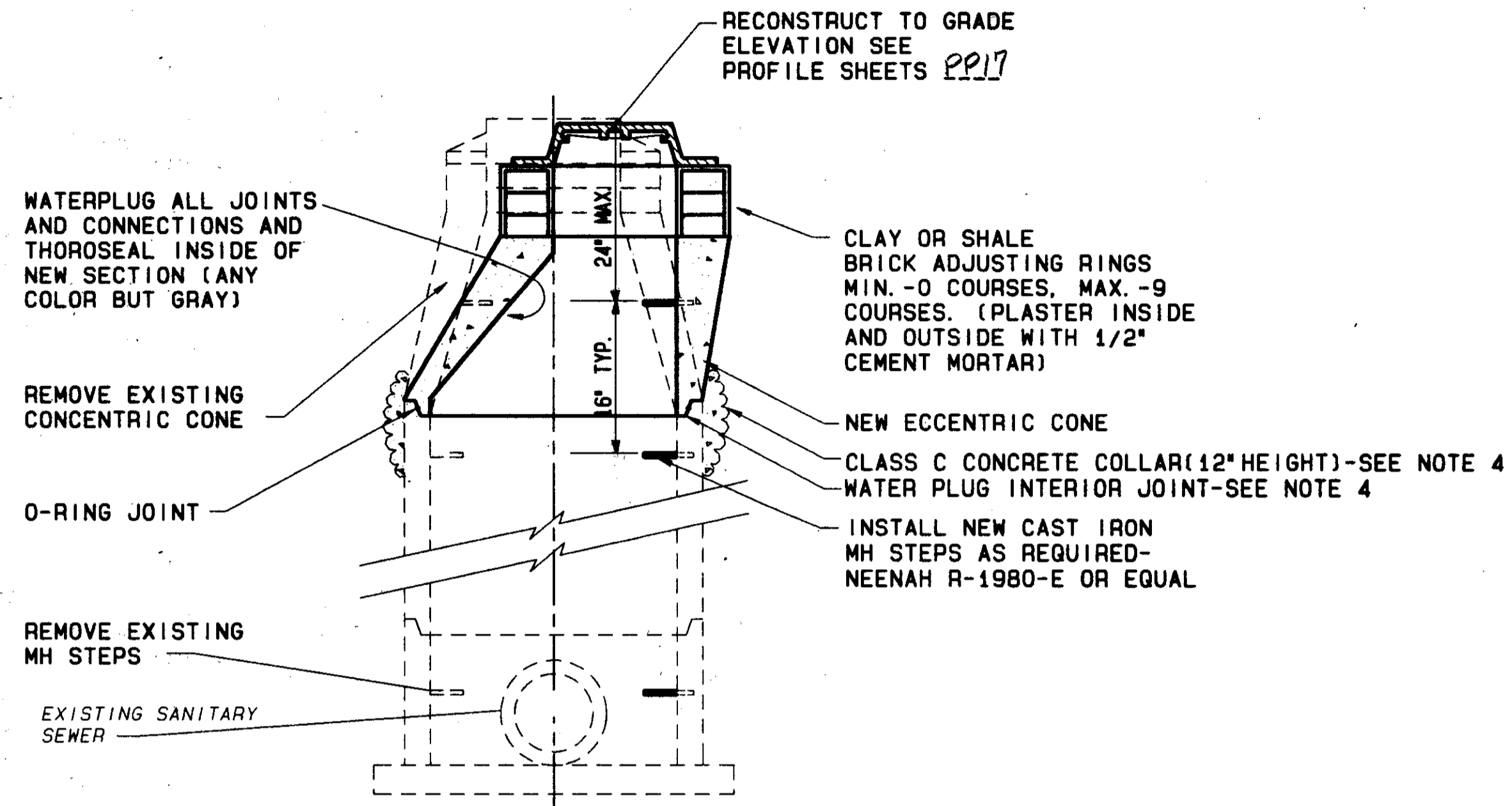


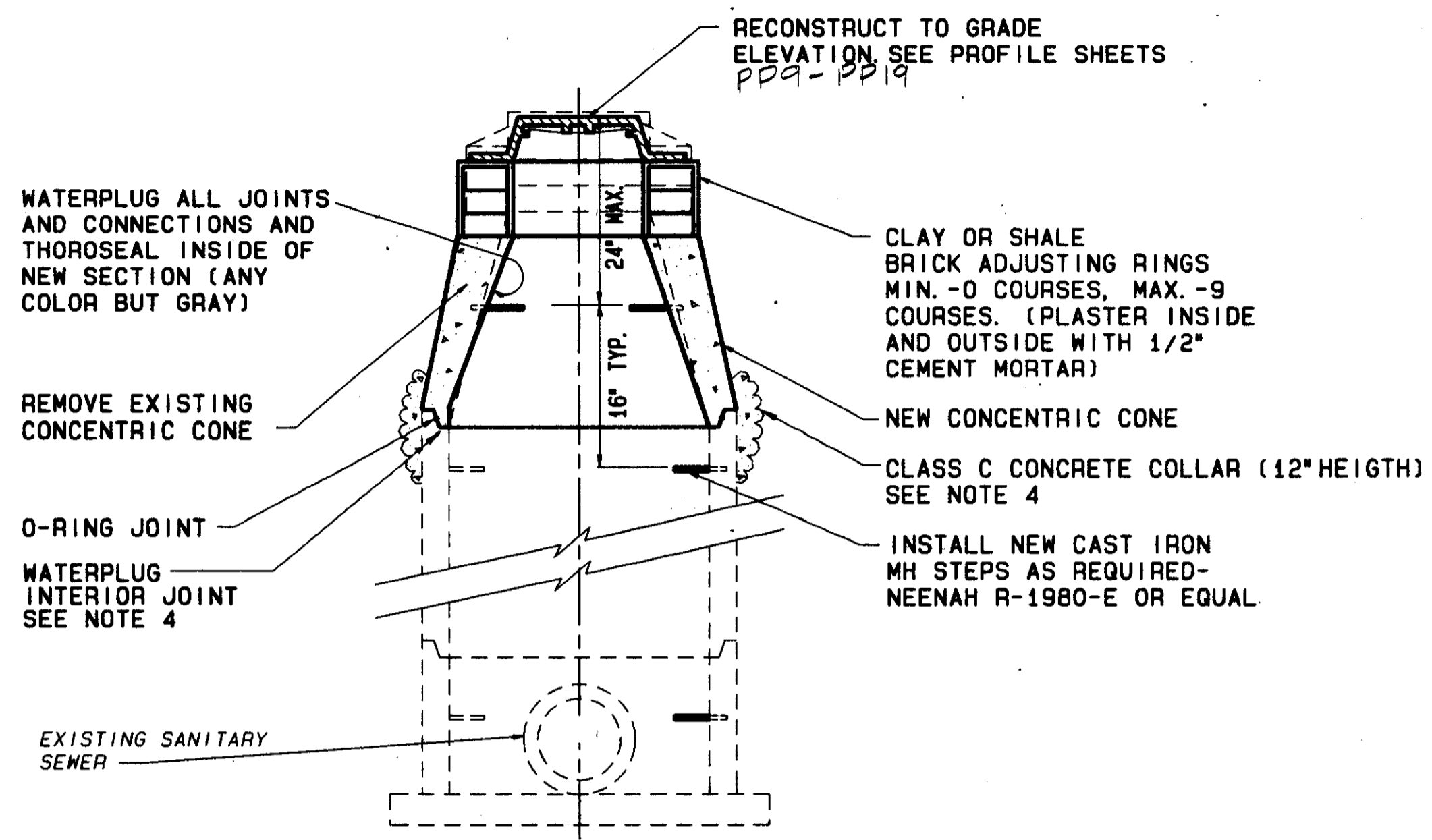
