

GENERAL

All grades are estimated based on electronic cadd files provided by Bax Engineering. Some field modifications may be required.

MATERIALS

The retaining wall units shall be Hercules Standard and Mega modules as manufactured by, or under license from, Hercules Mfg., Inc. Each shall be identified from the face by an indentation or depression at the top center of the face in accordance with the drawings. Hercules modules are designed to be installed with an average side to side spacing between modules of 11 inches. The modules shall be designed to interlock when installed according to the specifications so as to form a flexible, stable, and plantable wall. The setback shall be 70 degrees from horizontal as shown on the drawings. Each module shall have a fill-receiving trough, which is open and unbounded at the rear, allowing fill within the modules' trough to be in contact with the retained mass. The owner shall choose the color. Concrete wall units shall meet the requirements of ASTM C90-90 except compressive strength shall be a minimum of 3,000 pounds per square inch with a maximum six percent absorption.

The Hercules Mega unit shall be 19 inches wide by 18 inches deep with an 8 inch course height, minimum 135 lbs unit weight and 1.67 square feet (sf) coverage per unit. The Hercules Standard unit shall be 19 inches wide by 18 inches deep with an 8 inch course height, minimum 95 lbs unit weight and 1.5 sf coverage per unit.

The leveling pad shall be constructed of compacted crushed rock as shown on this sheet.

Geogrid - Geogrid reinforcement shall be Synteen SF20 as indicated or equal.

A drain pipe is required at the base of each wall for the entire length of each wall and may consist of either 6" Multiflow or 4" flexible pipe.

WALL FOUNDATION

Foundation soil shall be excavated as required for the leveling pad and the reinforced fill zone to the depths and locations shown on the plan sheet or as directed by the site engineer. The exposed foundation soil shall be observed by the on-site soils engineer prior to construction to verify that the exposed material is suitable for a net design bearing pressure of 2000 psf and that the base of the excavation is free of loose soil, uncompacted fill, water, or frozen material. Undercut any unsuitable soil. Undercut areas shall be filled with 2-inch minus crushed limestone and compacted to at least 95% of the materials standard Proctor maximum dry density.

Construct the crushed rock leveling pad to the lines and grades shown on the plans. The crushed rock leveling pad is to consist of 2-inch minus crushed limestone compacted to at least 95% of the materials maximum dry density as determined by the standard proctor test.

Install 6" Multiflow tubing or 4" diameter flexible pipe, as indicated for the entire length of each wall.

WALL CONSTRUCTION

Install the first course of units on the leveling pad. The units shall be placed at 30 inches on-center spacing. Install drain tubing. Compact the specified fill in, between, and behind the units to the top of the rails before the next course is placed. Install the next course in a running bond stack. Pull unit forward to establish a 70-degree wall batter or place at an offset to produce the required batter. Backfill as before noting any changes in backfill material and continue construction. Place the specified reinforcement at the locations and elevations shown on the attached elevation view. The radius walls may require smaller or larger spacing between the units to maintain the running bond.

