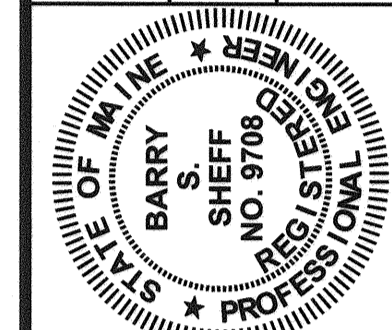
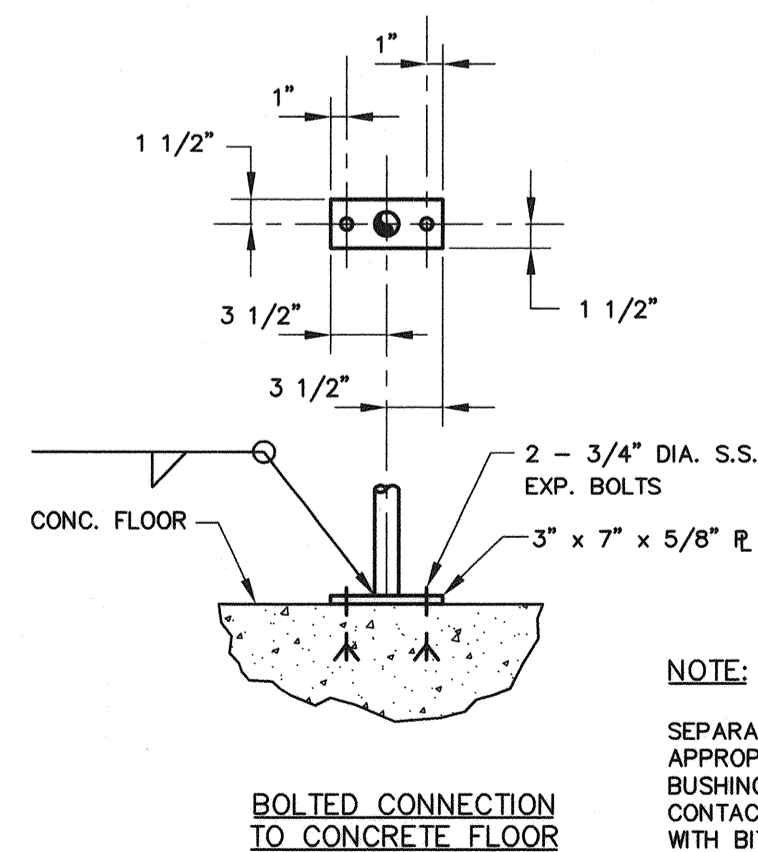
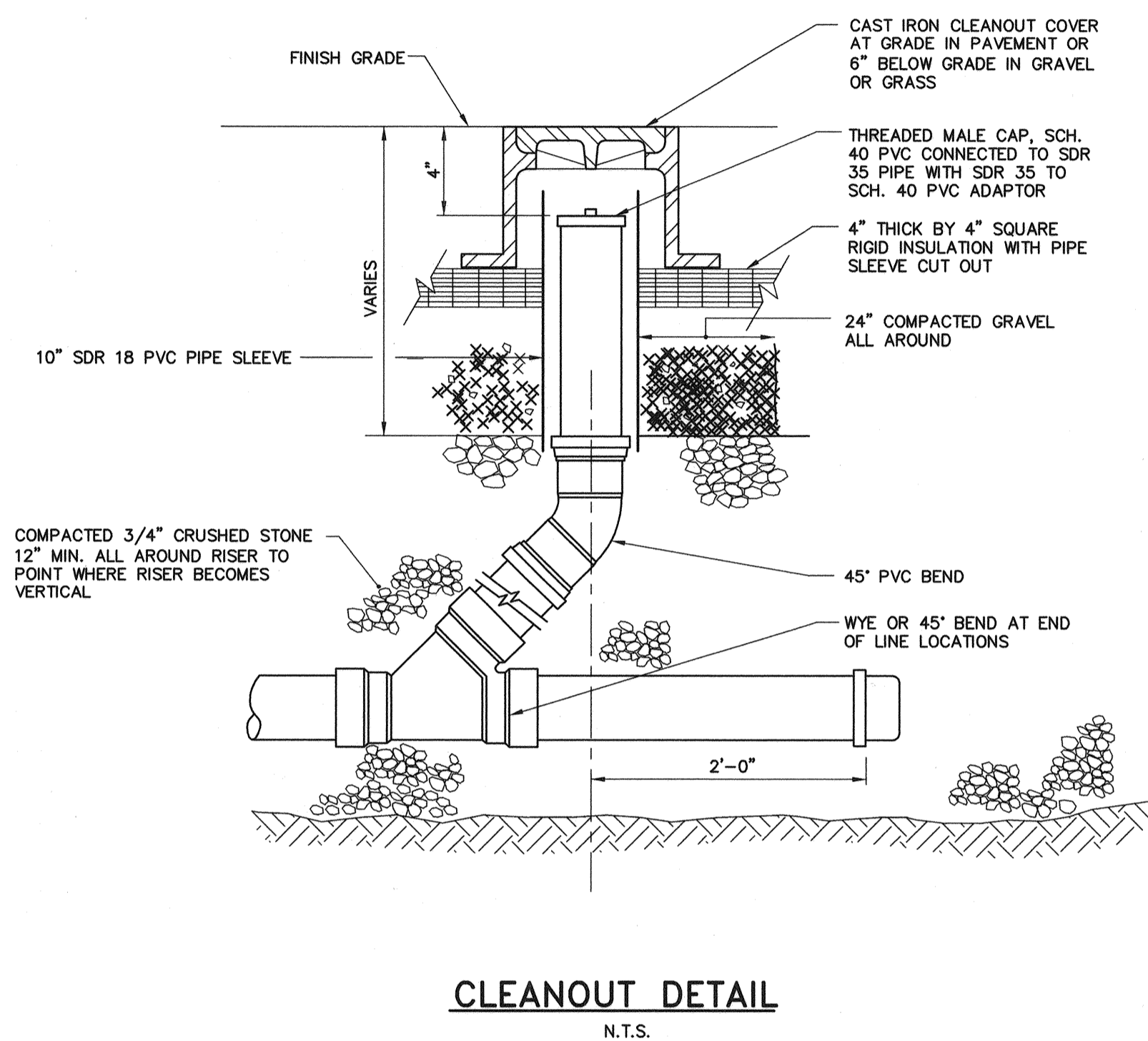


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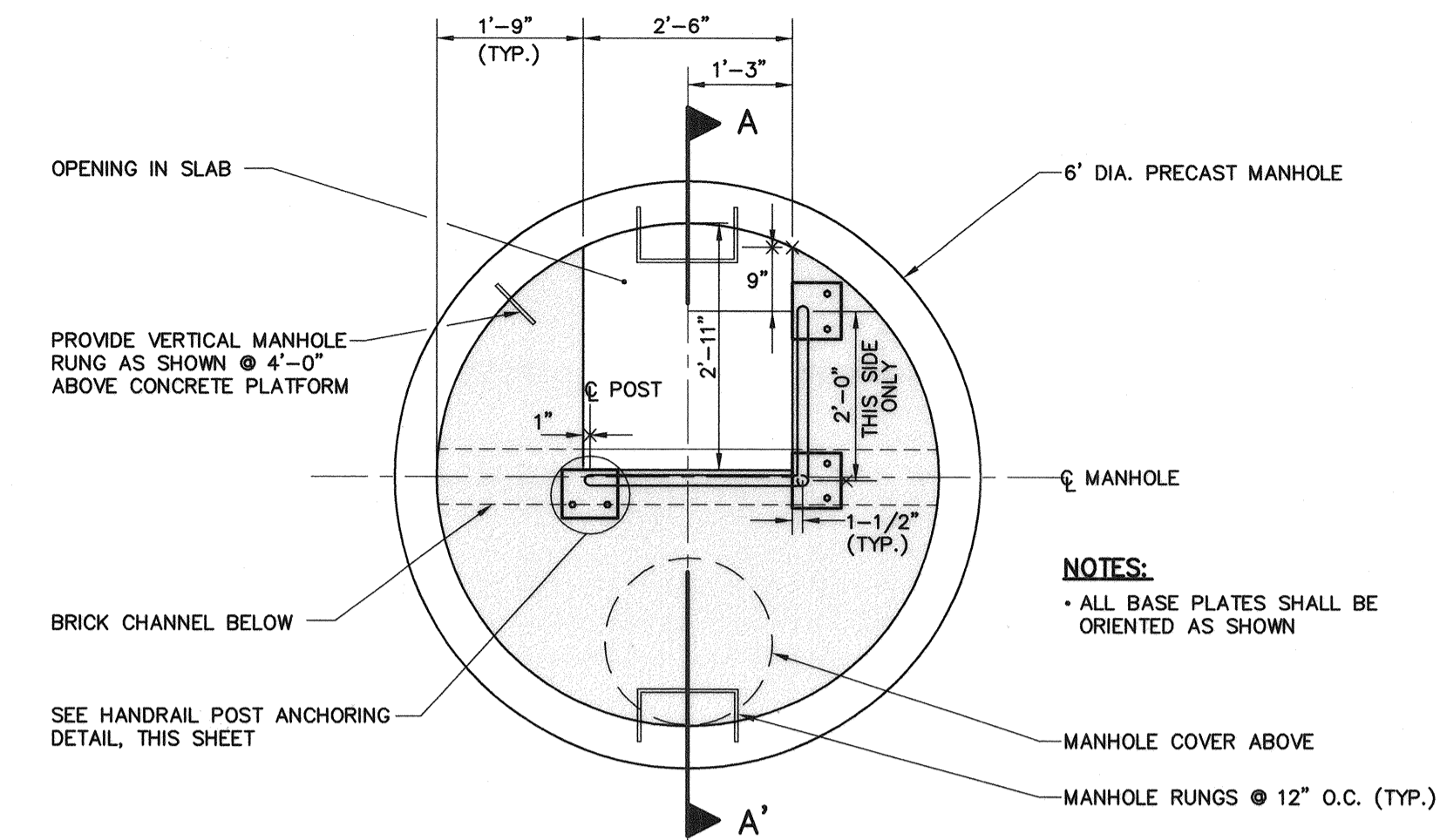


*Barry S. Sheff*  
 SIGNATURE  
 P.E. NUMBER 9708  
