

NOTES:

1. PRECAST MANHOLE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C-478 WITH 4000 P.S.I., TYPE II CEMENT.
2. PRECAST CONCRETE MANHOLE BASES SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 P.S.I. AND SHALL UTILIZE TYPE II CEMENT.
3. CONCRETE PLACED IN MANHOLE INVERTS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 P.S.I. AND SHALL UTILIZE TYPE II CEMENT.
4. LIFT HOLES THROUGH PRECAST STRUCTURES ARE NOT PERMITTED.
5. ALL PIPE PENETRATIONS SHALL BE PRECAST OR CORE-DRILLED.
6. AN A-LOK TYPE COLLAR, KOR-N-SEAL, OR AN APPROVED RUBBER BOOT SHALL BE USED AT ALL PIPE PENETRATIONS.
7. "D-LOK", "AKWASTOP", "RAM-NEK" OR APPROVED EQUAL AT ALL RISER JOINTS, 1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS.
8. THE INTERIOR OF THE ADJUSTMENT SECTION SHALL BE PLASTERED WITH 3/4" ACID RESISTANT MORTAR OVER BRICK ADJUSTMENT. ONE TO THREE COURSES OF BRICK ARE TO BE USED FOR ADJUSTMENT.
9. MANHOLE COVER SHALL BE WATERTIGHT OR EQUIPPED WITH A INFLOW PROTECTOR. FRAME AND COVER SHALL BE USF#170-E, O/E; COVER WEIGHT 130 POUNDS; TOTAL WEIGHT 280 POUNDS.
10. BOTTOM BARREL AND BASE OF MANHOLE TO BE MONOLITHICALLY CAST UNLESS OTHERWISE APPROVED BY CITY.
11. SERVICE LATERALS SHALL NOT ENTER MANHOLES UNLESS SPECIFIED ON THE PLANS AND THEN MUST BE TREATED AS MAINS (SHOW ELEVATIONS, PRECAST OR CORE-DRILLED PENETRATIONS, FLOW CHANNEL CONSTRUCTION, ETC.).
12. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.
13. FOR NON-STANDARD MANHOLES, THE ENGINEER OF RECORD SHALL DESIGN ALL MANHOLE REINFORCEMENT STEEL AND JOINT DETAILS AND SHALL SUBMIT CALCULATIONS TO THE CITY FOR REVIEW.
14. PRECAST OR CORE-DRILLED PENETRATION DIAMETERS SHALL BE PER MANUFACTURER SPECIFICATIONS OR AS FOLLOWS:
 - 10" TO 12" FOR 8" DIAMETER PIPE.
 - 12" TO 16" FOR 10" DIAMETER PIPE.
 - 16" FOR 12" DIAMETER PIPE.
15. MATERIALS OF CONSTRUCTION, PLACEMENT, AND COMPACTION REQUIREMENTS FOR BEDDING MATERIALS SHALL BE PER CITY SPECIFICATIONS.
16. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO THE FLOW STREAM.
17. PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.

CITY OF GROVELAND STANDARD DETAILS: SANITARY SEWER



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**GENERAL SANITARY
SEWER NOTES**

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SCALE: N.T.S.

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