WALL BACKFILL

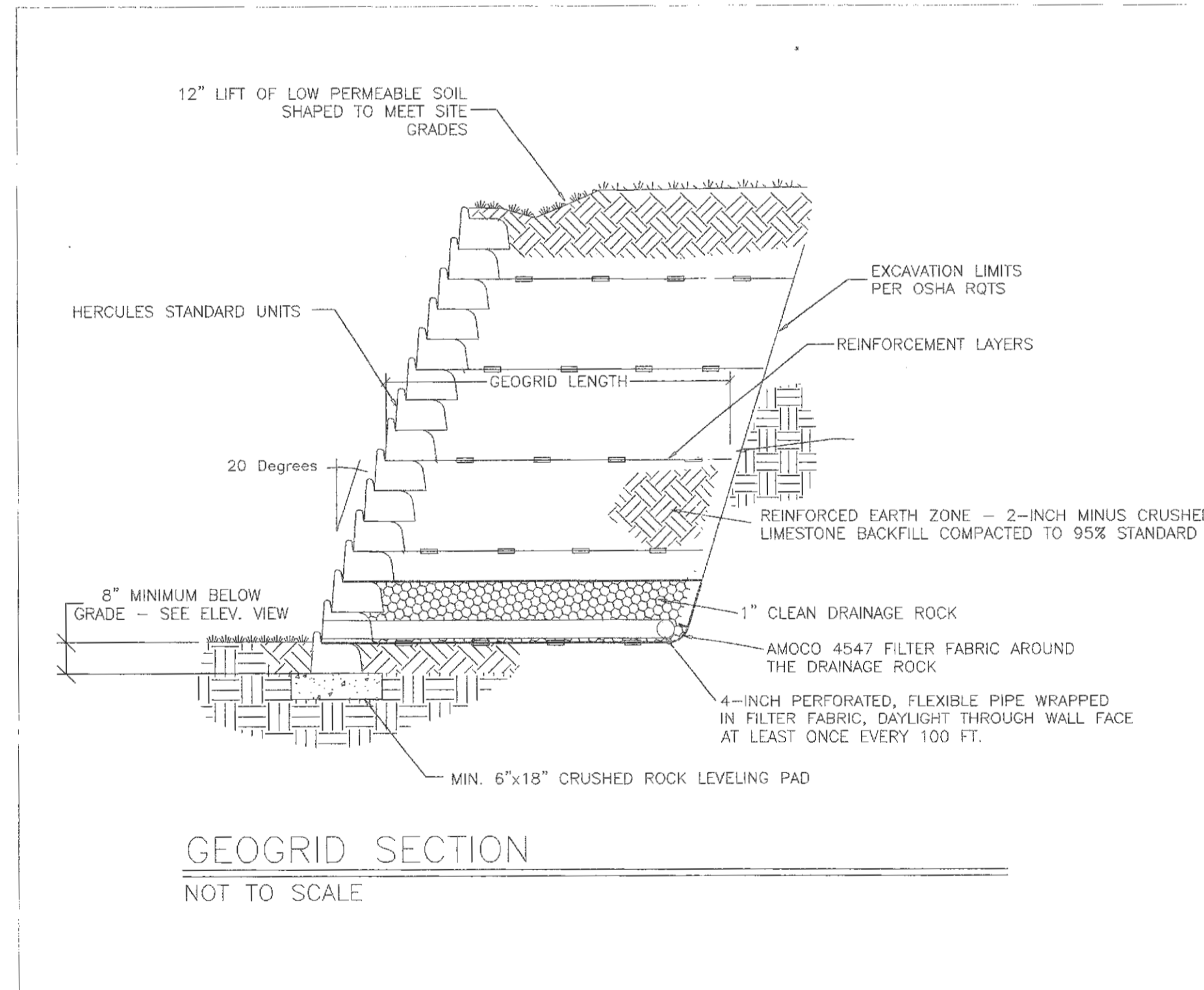
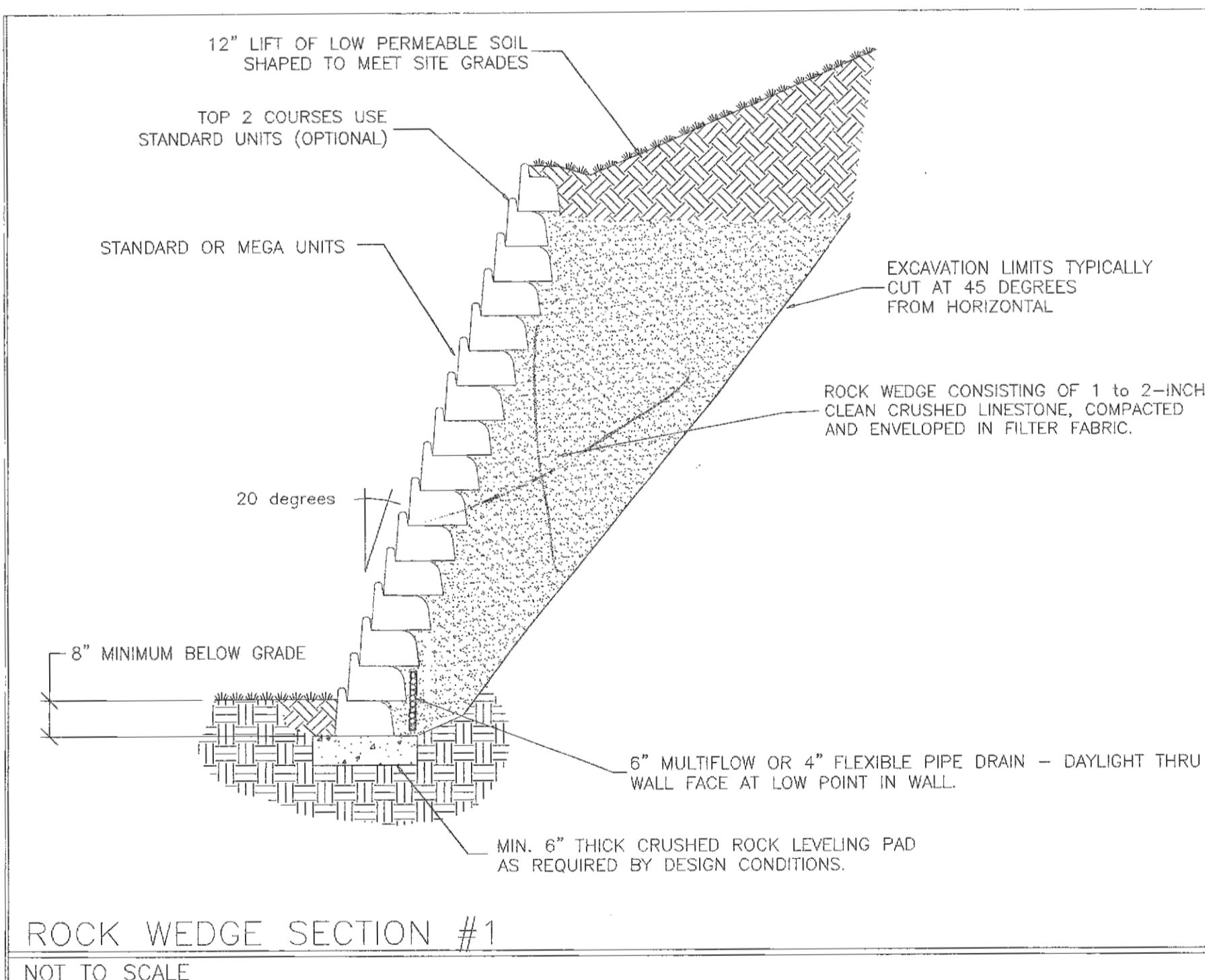
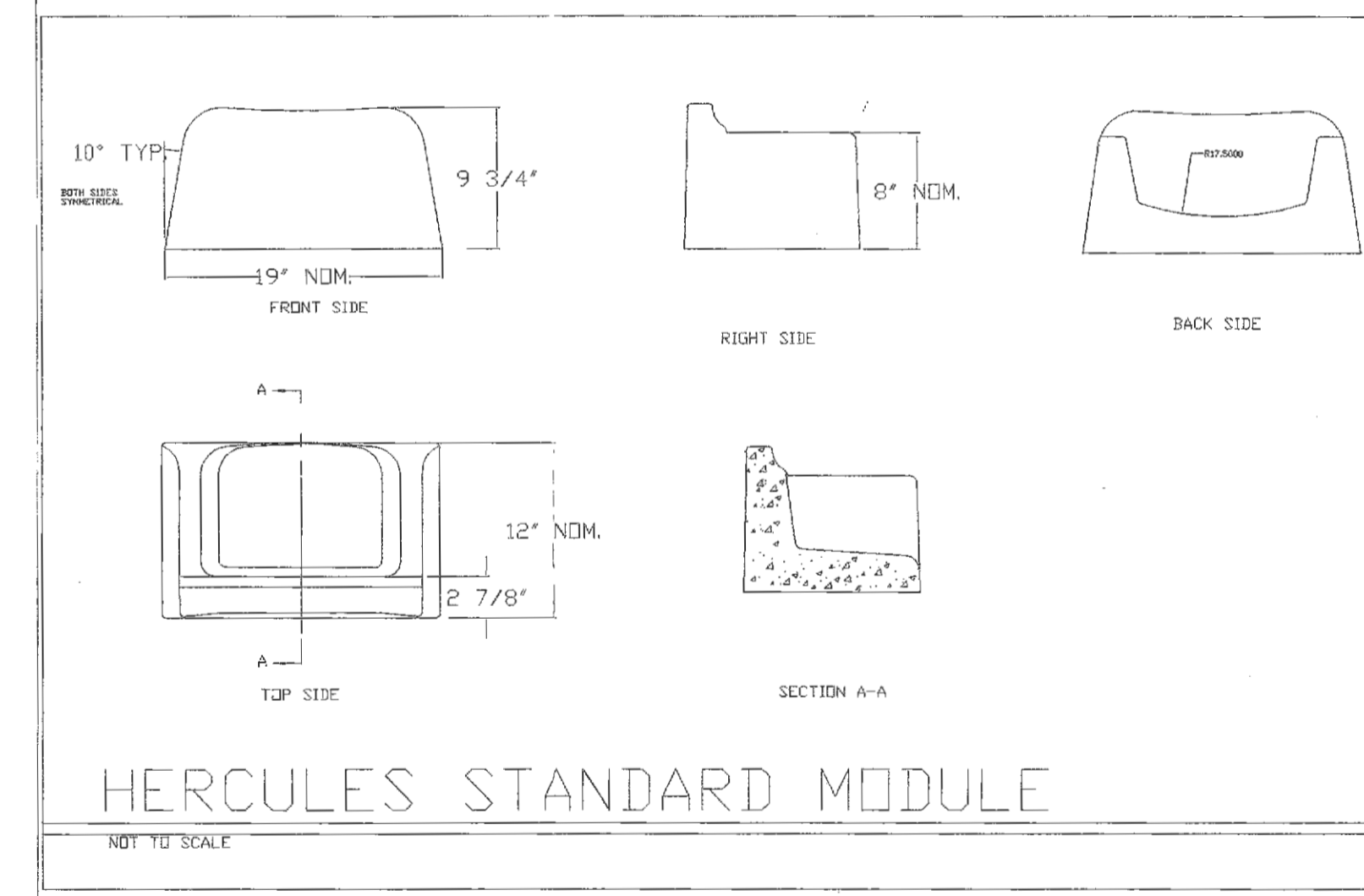
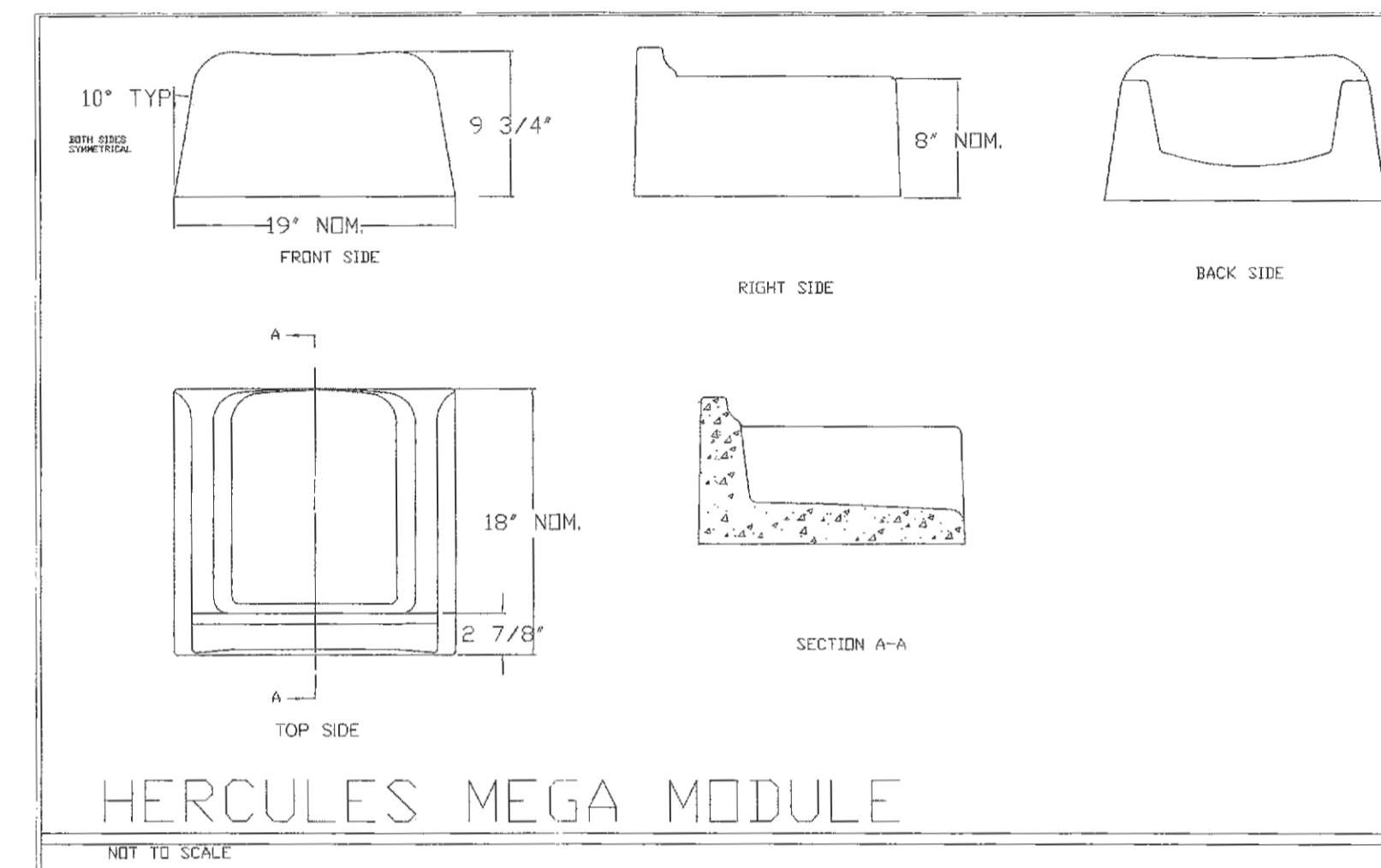
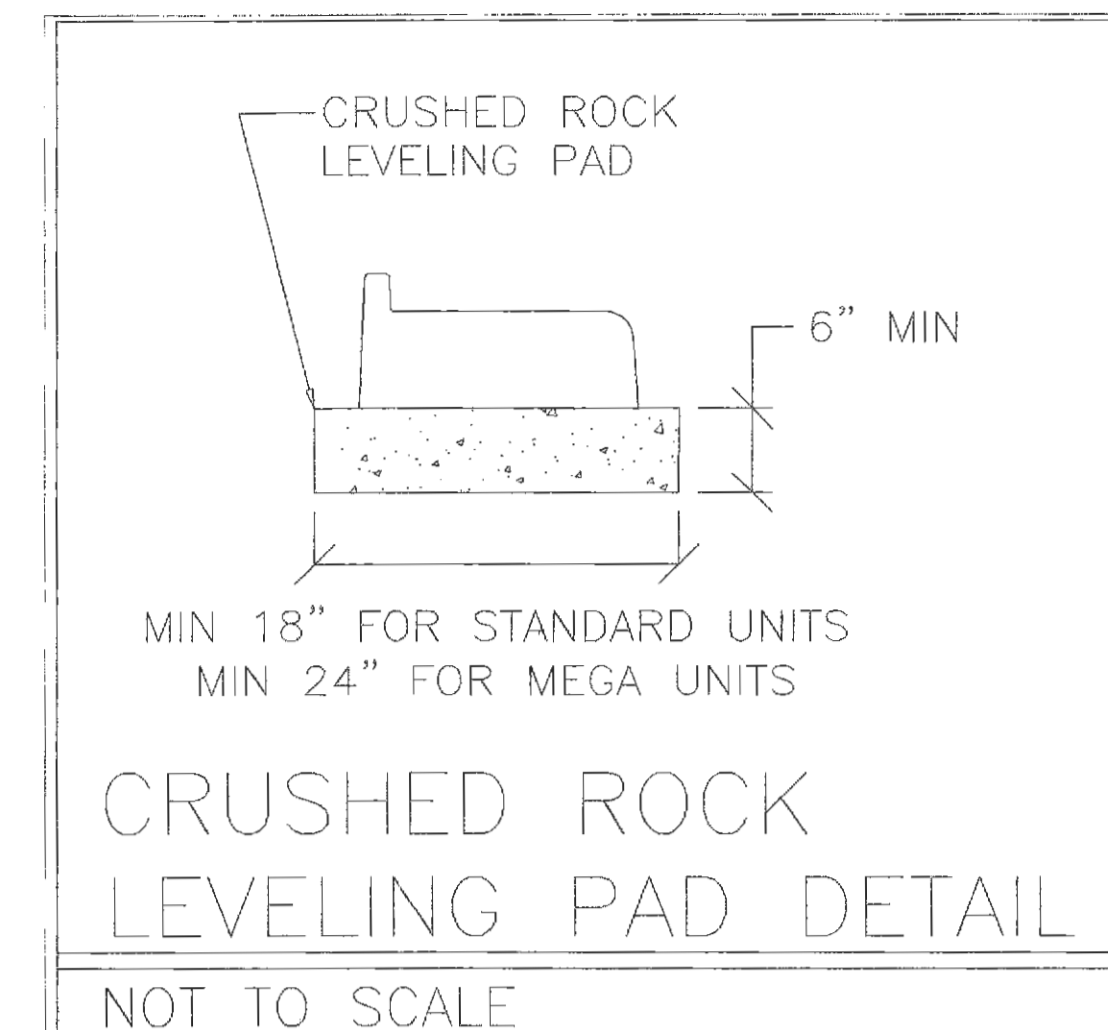
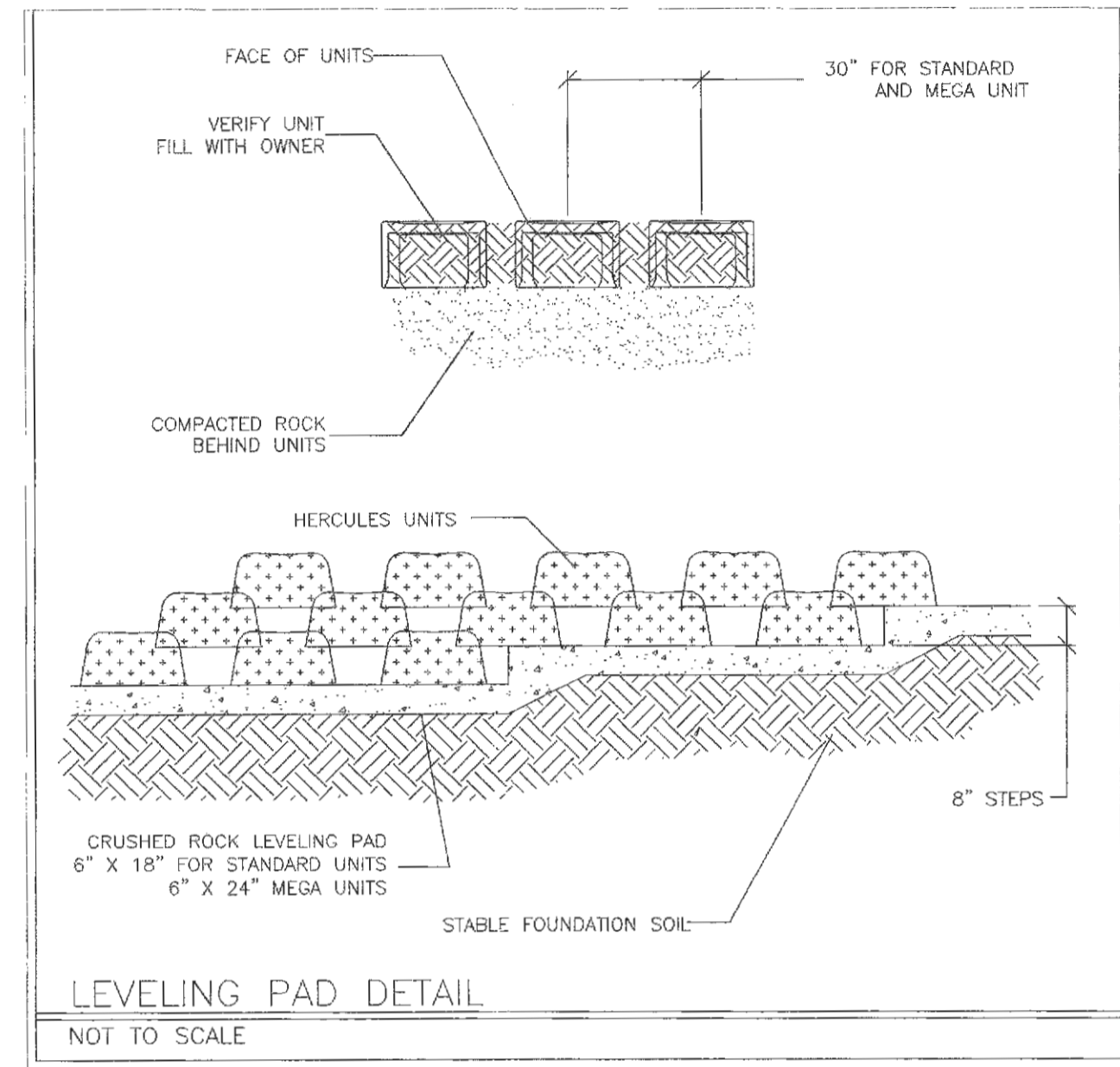
2-inch minus crushed rock backfill material shall