 DATE 10/11/04

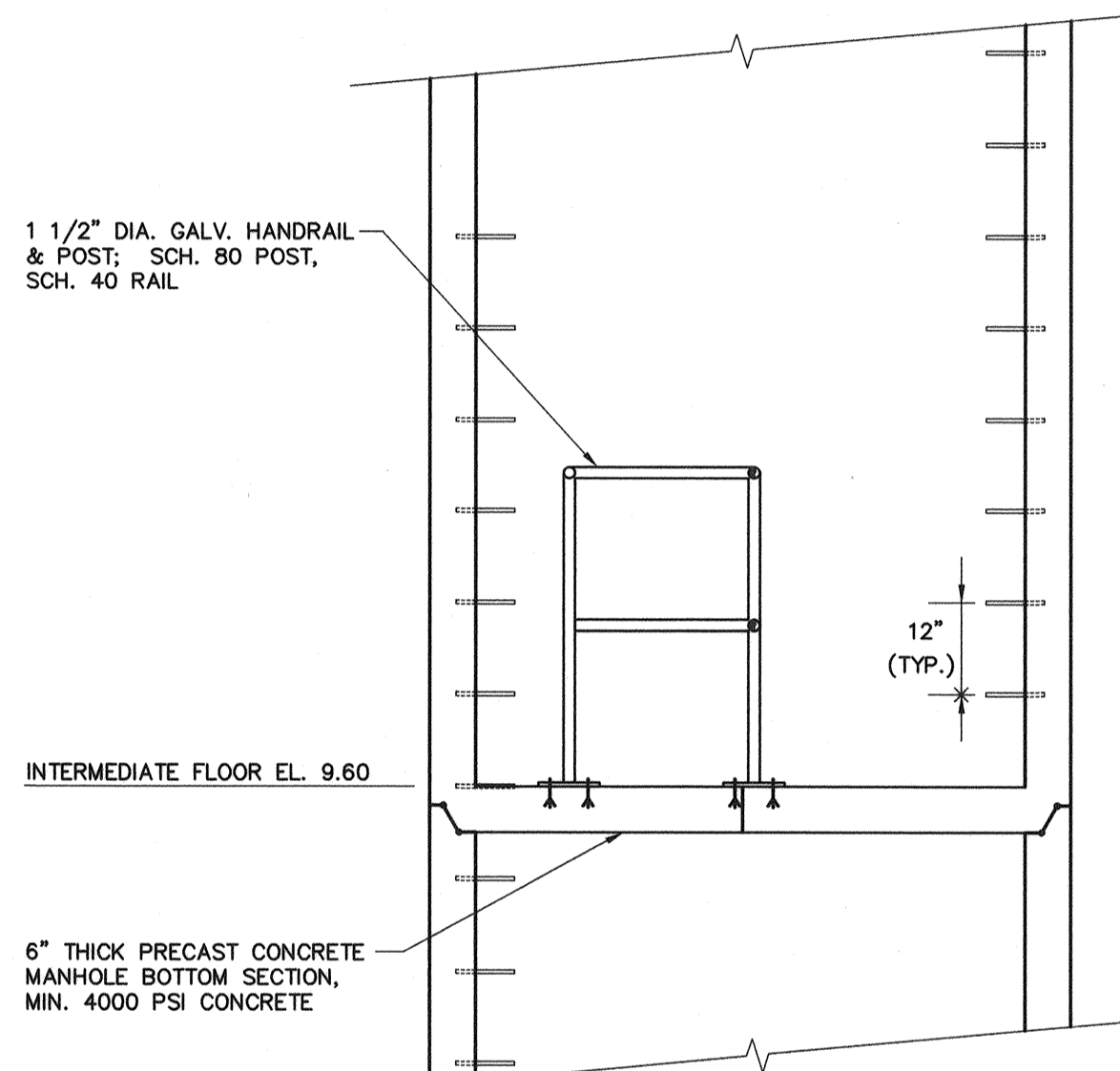
| PROJ. MANAGER    | PAUL POTLE | DATE     | BY  |
|------------------|------------|----------|-----|
| DESIGN-DETAILED  | DAS        | 10/11/04 | ABC |
| CHECKED-REVIEWED | DAS        | 10/11/04 | BSS |
| DESIGN-DETAILED2 |            |          |     |
| DESIGN-DETAILED3 |            |          |     |
| REVISIONS 1      |            |          |     |
| REVISIONS 2      |            |          |     |
| REVISIONS 3      |            |          |     |
| REVISIONS 4      |            |          |     |
| FIELD CHANGES    |            |          |     |



**NOTE:**  
 SEPARATE DISSIMILAR MATERIALS WITH APPROPRIATE NYLON WASHERS AND BUSHINGS. ALUMINUM SURFACES IN CONTACT WITH CONCRETE TO BE PAINTED WITH BITUMASTIC OR COAL-TAR EPOXY.

