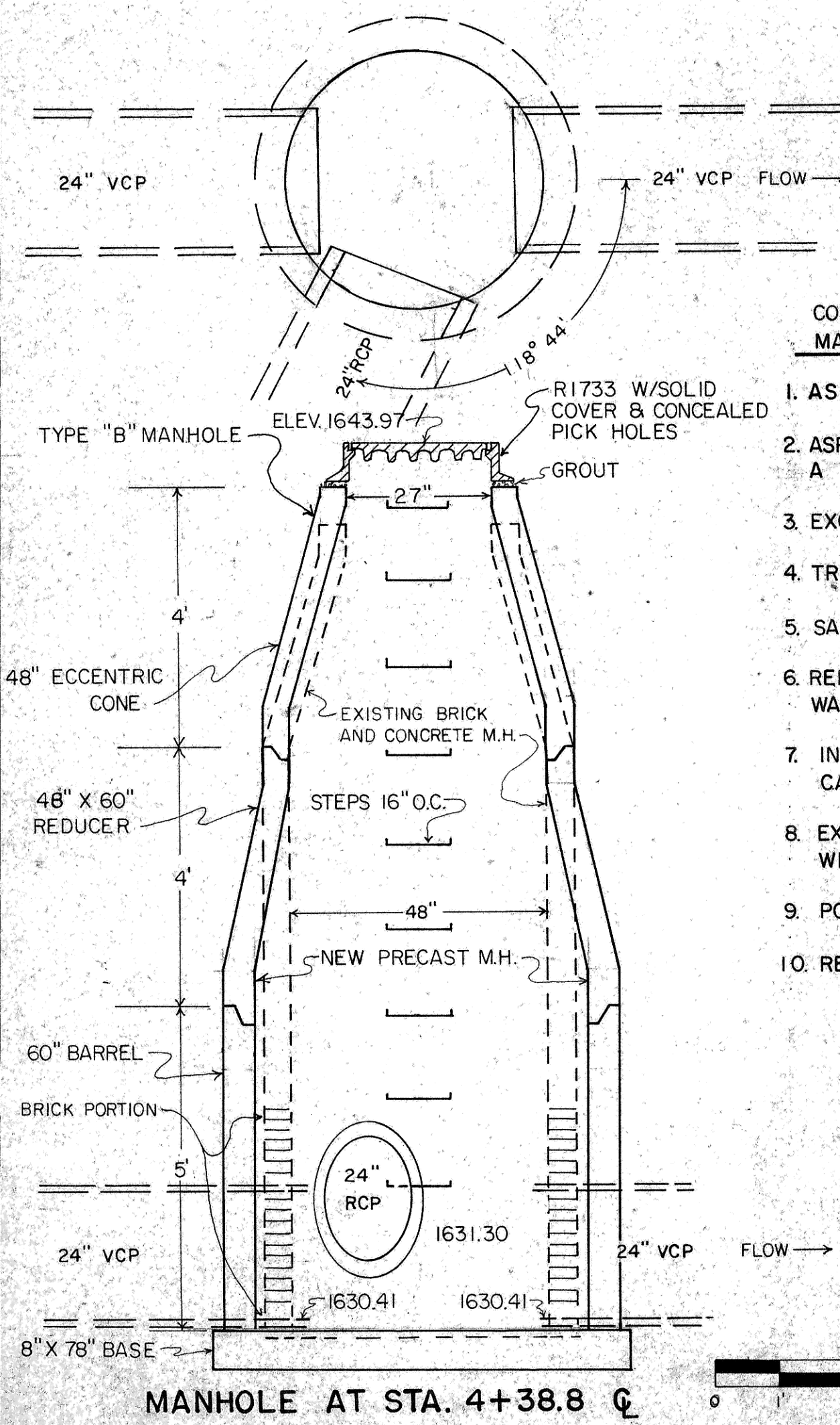
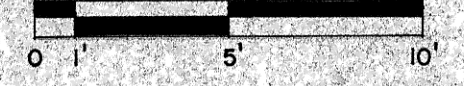
