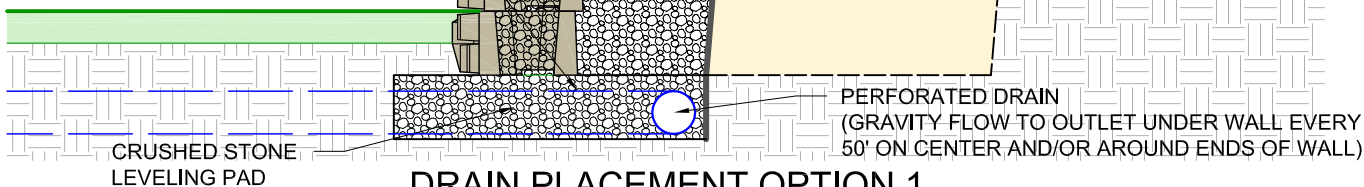


DRAIN PLACEMENT OPTIONS - 1 OF 2

TYPICAL CRUSHED STONE LEVELING PAD MATERIAL GRADATION REQUIREMENTS	
SIEVE SIZE	% PASSING
1 1/2 INCH	100
1 INCH	95 - 100
1/2 INCH	25 - 60
NO. 4	0 - 10
NO. 8	0 - 5
NO. 200	0

CONVERT TO SOLID PIPE BEFORE OUTLETING UNDER WALL TO MINIMIZE POTENTIAL CRUSHING

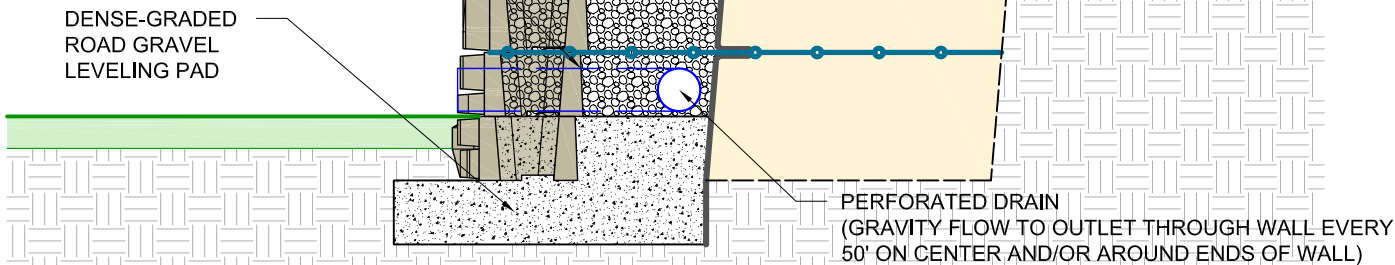


DRAIN PLACEMENT OPTION 1

THIS DETAIL IS INTENDED FOR USE WHERE GRAVITY DRAINAGE IS AVAILABLE TO THE BOTTOM OF THE CRUSHED STONE LEVELING PAD

TYPICAL DENSE-GRADED ROAD GRAVEL LEVELING PAD MATERIAL GRADATION REQUIREMENTS	
SIEVE SIZE	% PASSING
1 INCH	100
3/8 INCH	60-85
NO. 8	25-60
NO. 200	9-16

CONVERT TO SOLID PIPE BEFORE OUTLETING THROUGH WALL TO MINIMIZE POTENTIAL CRUSHING



DRAIN PLACEMENT OPTION 2

THIS DETAIL IS INTENDED FOR USE WHERE GRAVITY DRAINAGE IS ONLY AVAILABLE TO THE BOTTOM OF THE EXPOSED WALL FACE

DRAWN BY: J. Johnson	TITLE:
APPROVED BY:	DRAIN PLACEMENT OPTIONS <i>115 RETAINING</i>
DATE: 12-11-09	
SHEET NO. : 1 of 2	DRAWING FILE: RS 115 Drain Options 121109.dwg

