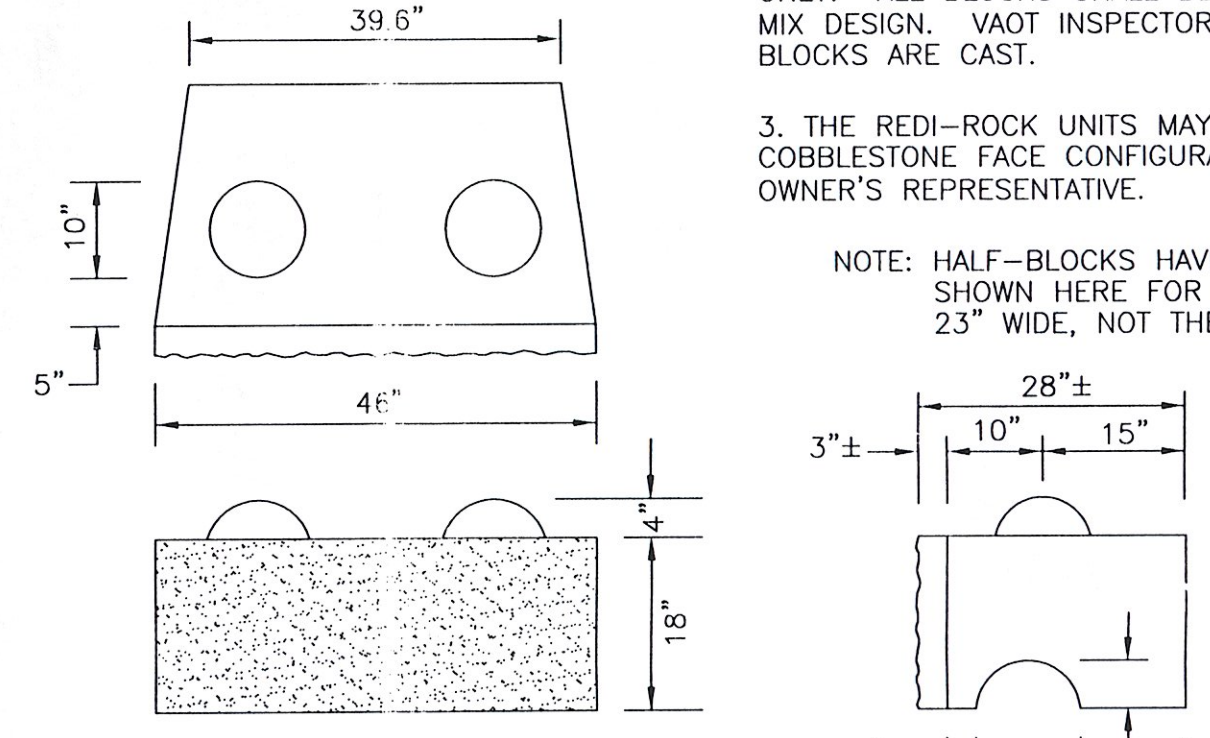


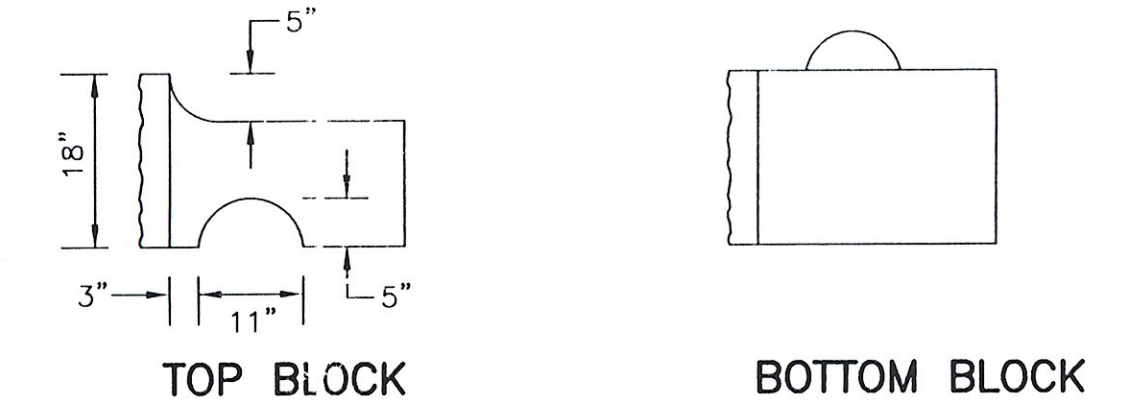
TYPICAL SECTION - REDI ROCK WALL - REINFORCED
 (TYPICAL DETAIL ONLY - SEE WALL FACE DRAWING FOR SPECIFIC BLOCK AND GEOGRID CONFIGURATIONS)
 "REDIROCK" SEGMENTAL RETAINING WALL
 (NOT TO SCALE)

