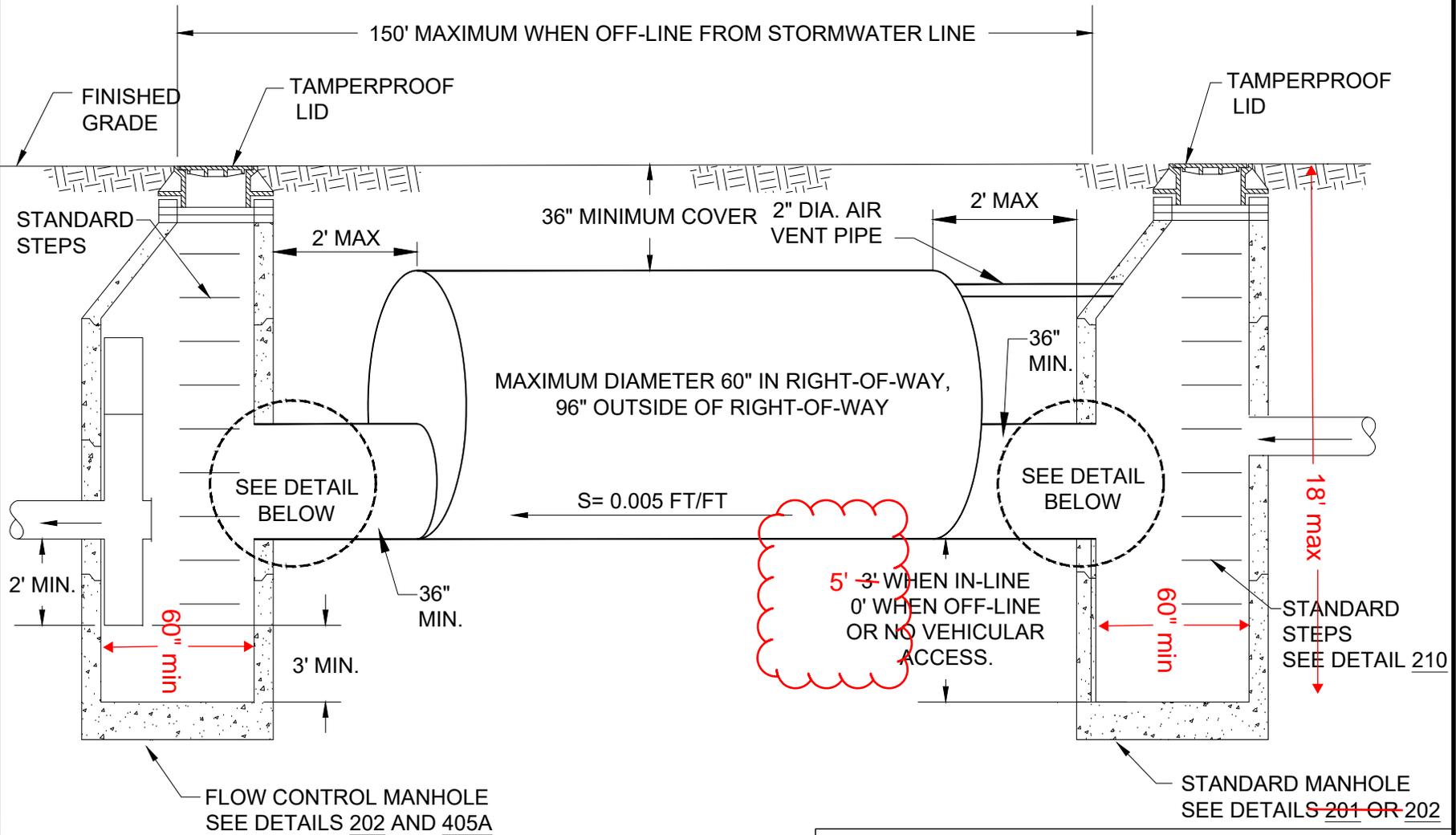


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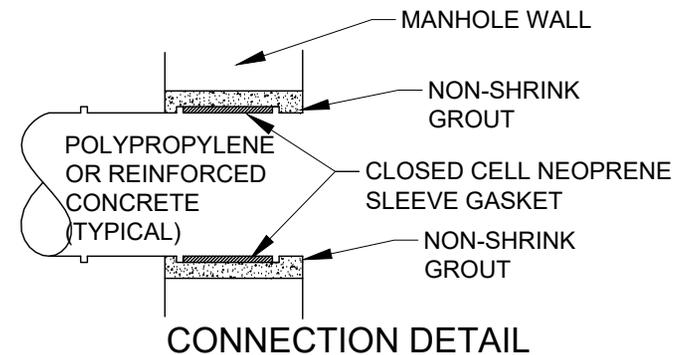
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DETENTION PIPE
TYPICAL CLOSED