# SANITARY SEWER DETAILS

NOT TO SCALE



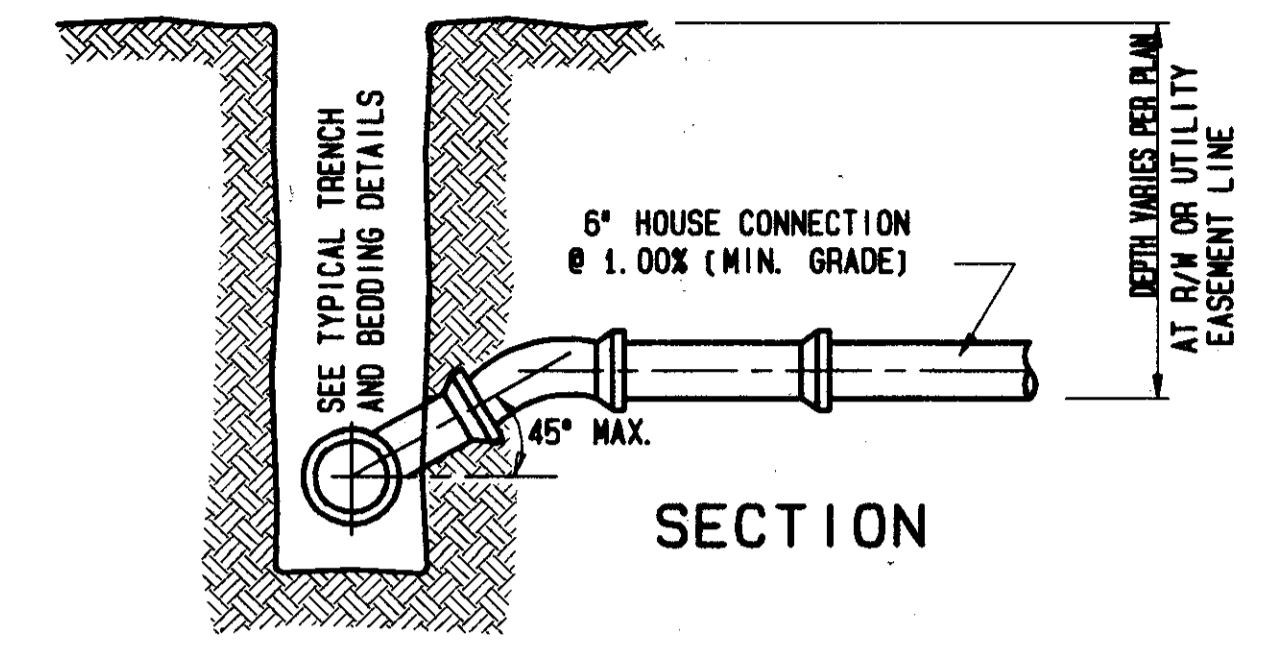
**MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN, TYPE 1**

STA. 28+38.17 RT.  
STA. 30+78.08 RT.