be used for the leveling pad and for the reinforced fill and shall be placed in maximum 9 inch thick loose lifts and compacted to at least 95% of the materials maximum dry density as determined by the Standard Proctor method.

1-inch clean crushed rock backfill material shall be used in the rock wedge and for the drainage layer, and shall be placed in maximum 9 inch loose lifts and compacted with at least 3 passes of a vibratory compactor.

Before any wall is constructed to a point where it is 5 feet high, the front of the wall shall be backfilled and compacted to the finished grade.

SURFACE RUNOFF DURING CONSTRUCTION

To prevent damage to the walls during site development, all surface runoff or drainage should be directed away from the walls. Excess water during heavy rain events, if not drained properly, can cause washouts at wall ends and 'blowouts' of interior sections. These precautions should be taken during wall construction, and after, until the final site drainage, landscaping and paving are complete.



John E. Shively
 JOHN E. SHIVELY
 NUMBER E-24948
 PROFESSIONAL ENGINEER
 STATE OF MISSOURI
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Shively Geotechnical, Inc.
 8460 North Linbergh Avenue, Suite 10
 St. Louis, Missouri 63031
 314-770-1001 Fax: 314-770-1046

Wall 1
Detail Sheet, Revision 1
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Hyland Green Village
O'Fallon, Missouri

Project Number	Issue Date	Design By	Drawn By	Checked By
	09/30/2005			

Sheet Number
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