NOTES:

1. DETENTION PIPE AND ALL CONNECTIONS SHALL BE WATERTIGHT.

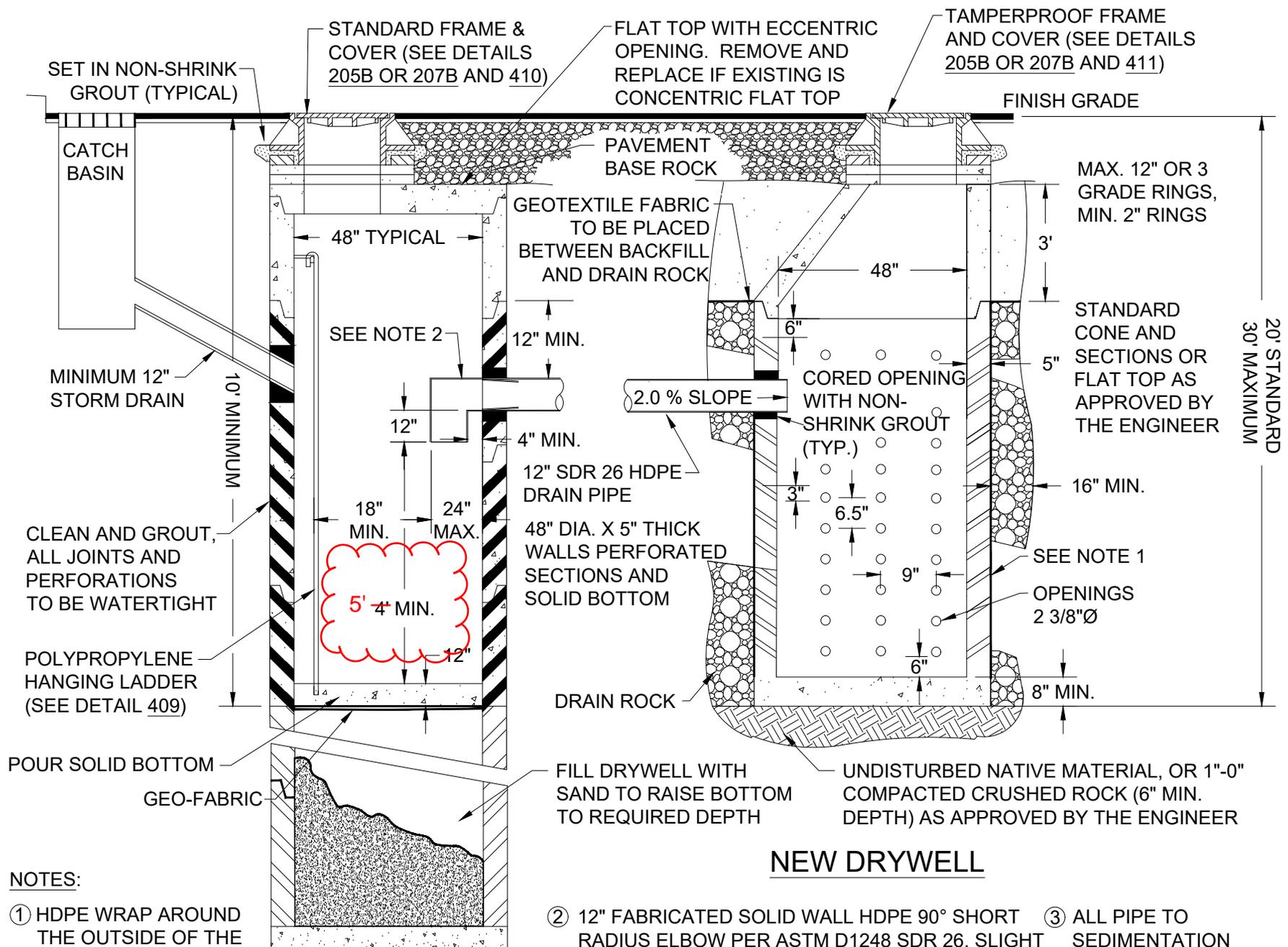


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DRYWELL SYSTEM AND
SEDIMENTATION MANHOLE
(TYPICAL RETROFIT INSTALLATION)