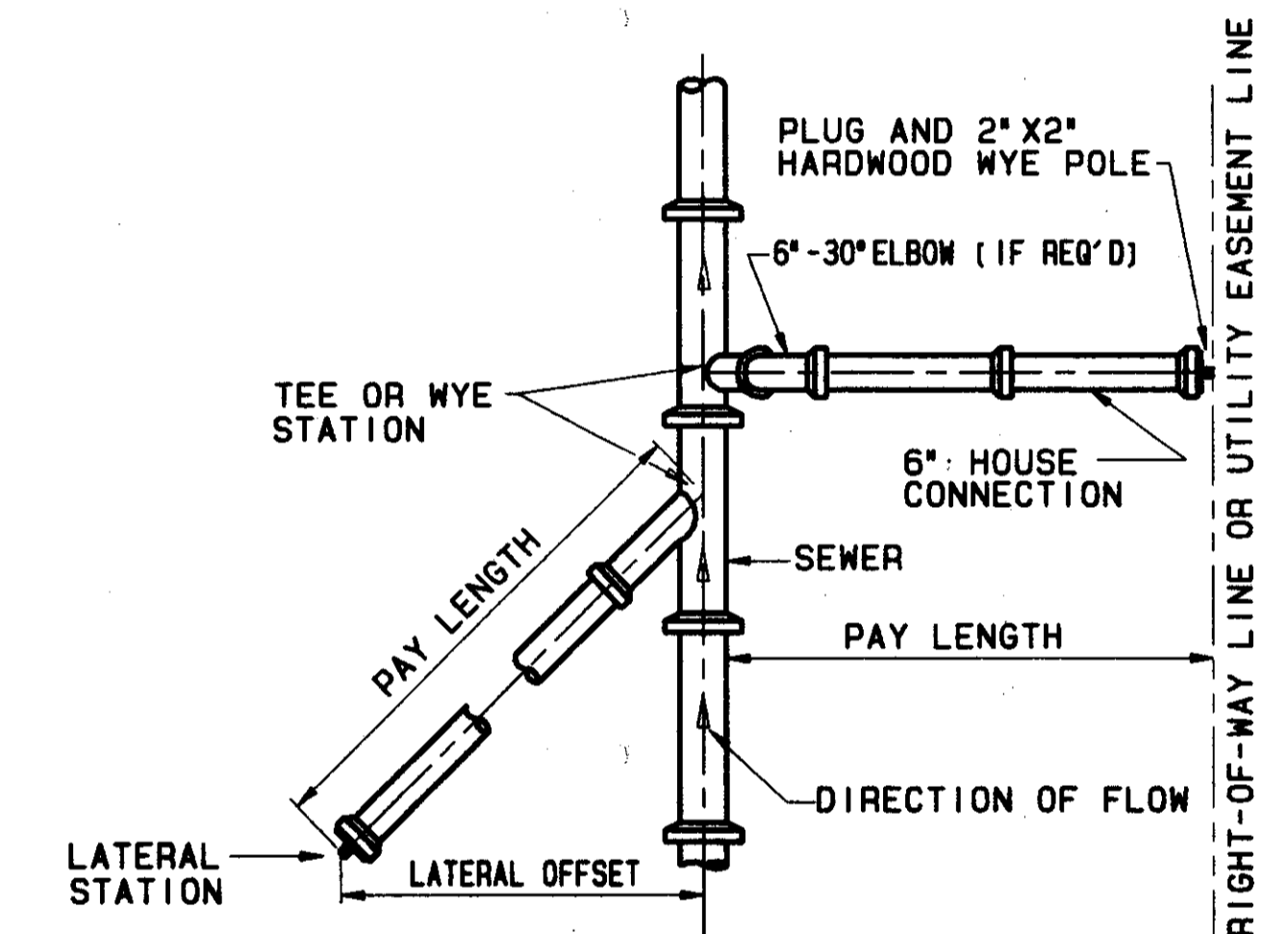


**MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN, TYPE 2**

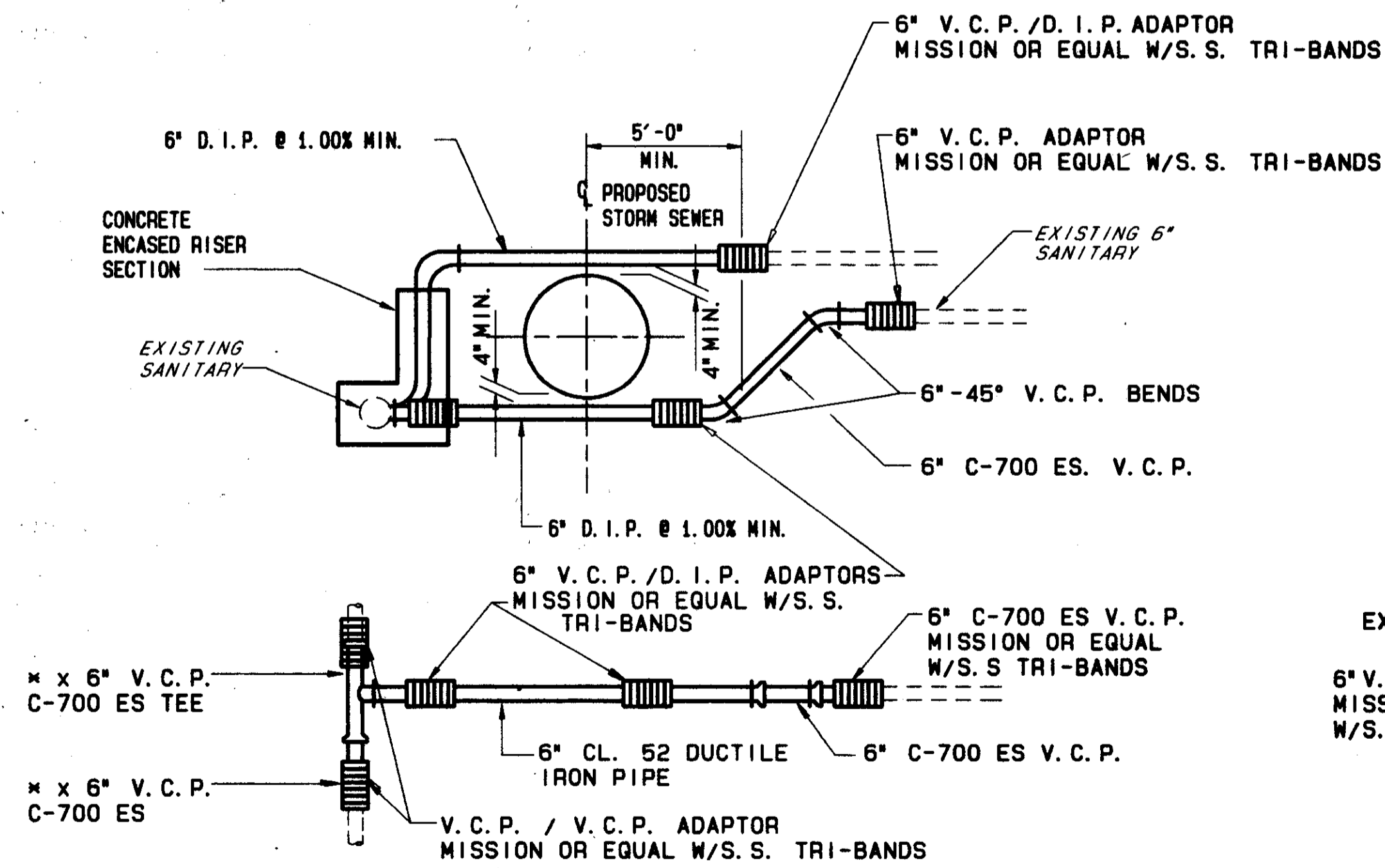
STA.	10+16	17	RT.
STA.	13+80	9	RT.
STA.	14+52	7	RT.
STA.	17+71	6	RT.
STA.	21+41	6	RT.
STA.	27+65	4	RT.
STA.	31+65	4	RT.