GENERAL NOTES:

1. STRIP ALL VEGETATION, ORGANIC SOILS AND UNSUITABLE FILL SOILS FROM THE WALL ALIGNMENT AREA.
2. BENCH CUT ALL EXCAVATED SLOPES.
3. DO NOT OVER EXCAVATE UNLESS DIRECTED TO DO SO BY THE OWNER'S SITE REPRESENTATIVE IN ORDER TO REMOVE UNSUITABLE SOIL.
4. THE OWNER'S SITE REPRESENTATIVE SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
5. LEVELING PAD SHALL CONSIST OF COMPACTED, 3/4" CRUSHED GRAVEL, 12" THICK AND EXTENDING AT LEAST 12" TO EITHER SIDE OF THE BASE BLOCK. A SMOOTHING SURFACE LAYER OF 3/8" CRUSHED STONE MAY BE UTILIZED.
6. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE AS INDICATED ON THE WALL FACE DRAWING.
7. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS, ESPECIALLY WITH REGARDS TO LEVELING OF BLOCKS AND BASE.
8. DRAINAGE FILL SHALL CONSIST OF 3/4" TO 3/8" SIZE CRUSHED STONE, LESS THAN 5% MINUS #200 SIEVE, PLACED BEHIND THE WALL FOR A DEPTH OF AT LEAST 12" BEHIND THE WALL. A FILTER FABRIC SHALL BE PLACED OVER THE CUT OR FILL FACE BEHIND THE WALL AREA TO PREVENT SOIL MIGRATION INTO THE DRAINAGE MATERIAL. 3/4" CONCRETE AGGREGATE IS AN ACCEPTABLE MATERIAL FOR THIS USE.
9. WHERE PERFORATED HDPE DRAINS ARE USED, PROVIDE OUTLETS AT THE ENDS OF THE WALL OR AT A LOW COLLECTION POINT ALONG THE WALL. (ALTERNATE OUTLET METHODS MAY BE APPROVED BY THE DESIGN ENGINEER.)
10. BACKFILL AND COMPACT THE FILL MATERIAL BEHIND THE WALL AS THE WALL IS INSTALLED.
11. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE OWNER'S SITE REPRESENTATIVE.
12. PLACE A FILTER FABRIC (MIRAFI 140N, OR EQUAL) OVER THE DRAINAGE MATERIAL TO MINIMIZE SOIL MIGRATION FROM THE SURFACE MATERIAL INTO THE DRAINAGE MATERIAL.
13. COMPACTION SHALL BE TO 92% (MODIFIED PROCTOR) OR 95% (STANDARD PROCTOR).
14. PROVIDE LATERAL DRAINAGE SWALES TO DIRECT FLOWS AROUND THE ENDS OF THE WALL AND AWAY FROM THE WALL DURING CONSTRUCTION. DO NOT CONSTRUCT A SWALE BEHIND THE WALL AS PART OF THE FINISHED WALL. GRADE ABOVE THE WALL SO THAT WATER FLOWS OVER THE WALL FACE OR TO A POINT AT LEAST AS FAR BEHIND THE WALL AS THE WALL HEIGHT.
15. TURF, OR SOME ACCEPTABLE FORM OF SOIL EROSION PROTECTION, SHOULD BE ESTABLISHED AT THE TOP OF THE WALL (WHERE REQUIRED) BY THE LANDSCAPE CONTRACTOR AS SOON AS THE WALL IS COMPLETED.
16. FINAL WALL ALIGNMENT SHALL BE LOCATED IN THE FIELD BY THE OWNER'S SITE REPRESENTATIVE.
17. RECOMMENDED COMPACTION EQUIPMENT WITHIN 15 FEET OF THE BACK OF THE WALL IS AS FOLLOWS:
 0 - 4 FEET HAND TAMP OR VIBRATORY PLATE COMPACTOR
 4 - 15 FEET NOTHING LARGER THAN TWO-DRUM, WALK-BEHIND VIBRATORY ROLLER
 (LARGER ROLLERS CAN BE USED STATICALLY, PROVIDED LIFT SIZE DOES NOT COMPROMISE ACHIEVEMENT OF NECESSARY COMPACTION RATES.)
18. THESE WALLS HAVE BEEN DESIGNED WITH CONSIDERATION OF SEISMIC LOADINGS.