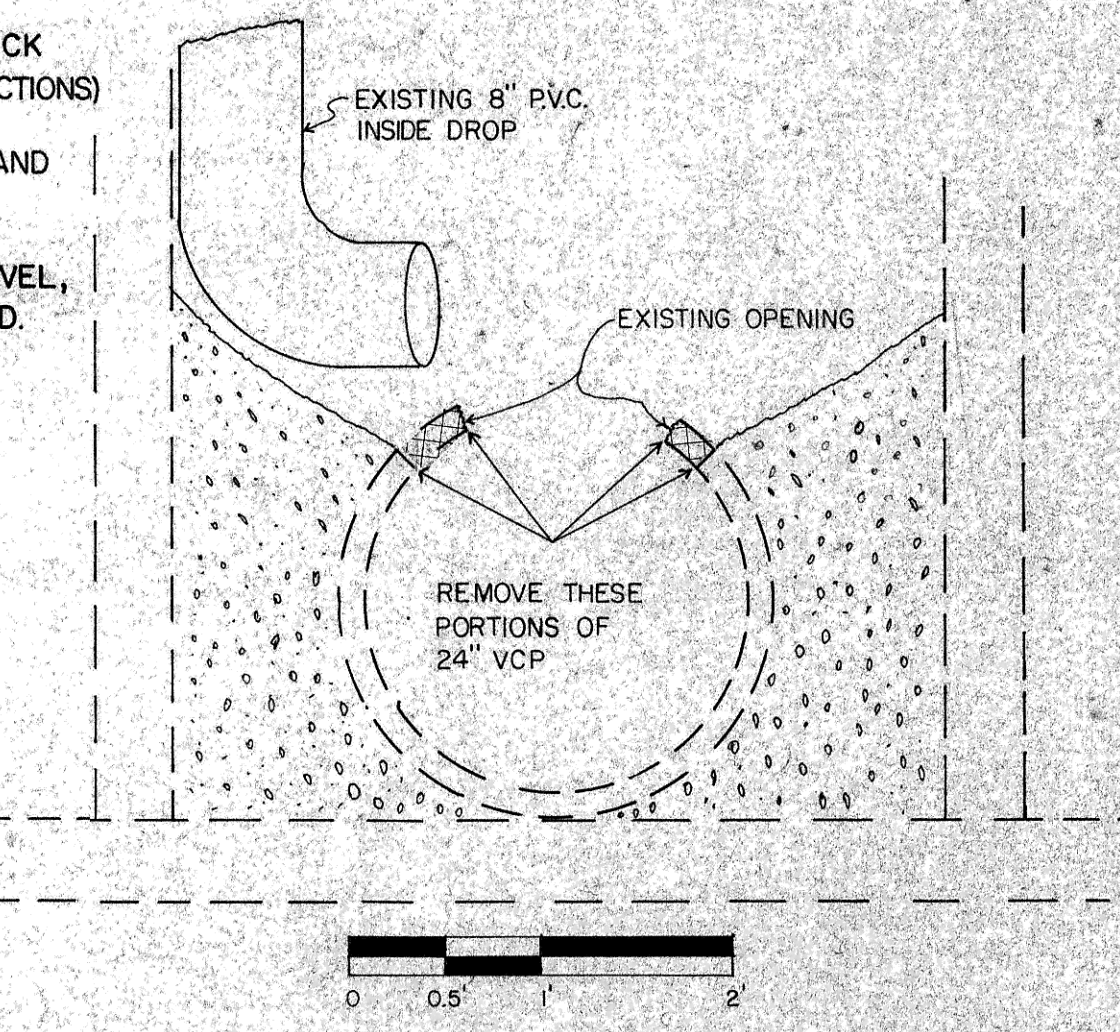
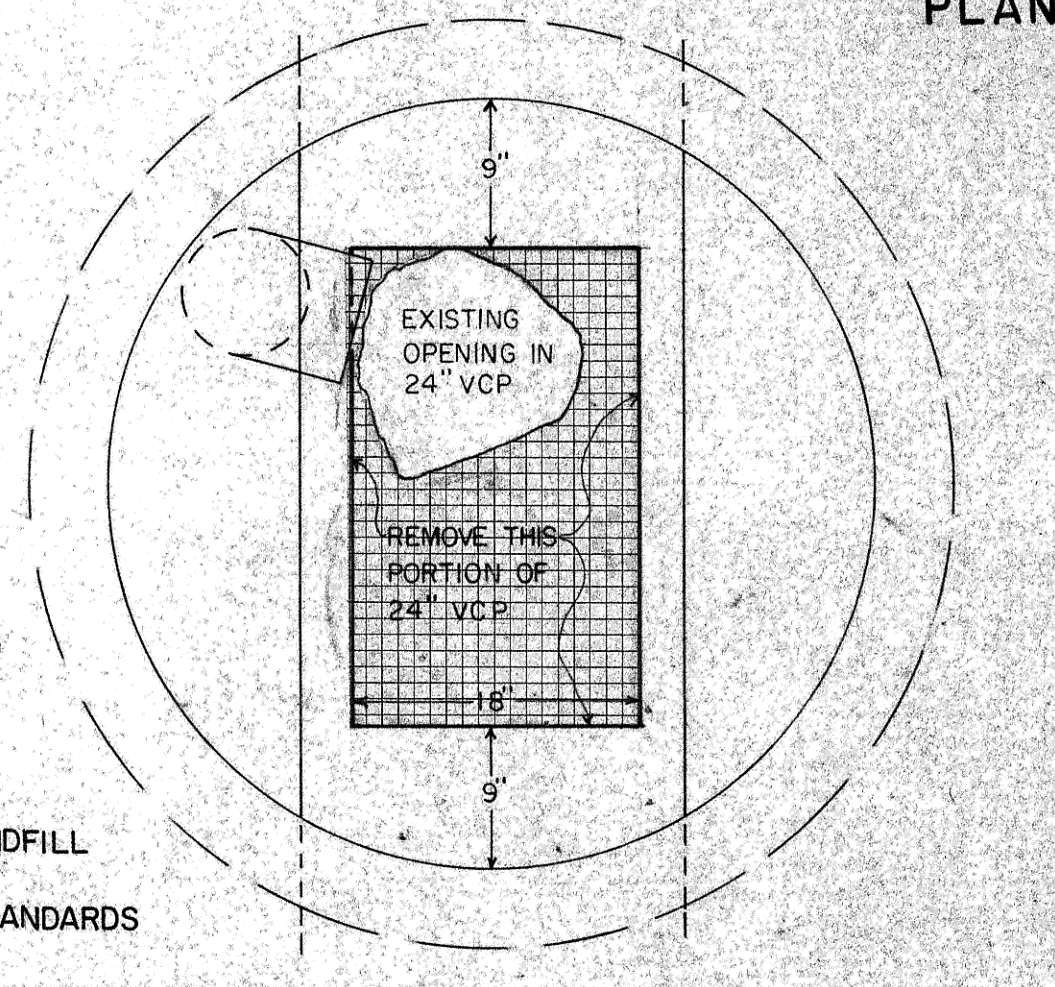