**SEWER LATERAL DETAIL**

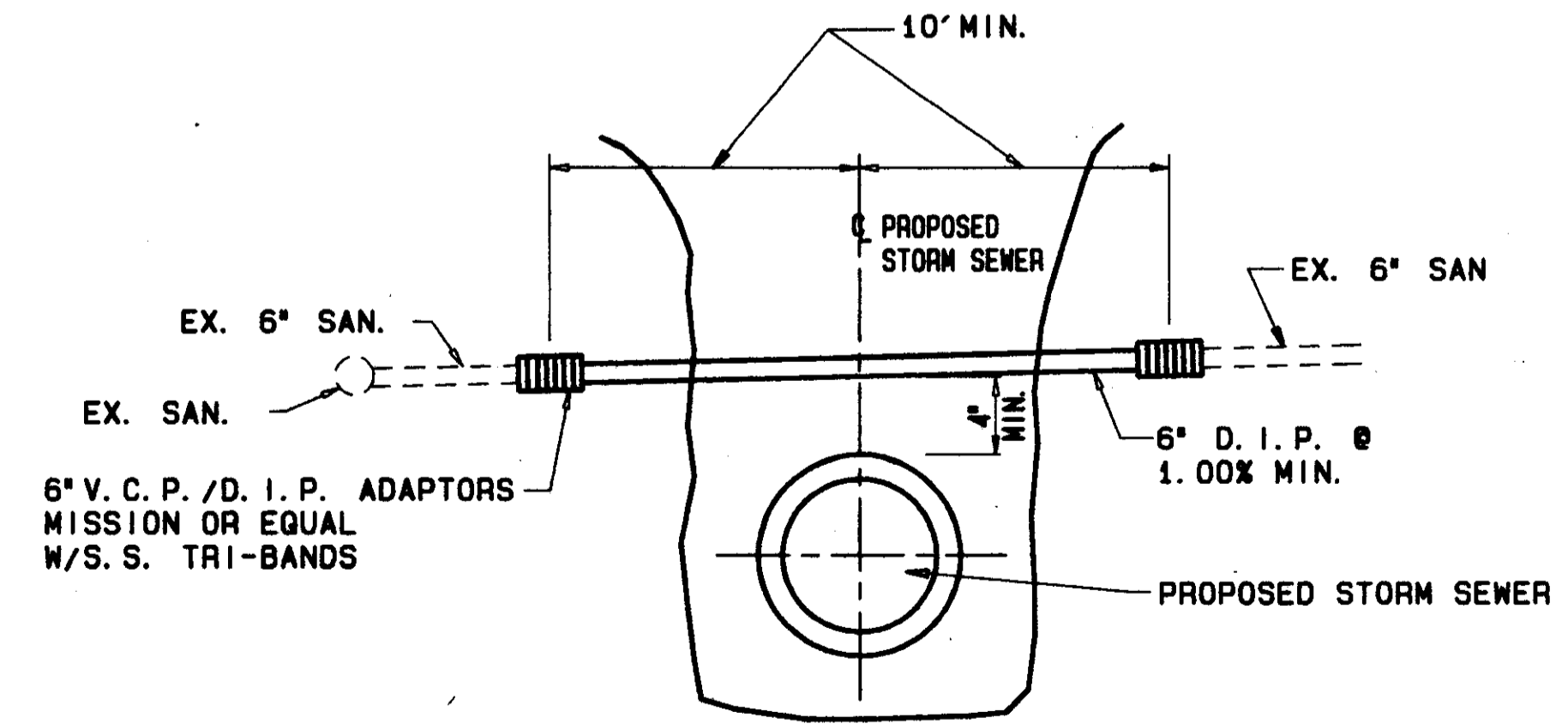


**PLAN**



**SANITARY LATERAL ADJUSTMENT DETAIL**

\* EXISTING SANITARY SEWER SIZES VARY. SEE PLAN SHEETS.



**SANITARY LATERAL REPLACEMENT DETAIL**

**SANITARY SEWERAGE NOTES**

- ① NO MANUFACTURED ADJUSTING RINGS WILL BE PERMITTED ON SANITARY MANHOLES. SANITARY MANHOLE CASTINGS SHALL ONLY BE ADJUSTED TO GRADE UTILIZING RED SHALE BRICK AS SPECIFIED BELOW.
- ② THE TOTAL MAXIMUM NUMBER OF FULL BRICK COURSES (EXISTING AND NEW) ALLOWED IS NINE (9) COURSES, UNLESS OTHERWISE DIRECTED BY THE LAKE COUNTY UTILITIES DEPARTMENT. ALL PROPOSED SANITARY MANHOLE ADJUSTMENTS ARE ANTICIPATED TO MEET THIS REQUIREMENT.
- ③ THE TOP EXISTING MANHOLE STEP SHALL NOT BE MORE THAN 2'-0" BELOW THE TOP OF FRAME UNLESS OTHERWISE DIRECTED BY THE LAKE COUNTY UTILITIES DEPARTMENT. REQUIRED NEW STEPS SHALL BE NEENAH R-1080-E OR EQUAL AND PROJECT INTO THE BRICK 5" TO 6".
- ④ A CONCRETE COLLAR (DETAIL TO BE PROVIDED BY THE CONTRACTOR AND APPROVED BY THE LAKE COUNTY UTILITIES DEPARTMENT) MAY BE UTILIZED IN LIEU OF AN O-RING JOINT WHEN NEW ECCENTRIC CONE SECTIONS ARE NOT COMPATIBLE WITH THE EXISTING PRECAST MANHOLE SECTIONS.
- ⑤ ALL SEWER BRICK SHALL BE MADE FROM SHALE SEWER BRICK AND SHALL BE SMOOTH, SOUND, HARD, TOUGH, AND THOROUGHLY VITRIFIED. THEY SHALL BE TRUE IN FORM WITH STRAIGHT SHARP EDGES AND FLAT SURFACES, AND SHALL BE UNIFORM IN QUALITY, CROSS-SECTION AND DIMENSIONS. SHALE SEWER BRICK FURNISHED OR USED UNDER THESE SPECIFICATIONS SHALL COMPLY WITH ALL THE REQUIREMENTS FOR GRADE S.S., ASTM C-32 SO FAR AS THE SAME MAY APPLY AND ARE NOT IN CONFLICT WITH THESE SPECIFICATIONS.