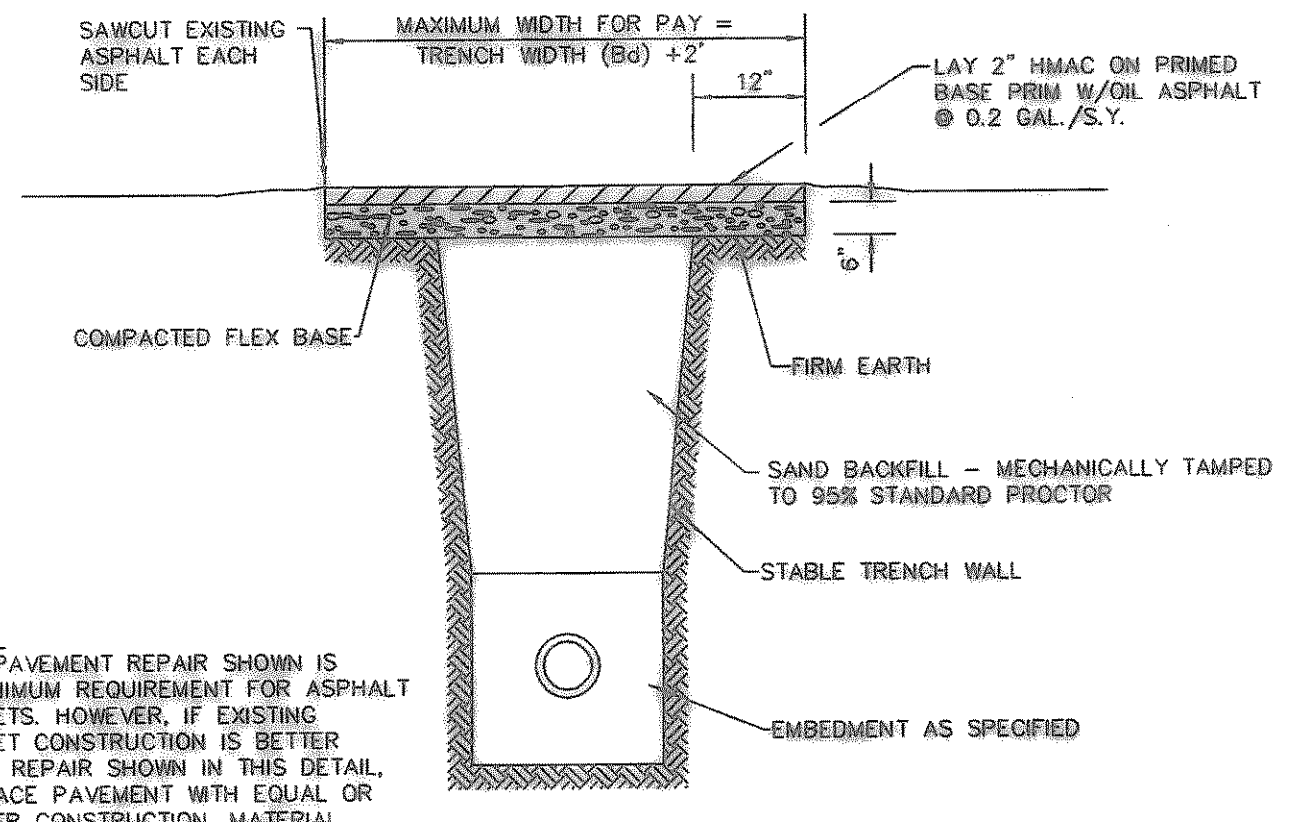
**NOTES:**

- THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
- IN UNSTABLE MATERIALS, FOR VERTICAL BENDS OR OFFSETS, BLOCKING SHALL BE DESIGNED FOR ACTUAL THRUST USING THE FORMULA  $P=125(H)(A)\sin 1/2$  WHERE H=1-1/2 RATED HEAD, A=AREA OF PIPE IN SQ. FT.,  $\theta$ =ANGLE, AND P=THRUST IN POUNDS.
- BEFORE POURING, PLUGS SHALL BE WRAPPED WITH VISQUEEN AND A BOARD PLACED IN FRONT.
- CONC. SHALL BE 2500 PSI MIN.
- THRUST BLOCKS SHOWN ALSO APPLY TO SANITARY FORCE MAINS.
- PLUMBING CONTRACTOR TO FURNISH SIZES OF THRUST BLOCKS FOR APPROVAL PRIOR TO CONSTRUCTION.