**LINING PULLING PIT AND FINAL ASPHALT ELEVATIONS  
PLAN VIEW**

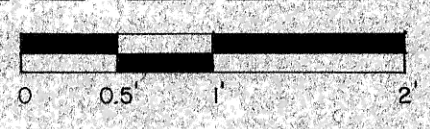


**CONSTRUCTION NOTES FOR REPLACING  
MANHOLE AT STA. 4+38.8 TYPE "B"**

1. ASPHALT PAVEMENT TO BE REMOVED (12' X 18')
2. ASPHALT SHALL BE CUT WITH A SAW OR A WHEEL.
3. EXCAVATION TO BE HAULED TO SANITARY LANDFILL
4. TRENCH TO BE SHORED TO MEET O.S.H.A. STANDARDS
5. SALVAGE EXISTING CASTING, DELIVER TO CITY MAINTENANCE SHOP
6. REMOVE EXISTING CONCRETE SECTIONS, BRICK WALLS AND INVERT, (SALVAGE CONCRETE SECTIONS)
7. INSTALL PRECAST CONCRETE MANHOLE AND CASTING AS SHOWN.
8. EXCAVATION TO BE BACKFILLED WITH GRAVEL, WHICH SHALL BE COMPACTED AS SPECIFIED.
9. POUR NEW SMOOTH INVERT.
10. REPLACE 4" THICK ASPHALT PAVEMENT.



