

January 10, 2023

Dwayne Lewis MSE Hardscapes PO Box 942 Raymore, MO 64083

RE: Stacked Stone Retaining Wall

146 Ambersham

Per your request, Hart Creek Engineering has reviewed the construction of the retaining wall at the residence location at 146 Ambersham in Lee's Summit, MO. The wall construction appears to be in conformance with the attached wall details and built per industry standards.

If you have any questions or I may be of any further assistance, do not hesitate to contact me.

Sincerely,

Charley Farris, PE



RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

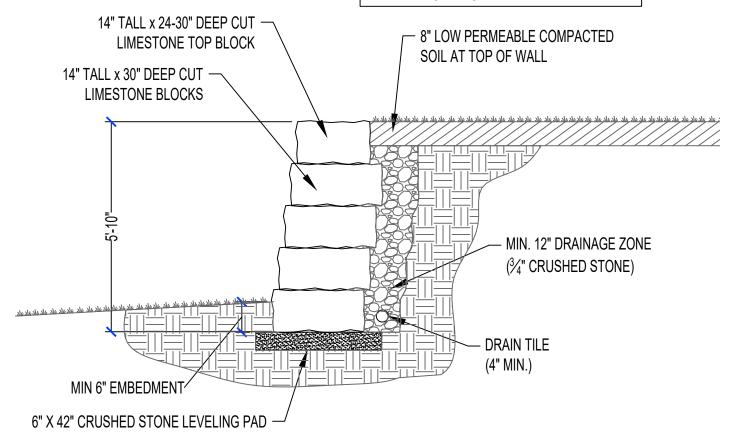
## 1. MATERIALS

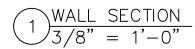
- a. DRAINAGE FILL BEHIND BACK FACE SHALL CONSIST OF CLEAN CRUSHED STONE OR CRUSHED GRAVEL MEETING THE REQUIREMENTS OF ASTM C33 #57 OR #67.
- b. LEVELING PAD SHALL BE WELL GRADED CRUSHED STONE MEETING ALL OF THE REQUIREMENTS OF KDOT AB-3 OR 2000 PSI LEAN CONCRETE.
- c. DRAIN PIPE SHALL BE 4" Ø PERFORATED OR SLOTTED PVC, OR CORRUGATED HDPE PIPE. THE DRAINAGE PIPE MAY BE WRAPPED WITH A GEOTEXTILE TO FUNCTION AS A FILTER.

## 2. TECHNICAL REQUIREMENTS

- a. PRIOR TO CONSTRUCTION OF THE WALLS, THE GRADING CONTRACTOR SHALL CLEAR AND GRUB THE REINFORCED BACKFILL ZONE AREA, REMOVING TOP SOILS, BRUSH, SOD OR OTHER ORGANIC MATERIALS. ANY UNSUITABLE SOILS SHALL BE OVER-EXCAVATED. REPLACED AND COMPACTED WITH REINFORCED BACKFILL MATERIAL TO PROJECT SPECIFICATIONS OR OTHERWISE DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- b. THE GEOTECHNICAL ENGINEER SHALL CONFIRM THAT THE SITE HAS BEEN PROPERLY PREPARED AND THE DESIGN PARAMETERS IN SECTION 5 ARE APPROPRIATE PRIOR TO FILL PLACEMENT. A WRITTEN CONFIRMATION SHALL BE PROVIDED TO HART CREEK ENGINEERING PRIOR TO FILL PLACEMENT.
- c. FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 10" IN UNCOMPACTED THICKNESS FOR HEAVY COMPACTION EQUIPMENT. FOR ZONES WHERE COMPACTION IS ACCOMPLISHED WITH HAND OPERATED EQUIPMENT. FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. ONLY HAND OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3' OF THE BACK FACE OF THE WALL.
- d. FILL MATERIALS SHALL BE PLACED FROM THE BACK OF THE FACING UNITS TOWARDS THE ENDS OF THE GEOGRID TO ENSURE PROPER TENSIONING.
- e. FILL SHALL BE COMPACTED AS SPECIFIED BY PROJECT SPECIFICATIONS OR TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-698.

FINISHED GRADE AT TOP OF WALL SHALL BE DESIGNED FOR PROPER DRAINAGE TO PREVENT PONDING.







HARTCREEKENGINEERING.COM

HARTSBURG, MO 65039 573-289-8520

MO LICENSE E-2022018980

PROJECT NO:	23002	PROJEC
RAWN BY:	CRF	
REVIEWED BY:	CRF	$\Delta NI$

DATE: 01/10/2023

CT 146 **AMBERSHAM** 

SHEET

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