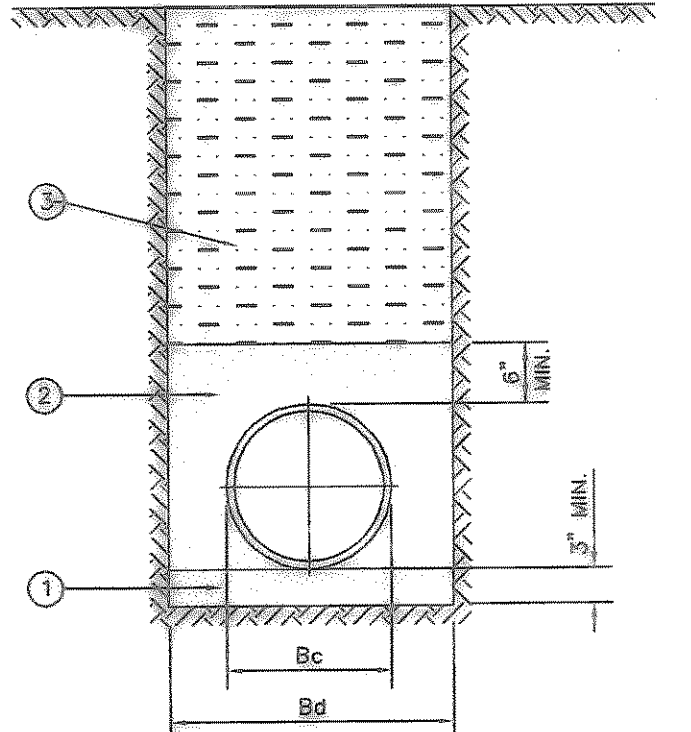
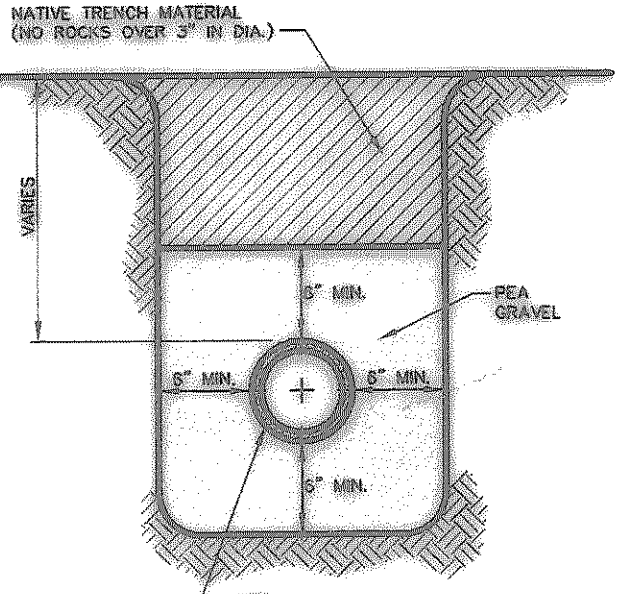


**NOTES:**

- NO. 5 SMOOTH DOWEL BAR MAY BE USED IN 5", 6" AND 7" PAVEMENT THICKNESS.
- LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTOR'S OPTION.
- DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG. DRILLING BY HAND IS NOT APPLICABLE. PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.



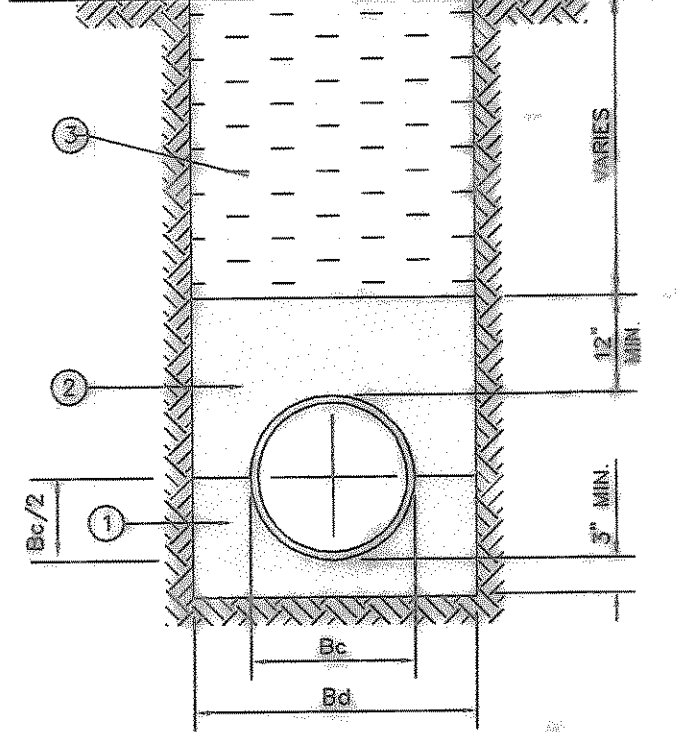
**NOTE:** THE PAVEMENT REPAIR SHOWN IS A MINIMUM REQUIREMENT FOR ASPHALT STREETS. HOWEVER, IF EXISTING STREET CONSTRUCTION IS BETTER THAN REPAIR SHOWN IN THIS DETAIL, REPLACE PAVEMENT WITH EQUAL OR BETTER CONSTRUCTION, MATERIAL, THICKNESSES & QUALITY.



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 90% 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 90% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD PROCTOR DENSITY.



① FINE GRADATION CRUSHED STONE - TOP LAYER IS TO BE PLACED TO GRADE TO PROVIDE UNIFORM SUPPORT OF PIPE BARREL. EXCAVATE BELL HOLES.

② SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO 90% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD PROCTOR DENSITY. (NO SAND PERMITTED ABOVE STONE)

③ SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO 90% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD PROCTOR DENSITY.

These Drawings have been modified to conform to the Construction Records.  
 Glenn Engineering Corporation  
 By: *[Signature]* Date: 2-23-04

**UTILITY DETAILS**  
 AS SHOWN