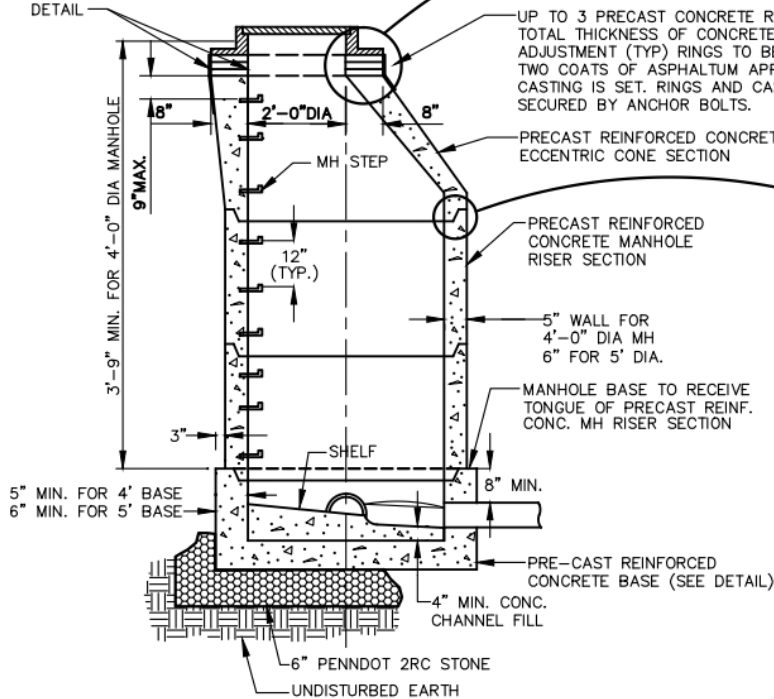


#### NOTES:

1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO  $3/4$  OF THE DIAMETER OF THE SEWER.
2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
3. TYPE "B" MANHOLES (SHALLOW TYPE) TO BE PROVIDED WHERE REQUIRED BY DEPTH CONDITIONS. ALL OTHER MANHOLES TO BE TYPE "A".
4. THE WALL THICKNESS IN A 4'-0" DIA. PRECAST BASE SHALL BE AS FOLLOWS FOR PIPES 16" AND SMALLER, 5" WALL; FOR PIPES 18" AND LARGER, 8" WALL.
5. ALL MANHOLE FRAMES FOR "OFF THE ROAD" MANHOLES SHALL BE BOLTED TO THE CONE SECTION OR CONCRETE SLAB WITH 2'- $3/4$ " DIA. BOLTS WITH WASHERS AND NUTS; BOLTS TO BE AT 180 ON A 36" DIA. BOLT CIRCLE.
6. FOR MANHOLES HAVING 5'-0" DIA AND 6'-0" BASES REDUCTION IN DIAMETER TO 4'-0" SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL, WHERE DEPTH IS SUFFICIENT.
7. ENTIRE PERIMETER OF MANHOLE SHALL BE BACKFILLED WITH 2A MODIFIED STONE TO A POINT NO LESS THAN 1 FT. ABOVE THE TOP OF PIPE CONNECTING AT THE HIGHEST ELEVATION.

EITHER AN INTERNAL OR EXTERNAL MANHOLE FRAME SEAL - SEE MANHOLE FRAME SEAL DETAIL



2 SEPARATE ROWS OF FLEXIBLE, PLIABLE SEALANT: "MASTIC", "RAM-NECK", "RUBBER-NECK" OR EQUAL

BUTYL - RUBBER MANHOLE JOINT  
- A.S.T.M. C443/C361 RUBBER  
- A.S.T.M. D1056 NEOPRENE

#### SECTION A-A

### TYPE "A" STANDARD MANHOLE DETAIL NOT TO SCALE

TYPE "A" STANDARD MANHOLE  
PREPARED FOR:  
PERKASIE REGIONAL AUTHORITY

ANDERSEN  
ENGINEERING  
ASSOCIATES  
INCORPORATED  
306 NORTH FIFTH STREET, PERKASIE, PA  
(215) 257-5711

DSN BY:	P.C.A.
CHK BY:	P.C.A.
DATE:	3/15/96
DWG NO.	PRA-S01