28" UNIT - MIDDLE BLOCK
 UNIT DIMENSIONS
 (NOT TO SCALE)



TOP BLOCK **BOTTOM BLOCK**

IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR MUST CONTACT THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.

COMPACTION NOTE: WHERE THE RETAINING WALL PASSES OVER ANY UTILITY LINES, COMPACTION OF THE SOIL WITHIN THE UTILITY TRENCH IS CRITICAL IN ORDER TO PREVENT SETTLEMENT OF THE WALL. COMPACTION OF ALL FILL MATERIAL IN UTILITY TRENCHES WHICH PASS UNDER THIS RETAINING WALL MUST BE AT LEAST 95% OF THE MAXIMUM DENSITY OF THE FILL MATERIAL.

IMPERVIOUS MATERIAL GENERAL REQUIREMENTS

SIEVE SIZE	% PASSING
3"	100%
#4	80-100%
#40	50-90%
#100	40-80%
#200	30-80%

8" OF TOPSOIL IS AN ACCEPTABLE ALTERNATE FOR IMPERVIOUS FILL ALONG THE TOP OF THE WALL.

REINFORCED ZONE BACKFILL SPECIFICATIONS

GRANULAR BACKFILL
 VAOT TABLE 704.08A

SIEVE SIZE	% PASSING
3"	100%
#4	45-75%
#100	0-12%
#200	0-6%

NOTE: MATERIAL THAT DOES NOT MEET THIS SPECIFICATION SHALL NOT BE USED.

SITE SPECIFIC NOTE: THE WALL HEIGHTS AT THIS SITE VARY AND ARE SHOWN ON THE WALL FACE DRAWINGS ON SHEET 2 OF 2. THE GEOGRID SHALL BE SYNTEEN PRODUCTS AS DETAILED ON THE WALL FACE DRAWINGS. THE CUT LENGTHS OF THE GEOGRID LAYERS, AND THE PLACEMENT ELEVATIONS OF THE GEOGRID LAYERS ARE SHOWN ON THE WALL FACE DRAWINGS. THE GEOGRID SHALL PROVIDE 100% COVERAGE. THE CONTRACTOR SHOULD CONTACT THE DESIGN ENGINEER WITH ANY QUESTIONS.