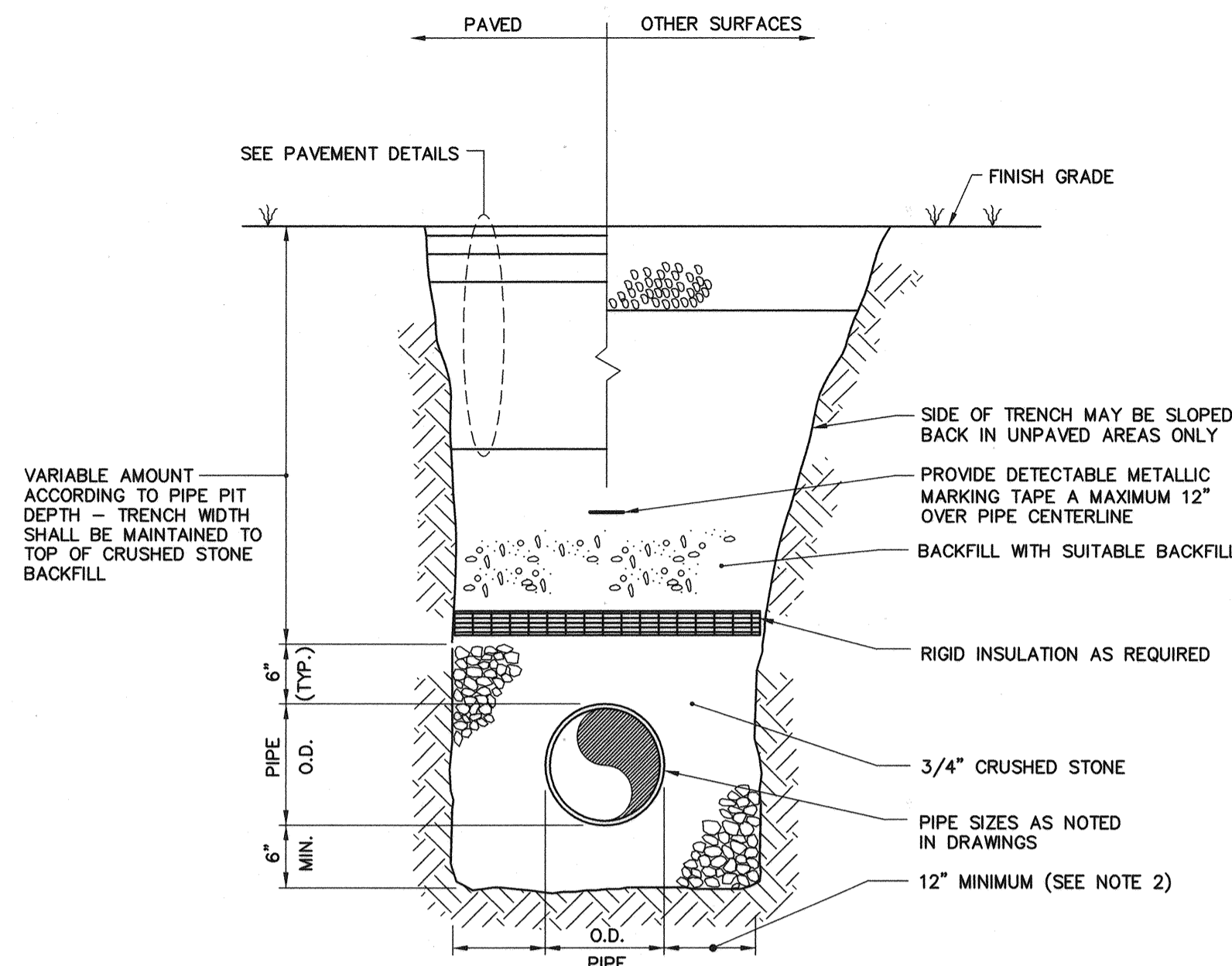
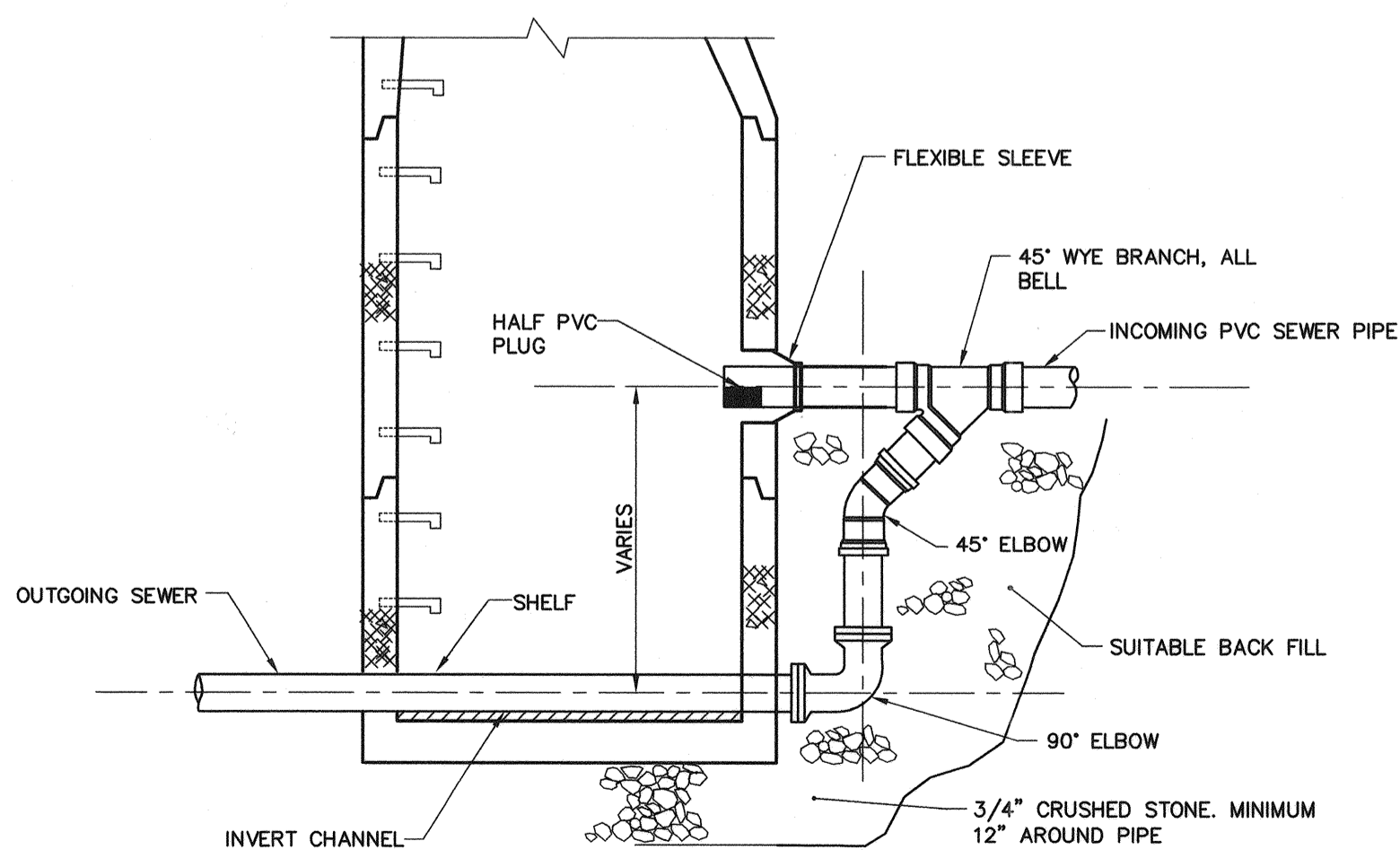


**NOTES:**  
 • ALL BASE PLATES SHALL BE ORIENTED AS SHOWN  
 • MANHOLE RUNGS @ 12" O.C. (TYP.)

