



reinforced earth®

WESTERN DIVISION - 1700 N. MOORE ST. ARLINGTON, VA. 22209 (703) 527-3434

GENERAL NOTES

DESIGN CRITERIA

- 1. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE REINFORCED EARTH VOLUME, METHODS OF CONSTRUCTION AND QUALITY OF PREFABRICATED MATERIALS SHALL CONFORM TO THE CONTRACTING AGENCY'S TECHNICAL SPECIFICATIONS FOR REINFORCED EARTH WALLS.

- 2. ASSUMED SOILS CHARACTERISTICS:

SELECT GRANULAR BACKFILL

$\phi = 34$ degrees, $c = 0$ p.s.f., $\gamma = 125$ p.c.f.

RANDOM BACKFILL

$\phi = 30$ degrees, $c = 0$ p.s.f., $\gamma = 125$ p.c.f.

FOUNDATION MATERIAL

$\phi = 30$ degrees, $c = 0$ p.s.f.

IF THE ACTUAL CHARACTERISTICS OF THE SOIL MATERIALS DIFFER FROM THOSE ABOVE, THE REINFORCED EARTH COMPANY SHOULD BE NOTIFIED PRIOR TO CONSTRUCTION TO EVALUATE THE NEED FOR REDESIGN OF THE WALL.

- 3. THE MAXIMUM CALCULATED APPLIED BEARING PRESSURE AT THE FOUNDATION LEVEL IS AS SHOWN ON THE WALL ELEVATIONS FOR EACH DESIGN CASE. IT IS THE RESPONSIBILITY OF THE OWNER TO DETERMINE THAT THIS CALCULATED APPLIED BEARING PRESSURE IS ALLOWABLE FOR THAT LOCATION.
- 4. ANY UNSUITABLE FOUNDATION MATERIAL BELOW THE REINFORCED EARTH VOLUME, AS DETERMINED BY THE ENGINEER, SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE STABILIZED AS DIRECTED BY THE ENGINEER.
- 5. REINFORCING STRIPS FOR REINFORCED EARTH WALLS SHALL BE 50 mm WIDE AND 4 mm THICK AND SHALL CONFORM THE PHYSICAL AND MECHANICAL PROPERTIES OF ASTM A-572, GRADE 65.

NOTE APPLIES TO THIS PROJECT

NOTE DOES NOT APPLY TO THIS PROJECT

WALL CONSTRUCTION

- 1. STATIONS SHOWN ARE ALONG CENTERLINE OF ROADWAY.
- 2. REINFORCED EARTH WALLS, IN CURVES, WILL FORM A SERIES OF SHORT CHORDS OF 4.92' EACH TO MATCH DESIRED WALL ALIGNMENT.
- 3. FOR LOCATION AND ALIGNMENT OF REINFORCED EARTH WALLS, SEE CONTRACT DRAWINGS.
- 4. MANHOLES AND DROP INLETS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS.
- 5. PILES WITHIN THE REINFORCED EARTH VOLUME SHALL BE DRIVEN PRIOR TO THE CONSTRUCTION OF THE REINFORCED EARTH WALL.
- 6. BACKFILL MATERIAL SHALL BE COMPACTED, IN ACCORDANCE WITH THE SPECIFICATIONS FOR REINFORCED EARTH WALLS, TO A LEVEL OF 2" ABOVE THE TIE STRIPS EMBEDDED IN THE PANELS. INSTALLATION OF REINFORCING STRIPS SHALL BE PERMITTED ONLY AFTER PLACEMENT AND COMPACTON OF THE BACKFILL MATERIAL HAS REACHED THE REQUIRED LEVEL.
- 7. COMPACTION AND OPERATION EQUIPMENT SHALL BE KEPT A MINIMUM DISTANCE OF 3'-0" FROM BACK FACE OF REINFORCED EARTH PANEL. COMPACTION WITHIN 3'-0" OF THE REINFORCED EARTH PANELS SHALL BE ACHIEVED WITH ATLEAST THREE (3) PASSES ON A LIGHTWEIGHT MECHANICAL TAMPER, ROLLER OR VIBRATORY SYSTEM.
- 8. FOR STRUCTURES IN EXCESS OF 20' IN HEIGHT, THE FINISHED GRADE IN FRONT OF THE WALL SHALL BE PLACED AND COMPACTED BEFORE WALL CONSTRUCTION EXCEEDS A HEIGHT OF 20'. FINISHED GRADE BACKFILL SHALL BE COMPACTED TO 95% OF ASTM D-698, METHODS 'C' OR 'D', UNLESS OTHERWISE DIRECTED BY ENGINEER.
- 9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF GUARDRAIL POSTS BEHIND THE REINFORCED EARTH PANELS, PRIOR TO PLACEMENT OF THE TOP LAYER OF REINFORCING STRIPS. INDIVIDUAL STRIPS MAY BE SKEWED, IF AUTHORIZED BY THE REINFORCED EARTH COMPANY, PRIOR TO PLACEMENT. ANY DAMAGE DONE TO THE REINFORCING STRIPS DUE TO THE INSTALLATION OF THE GUARDRAIL SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 10. IF STRUCTURES WITHIN THE REINFORCED EARTH VOLUME INTERFERE WITH THE NORMAL PLACEMENT OF REINFORCING STRIPS, THE CONTRACTOR SHALL NOTIFY THE REINFORCED EARTH COMPANY TO DETERMINE THE EFFECT ON THE DESIGN OF THE WALL BY SKEWING THESE STRIPS.
- 11. ALL DETAILING AND CHECKING OF REINFORCING STEEL FOR ANY C.I.P. CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.

R-181 (Alternate #1)

APPROX SURF. AREA	BACK FILL
18,500 SQ. FT.	18,100 C.Y.

Changed backfill requirements 3/1/89

Revised Wall Plans 3/1/89

"REINFORCED EARTH" IS THE REGISTERED TRADEMARK OF THE REINFORCED EARTH COMPANY.

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Drq. NO. R-181, Proj. No. F-068(3)

The Reinforced Earth Company	
Roslyn Center, 1700 North Moore Street, Arlington, Virginia 22209 (703) 527-3434	
Structure	REINFORCED EARTH WALL
Location	I - 215 TO BIG COTTON WOOD CANYON
Owner	UTAH D.O.T.
DESIGNED BY: B.Y.	DATE: 3/1/89
PROJECT ENGR: d.p.m.	10.6.88
CHECKED BY: d.p.m.	1 of 6
REV. NO.	DATE
DESCRIPTION	
GENERAL NOTES AS NOTED	