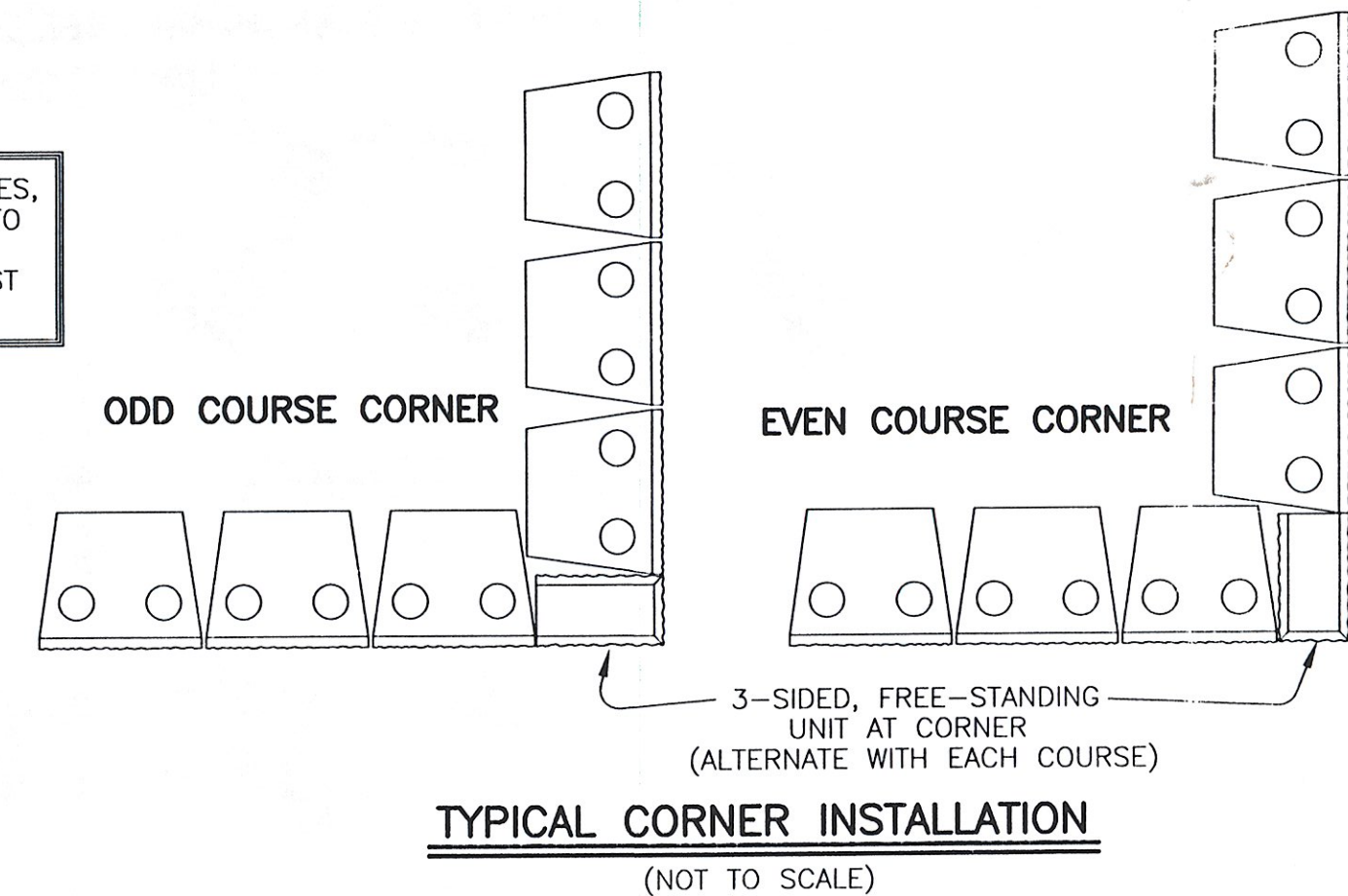
DESIGN ASSUMPTIONS

SOIL	SOIL UNIT WEIGHT	φ
SELECT FILL/BACKFILL	135	32
RETAINED EARTH	135	30