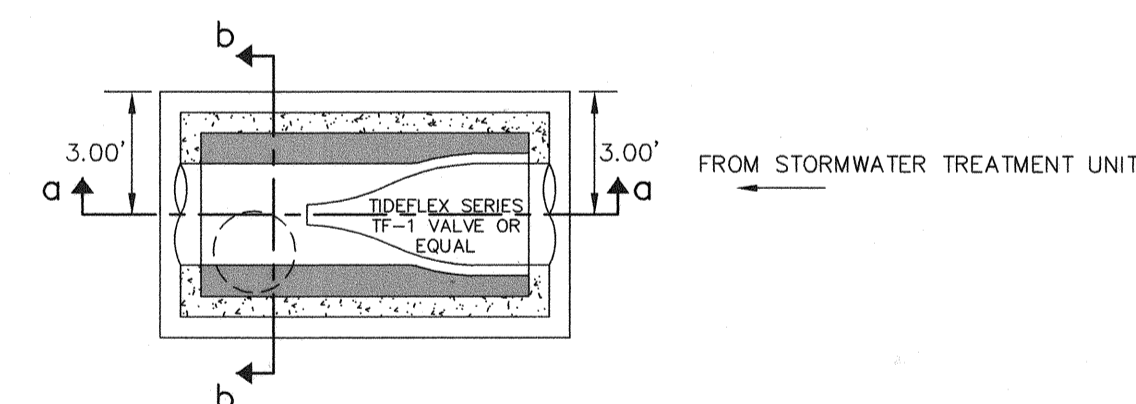


**NOTES:**  
 • SEE PRECAST MANHOLE SECTION ON SHEET C403 FOR NOTES & BACKFILL, JOINTS AND FROST BARRIER REQUIREMENTS.