MANHOLE AT STA. 2+46.08

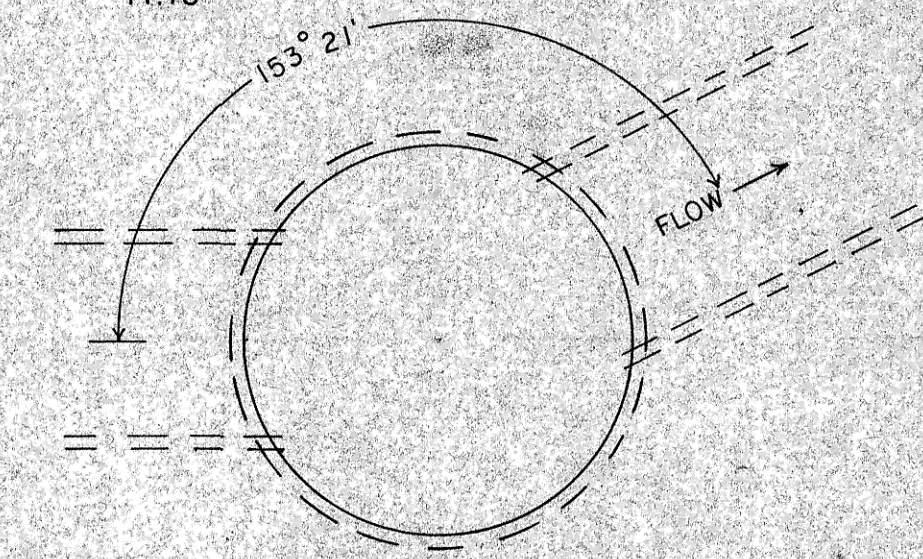


**CONSTRUCTION NOTES FOR MANHOLE  
MODIFICATIONS AT STA. 2+46.08**

1. INSIDE OF EXISTING MANHOLE AND EXTERIOR OF EXISTING 24" VITRIFIED CLAY PIPE MUST BE THOROUGHLY CLEANED.
2. EXISTING PIPE MUST BE REMOVED SO THAT THE OPENING IS 26" LONG AND 18" WIDE. PIPE OPENING MUST BE SMOOTH. BROKEN MATERIAL NOT TO BE DROPPED INTO SANITARY SEWER.
3. NEW CONCRETE SHELF MAY BE REQUIRED IF LOW AREAS ARE FOUND IN EXISTING SHELF.