FOUNDATION SOIL	120	30

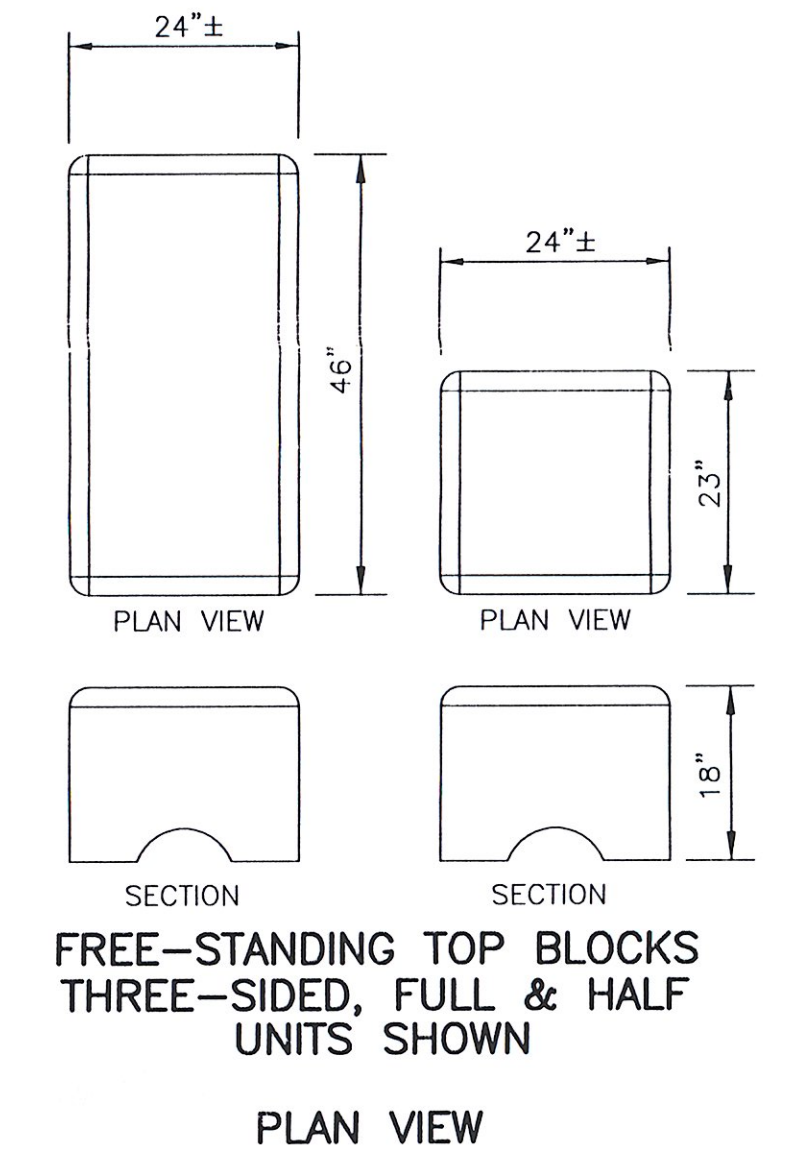
APPLIED SURCHARGE LOADING = 250 psf
 SEISMIC ACCELERATION = 0.08