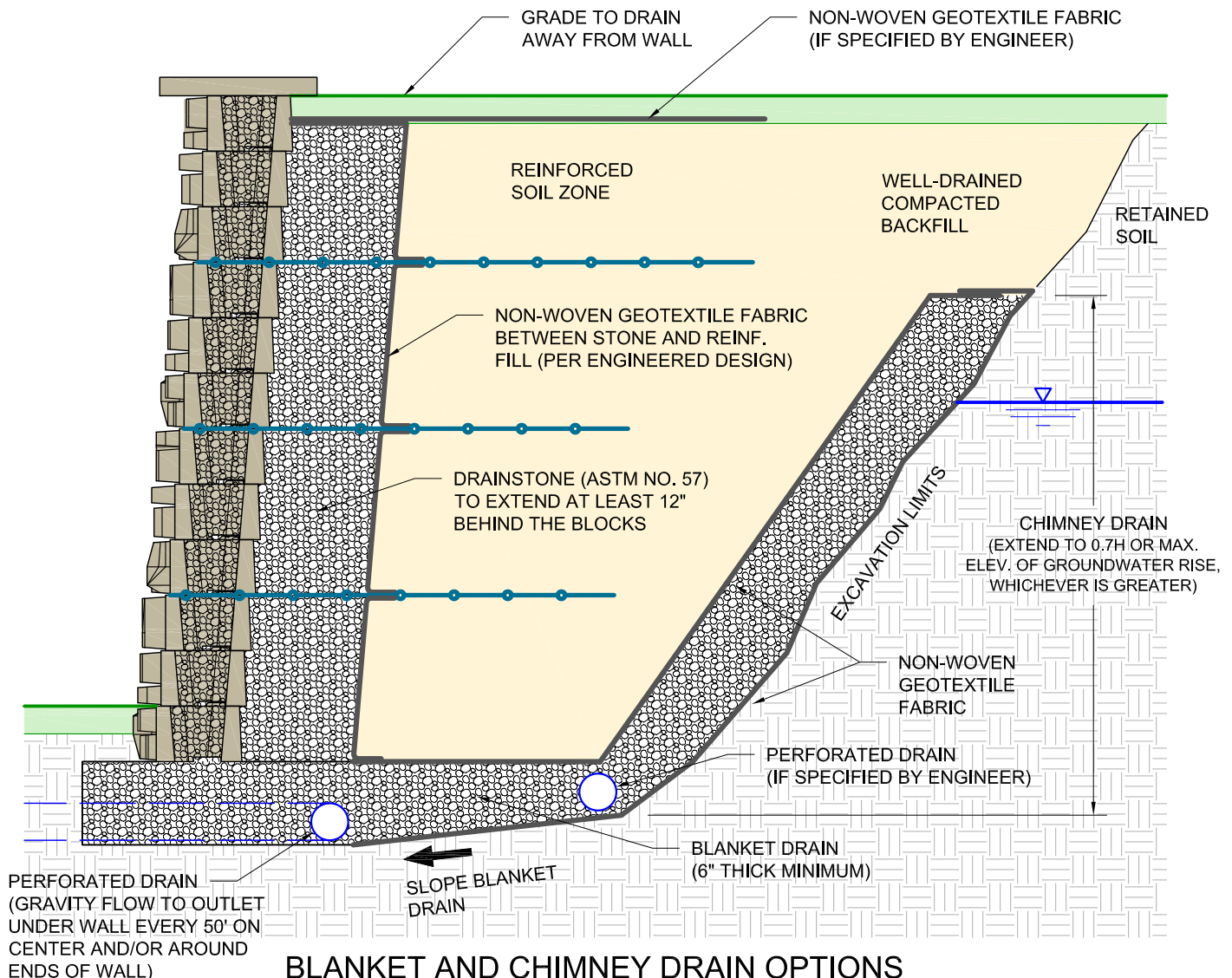


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DRAIN PLACEMENT OPTIONS - 2 OF 2

DRAIN PLACEMENT NOTES:

1. CLEARLY UNDERSTAND THE DRAINAGE CHARACTERISTICS OF THE SITE, INCLUDING BOTH SURFACE AND SUBSURFACE WATER FLOW. HAVE A DETAILED PLAN TO PROPERLY DEAL WITH ANY WATER BEFORE STARTING CONSTRUCTION.
2. INSTALL THE DRAIN IN THE LOWEST POSSIBLE POINT BEHIND THE WALL TO ALLOW THE OUTLET PIPE TO DRAIN BY GRAVITY TO DAYLIGHT.
3. OUTLET TO A STORM DRAIN SYSTEM SHOULD ONLY BE MADE UNDER SPECIFIC DESIGN, OVERSIGHT, AND DIRECTION BY A PROFESSIONAL ENGINEER.
4. GRADE AREAS BOTH ON TOP AND BOTTOM OF THE WALL TO DIRECT SURFACE WATER RUNOFF AWAY FROM THE RETAINING WALL. DRAINAGE SWALES MAY BE REQUIRED.
5. USE OF A BLANKET AND/OR CHIMNEY DRAIN IS RECOMMENDED IN AREAS WHERE GROUNDWATER CAN BE EXPECTED NEAR THE BOTTOM OF THE WALL OR FLOWING THROUGH THE RETAINED SOIL ZONE.



THIS DETAIL IS RECOMMENDED IN AREAS WHERE GROUNDWATER CAN BE EXPECTED NEAR THE BOTTOM OF THE WALL OR FLOWING THROUGH THE RETAINED SOIL ZONE

DRAWN BY:
J. Johnson

APPROVED BY:

DATE:
12-11-09

SHEET NO. :
2 of 2

TITLE:

DRAIN PLACEMENT OPTIONS
115 RETAINING

DRAWING FILE:
RS 115 Drain Options 121109.dwg

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