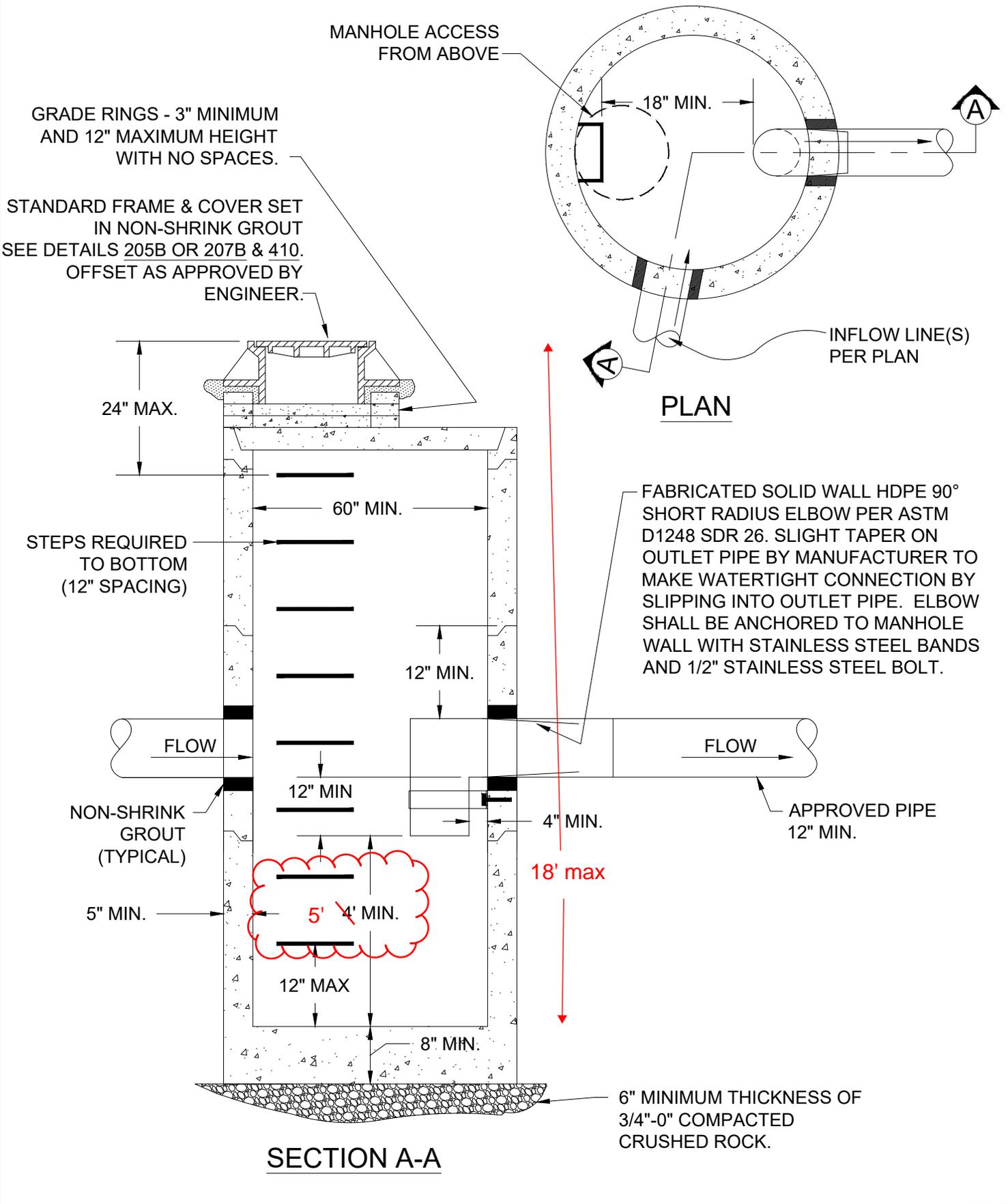


NOTES:

- ① HDPE WRAP AROUND THE OUTSIDE OF THE PERFORATED SECTIONS SHALL BE ADDED IF THE DRAIN ROCK IS SMALLER THAN 2"-4"
- ② 12" FABRICATED SOLID WALL HDPE 90° SHORT RADIUS ELBOW PER ASTM D1248 SDR 26. SLIGHT TAPER ON OUTLET PIPE BY MANUFACTURER TO MAKE WATERTIGHT CONNECTION BY SLIPPING INTO OUTLET PIPE. ELBOW SHALL BE ANCHORED TO MANHOLE WALL WITH STAINLESS STEEL BANDS AND 1/2" STAINLESS STEEL BOLT.
- ③ ALL PIPE TO SEDIMENTATION MANHOLE & PRECAST DRYWELL SHALL HAVE CLASS "B" BEDDING & PIPE ZONE MATERIAL

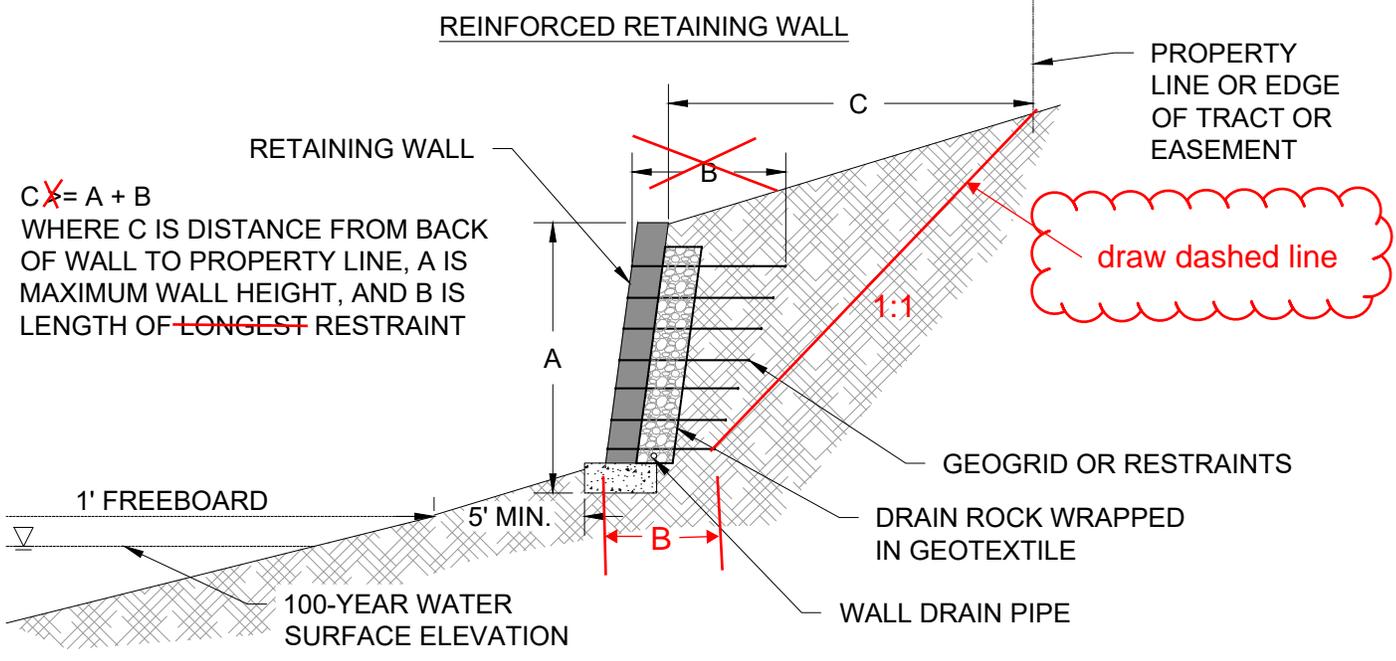
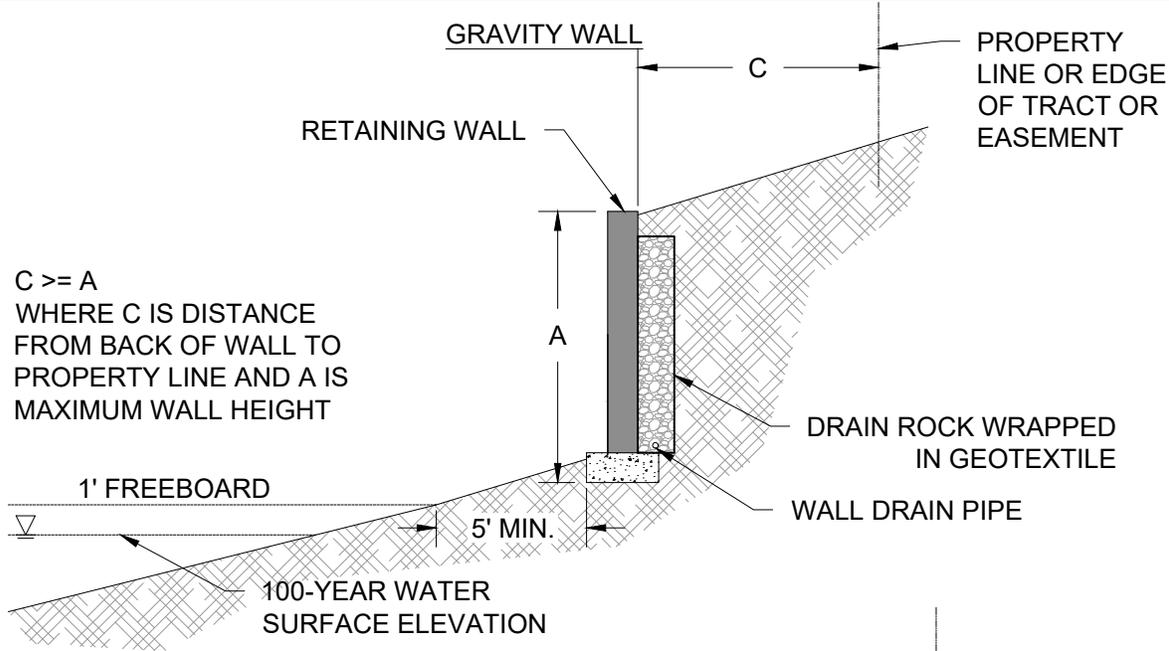
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DETAIL NO. 408