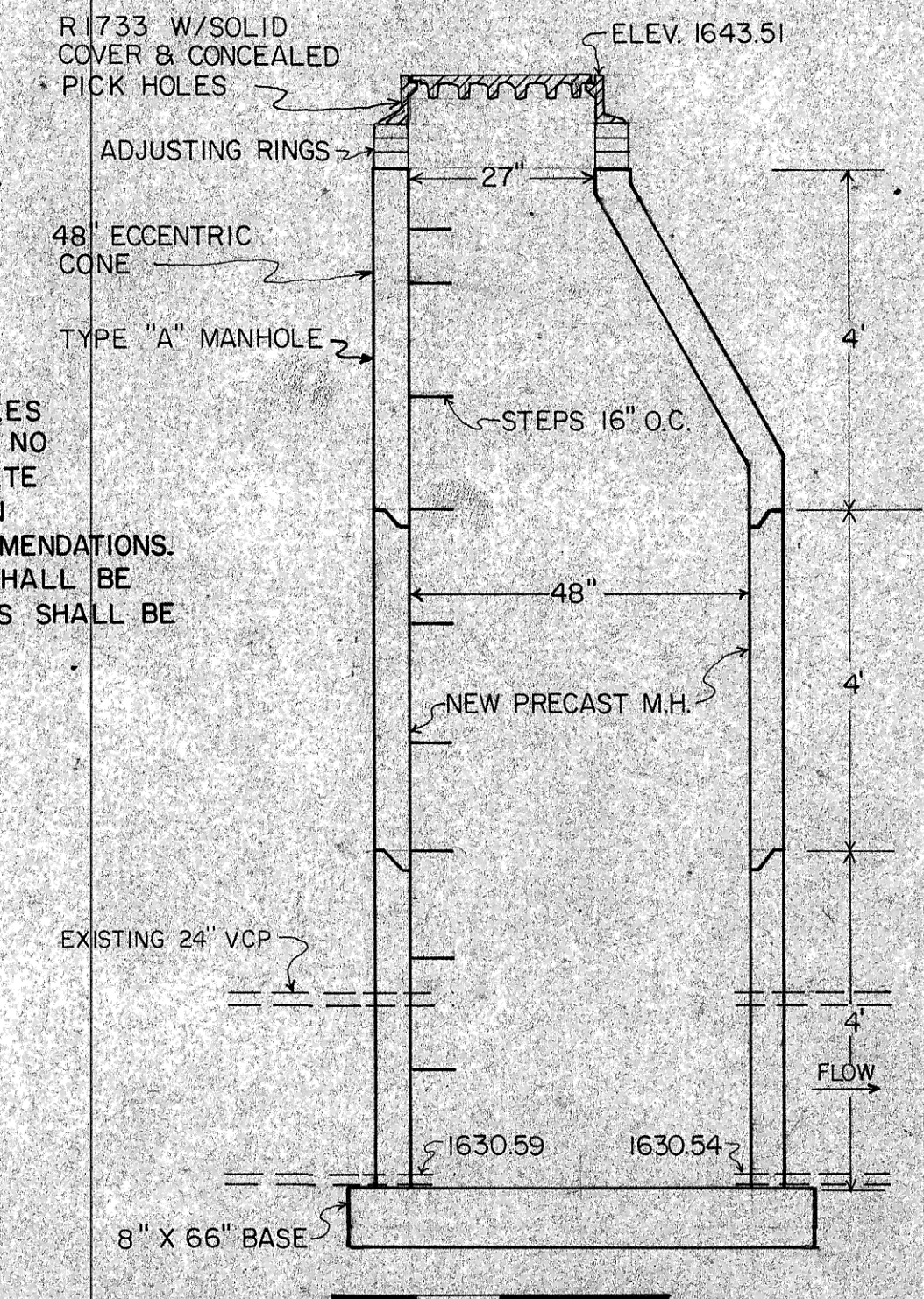
**NOTE FOR TYPE A & B MANHOLE**

THE COMPLETE INTERIOR OF THE NEW MANHOLES SHALL BE COVERED WITH 3 COATS OF INTERLOK NO 49 THICK, OR APPROVED EQUAL. THE CONCRETE SURFACE SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE MINIMUM DRY FILM THICKNESS PER COAT SHALL BE 5.0 MILS. ALL CHIPPED OR DAMAGED COATINGS SHALL BE REPAIRED TO COMPLY WITH SPECIFICATIONS.



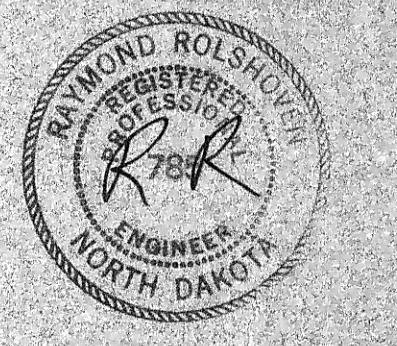
**CONSTRUCTION NOTES FOR MANHOLE AT  
AT STA. 5+39.33 TYPE "A"**

1. CONCRETE PAVEMENT TO BE REMOVED (12' X 18')
2. CONCRETE SHALL BE CUT WITH CONCRETE SAW AS SPECIFIED.
3. EXCAVATION TO BE HAULED TO THE SANITARY LANDFILL
4. TRENCH TO BE SHORED TO MEET O.S.H.A. STANDARDS
5. SALVAGE EXISTING CASTING, DELIVER TO CITY MAINTENANCE SHOP
6. REMOVE EXISTING BRICK MANHOLE AND INVERT.
7. INSTALL 48" PRECAST CONCRETE MANHOLE AND CASTING AS SPECIFIED.
8. EXCAVATION TO BE BACKFILLED WITH GRAVEL, WHICH SHALL BE COMPACTED AS SPECIFIED.
9. POUR NEW SMOOTH FLOW CONCRETE INVERT.
10. REPLACE 9" THICK CONCRETE SLAB, 12' X 18' REINFORCED WITH 4 X 4' - W4 X W4 WELDED WIRE MESH.



MANHOLE AT STA. 5+39.33

Record Drawing



REV.	DATE	DESCRIPTION	BY

<b>MANDAN INTERCEPTOR PHASE III MANDAN, NORTH DAKOTA</b>		
<b>SLIP Lining 24" SANITARY SEWER EAST MAIN STREET SOUTH TO R/W LINE</b>		
<b>ULTEIG ENGINEERS, INC.</b> CONSULTING ENGINEERS • ARCHITECT FARGO • BISMARCK • MINNEAPOLIS		PROJECT NO. 4242
DRAWN BY: <i>dlw</i>	SCALE: AS SHOWN	
CHECKED BY: <i>RR</i>	DATE: FEB. 1987	SHEET D-2 of
APPROVED BY: <i>RR</i>		