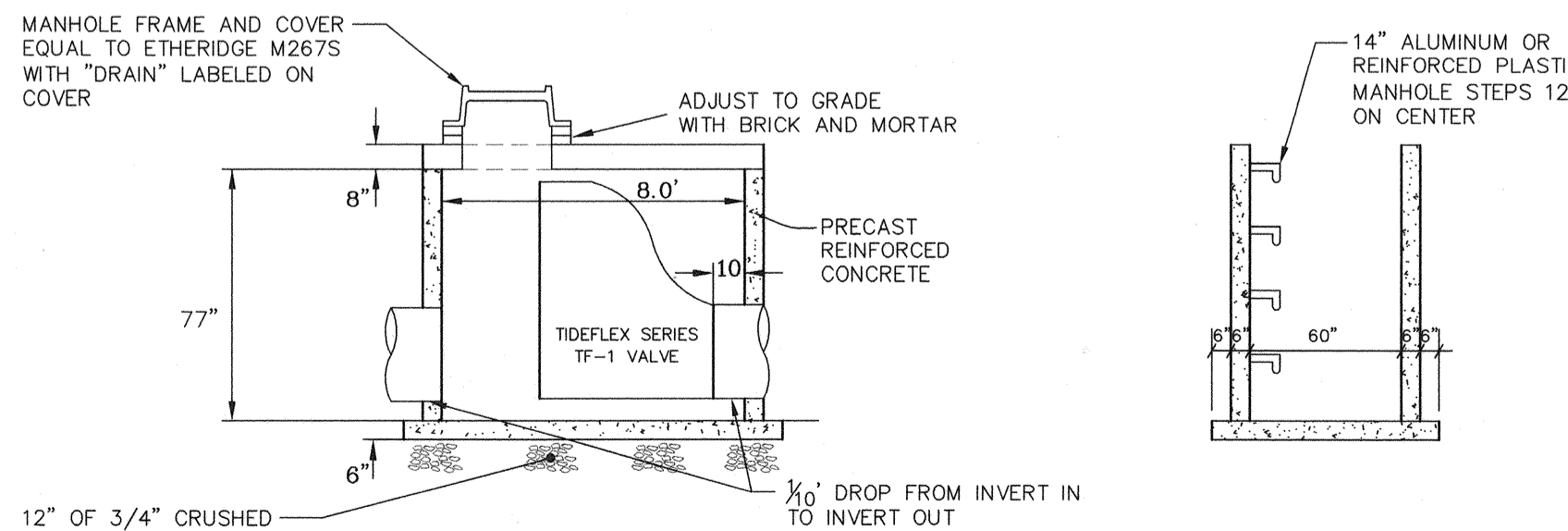
**SMH 1 W/ INTERMEDIATE LANDING**  
 N.T.S.



**NOTES:**  
 1. MAINTAIN UNIFORM TRENCH WIDTH TO 6" OVER PIPE.  
 2. PROVIDE RIGID INSULATION, 2" THICKNESS, FOR ALL PIPING WITH LESS THAN 4'-0" OF COVER TO TOP OF PIPE. INSULATE PER MDOT SECT 653. EXTEND INSULATION 18" OUT FROM EDGE OF PIPE. WHERE INSULATION IS REQUIRED, TRENCH WIDTH MUST EXTEND 18" MIN. FROM OUTSIDE EDGE OF PIPE.  
 3. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE O.S.H.A. SAFETY REGULATIONS. ALL SUCH TRENCH PROTECTION TO BE RESPONSIBILITY OF CONTRACTOR.



**NOTE:**  
 1. MANHOLE SPECIFICATIONS TO BE THE SAME AS STORM MANHOLE.  
 2. ALL COMPONENTS SHALL WITHSTAND HS 20-44 TRUCK LOADING.  
 3. STORM MANHOLE TO BE PRECAST DOUBLE CATCH BASIN.



**DRAIN MANHOLE 12 (DMH 12)**  
 N.T.S.