MINIMUM FACTORS OF SAFETY

OVERTURNING	2.0
SLIDING	1.5
BEARING CAPACITY	2.5
GEOGRID PULLOUT	1.5

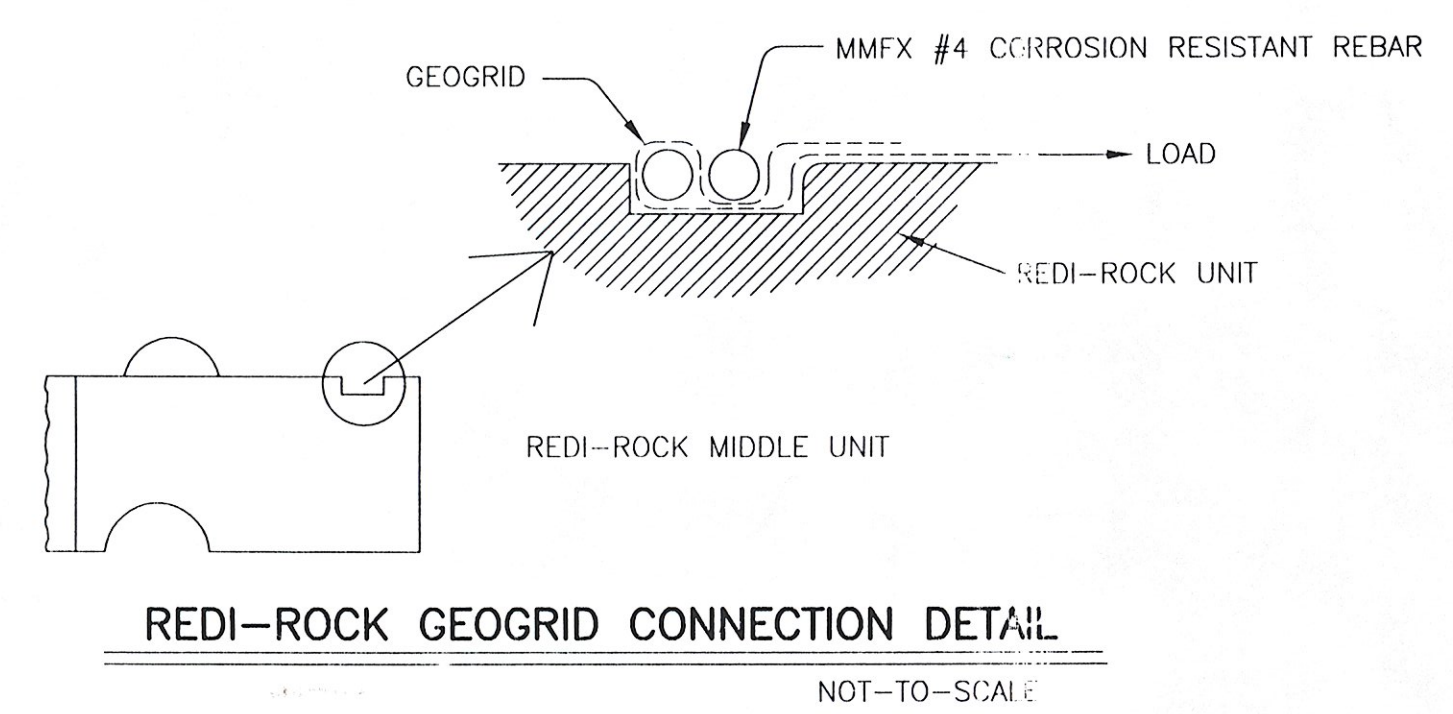


TYPICAL CORNER INSTALLATION
 (NOT TO SCALE)