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<p>CITY OF GRESHAM</p>	<p>SEDIMENTATION MANHOLE</p>	<p>DRAWN RMS</p>
		<p>REV. DATE AUG 2025</p>
		<p>APPR. <i>[Signature]</i></p>
		<p>DETAIL NO. 413</p>
<p>PWS VERSION: JAN 2026</p>		

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1. RETAINING WALLS ARE NOT ALLOWED WITHIN THE ACTIVE POND AREA. ALL PARTS OF THE WALL MUST BE A MINIMUM DISTANCE OF 5 FEET AWAY FROM THE BOUNDARY DEFINED BY THE FREEBOARD ELEVATION.
2. GRAVITY WALLS SHALL BE SET BACK FROM THE NEAREST PROPERTY LINE OR EDGE OF TRACT OR EASEMENT BY AT LEAST THE DISTANCE EQUAL TO THE WALL HEIGHT.
3. REINFORCED RETAINING WALLS SHALL BE SET BACK FROM THE NEAREST PROPERTY LINE OR EDGE OF TRACT OR EASEMENT BY AT LEAST THE DISTANCE EQUAL TO THE MAXIMUM WALL HEIGHT PLUS THE LENGTH OF THE LONGEST RESTRAINT.
4. DRAIN ROCK WRAPPED IN GEOTEXTILE SHALL BE INCLUDED BEHIND WALLS.
5. NO PERFORATIONS FOR PRIVATE STORM LINES SHALL PASS THROUGH RETAINING WALLS.
6. STRUCTURAL DESIGN CALCULATIONS MUST BE SUBMITTED WITH EVERY RETAINING WALL PROPOSAL.
7. WALLS SHALL NOT INHIBIT MAINTENANCE ACCESS INTO THE FACILITY, PARTICULARLY THE FOREBAYS.
8. SLOPES WITHIN CITY TRACT OR EASEMENT SHALL BE A MAXIMUM OF 3H:1V.

CITY OF GRESHAM

RETAINING WALLS ADJACENT TO PONDS

PWS VERSION: JAN 2026

DRAWN	TFH
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