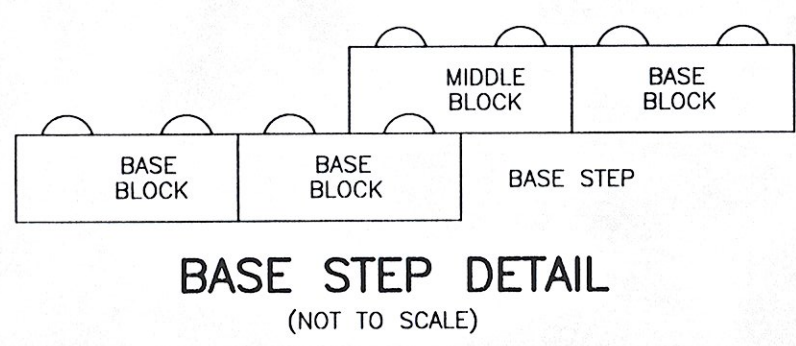


FREE-STANDING TOP BLOCKS
 THREE-SIDED, FULL & HALF UNITS SHOWN
 PLAN VIEW

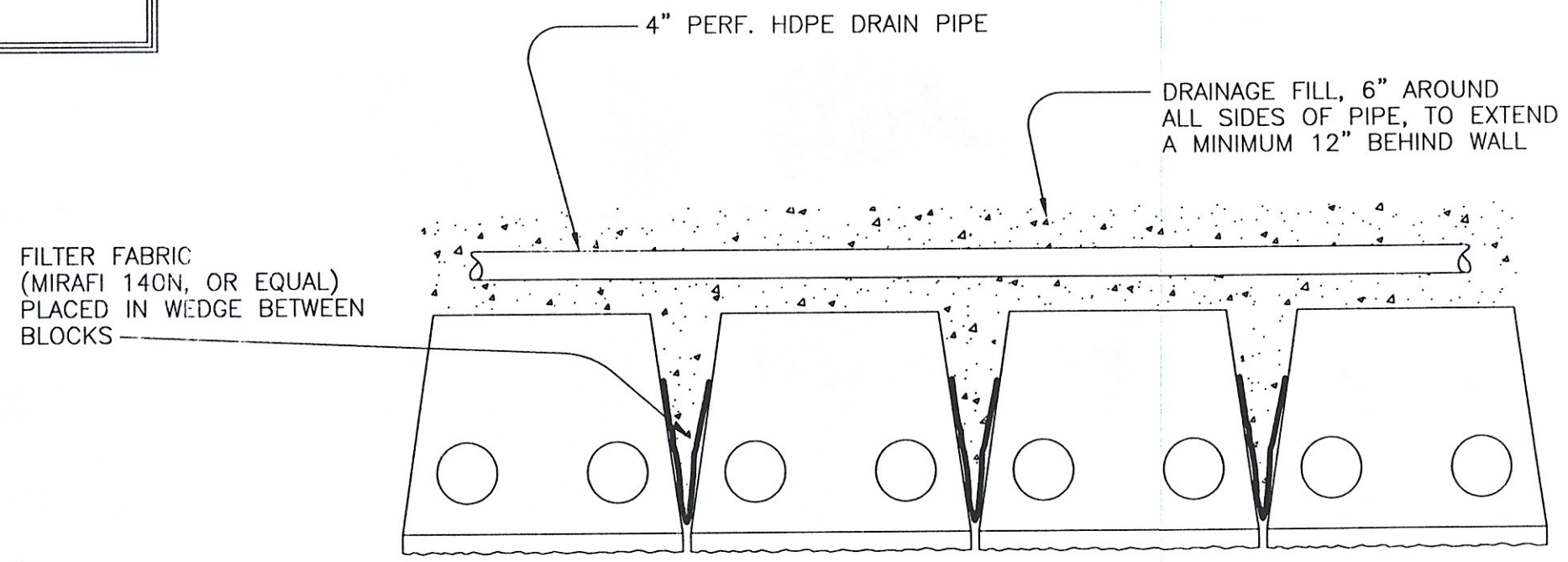
GRID OVERLAP AT CORNERS: AT INSIDE CORNERS WHERE GRID WILL OVERLAP, THE INSTALLER SHALL PLACE 2"-3" OF FILL MATERIAL BETWEEN THE LAYERS OF OVERLAPPING GEOGRID. GRID-ON-GRID CONTACT SHALL BE MINIMIZED.



REDI-ROCK GEOGRID CONNECTION DETAIL
 NOT TO SCALE



BASE STEP DETAIL
 (NOT TO SCALE)



1. SLOPE DRAIN TO WALL ENDS, MIN. 1/8" PER FOOT, OR SLOPE TO LOW POINT AND DROP THE DRAIN UNDER THE WALL.
2. WALL DRAIN MAY TIE TO NEARBY CLOSED DRAINAGE SYSTEM, IF AVAILABLE.

DRAIN & FABRIC DETAIL
 (NOT TO SCALE)

RECEIVED JUN 07 2007 BY: D.G.B.

STATE OF VERMONT
 RANDALL H. BRAGDON
 #6788
 CIVIL ENGINEER

NOTE: THIS DRAWING WAS PREPARED FOR USE WITH REDI-ROCK (TM) RETAINING WALL SYSTEMS. CONTACT REDI-ROCK WALLS OF NEW ENGLAND AT (603) 863-1000.

SOUHEGAN VALLEY ENGINEERING, INC.
 CIVIL ENGINEERING CONSULTANTS SITE DESIGN SPECIALISTS
 434 LEAR HILL ROAD NEWPORT (UNITY), NEW HAMPSHIRE 03773
 TEL: (603) 863-5454 FAX: (603) 863-3629
 Est. 1990 Available On The Web At www.SVEngineering.com

CLIENT: **REDI-ROCK WALLS OF NEW ENGLAND**
 8 REEDS MILL ROAD, NEWPORT, NH 03773

PROJECT: **RT. 4 BRIDGE OVER THE OTTAUQUECHEE RIVER**
 WOODSTOCK, VT

SHEET TITLE: **RETAINING WALL DESIGN SHEET 1**

DATE: **MAY 9, 2007** SCALE: **AS SHOWN** PROJECT No.: **07-277**

REVISION SET NUMBER 3

REVISION #2	6/4/07	REVISE PER 5/31/07 VAOT COMMENTS	EA
REVISION #1	5/24/07	REVISE PER VAOT COMMENTS	EA