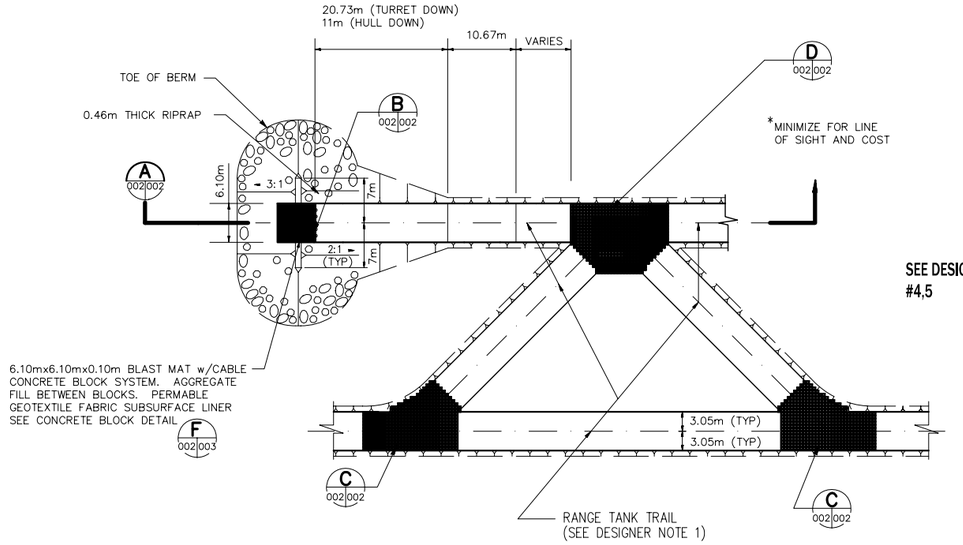
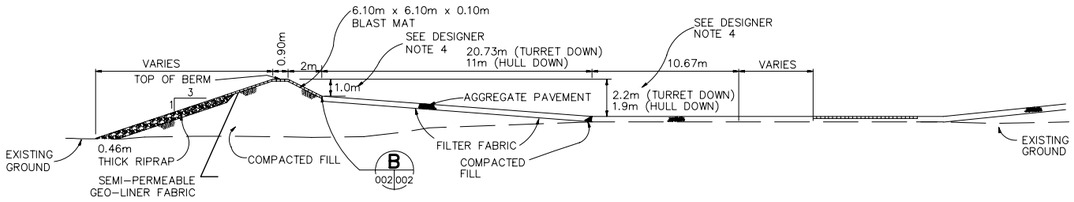


DEFILADE
(LOW COST ALTERNATE)
SCALE: N.T.S.



SECTION
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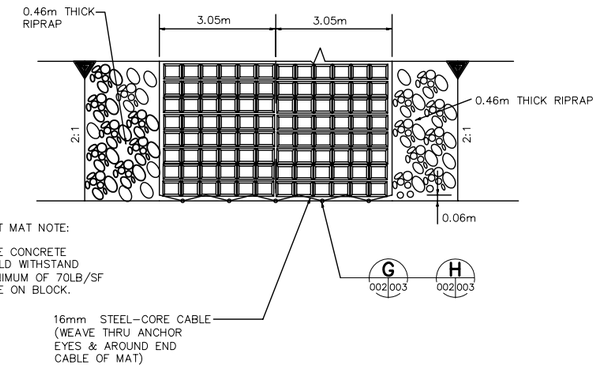
A
002|002



DETAIL MAT ANCHORS
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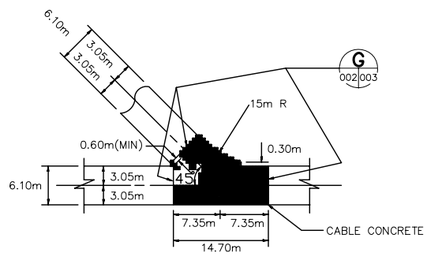
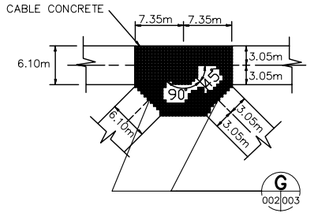
B
002|002



SEE DESIGNER NOTE: #4,5,6,7,8

DETAIL TANK TRAIL TURNOUT
SCALE : N.T.S.
C
002|002



SEE DESIGNER NOTE: #4,5,6,7,8

DETAIL TURNPAD
SCALE : N.T.S.
D
002|002

GENERAL NOTES:

1. CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 28 MPa IN 28 DAYS.

2. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.

3. AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR RESURFACED CONSISTENT WITH NATURAL SURROUNDINGS.

4. EARTH ANCHOR TO BE 19mmØ x 1.22m STEEL ROD WITH SOLID EYE AND 0.15m HELIX BRACING BY LATERAL STABILIZER PLATE.

NOTES TO DESIGNER:

1. REFER TO THE UNSURFACED THICKNESS DESIGN CURVES FOR TANK TRAILS IN THE DESIGN MANUAL FOR AGGREGATE PAVEMENT DESIGN.

2. FOR DEFILADE LOCATED ON LEFT SIDE OF TRAIL, PLAN SHOULD BE ANNOTATED FOR CONSTRUCTION IN A MIRROR IMAGE CONFIGURATION TO THAT SHOWN.

3. HULL DOWN AND TURRET DOWN HEIGHT SHALL BE COORDINATED WITH THE TRAINER.

4. THE MINIMUM REQUIRED CONCRETE STRENGTH SHOULD BE 4000 PSI @ 28 DAYS. THE MIX USED IS A DOT (IN THE STATE WHERE THE PROJECT EXISTS) APPROVED MIX DESIGN. AIR ENTRAINMENT OF 4% TO 7% SHALL IS ADDED FOR DURABILITY AND FREEZE-THAW FRACTURE RESISTANCE. THE AGGREGATES SHALL MEET DOT STANDARDS, WITH QUALITY REQUIREMENTS FOR FINE AND COARSE AGGREGATES. ALL ASTM STANDARDS WILL BE MET IN THE PRODUCTION OF THE CONCRETE.

5. FILTER FABRIC MEETING THE REQUIREMENTS OF AASHTO M-288, CLASS 1 SHALL BE INSTALLED UNDER A LAYER OF AGGREGATE BASE MATERIAL. THE CONCRETE BLOCK MATS SHALL BE INSTALLED ON THE AGGREGATE BASE MATERIAL AND VOID SPACES BETWEEN THE BLOCKS SHALL BE FILLED WITH AGGREGATE.

6. GROUT IN CORNERS FOR ENHANCED STABILITY.

7. KEY IN TWO BLOCKS AROUND PERIMETER OF MAT FOR ENHANCED STABILITY. THE END OF THE BLOCKS THAT ARE KEYED IN SHOULD BE ANCHORED.

8. CLAMPS SHOULD BE INSTALLED ON FOUR FOOT CENTERS.

9. GROUND BELOW MATS SHOULD BE LEVELED, BY GRADING.

10. ANCHOR EVERY OTHER MAT END LOOP OR AS SPECIFIED.

11. COMPACT FILL IN ALL ANCHOR HOLES.

12. WHEN PLACING THE MATS, THE GAP BETWEEN THE MATS SHOULD NOT BE ANY LARGER THAN A 2" MAXIMUM. IF THE MATS ARE PLACED WITH A LARGER SPACE THAN 2", IT IS RECOMMENDED TO GROUT THE SEAM BETWEEN THE MATS.

13. THE CABLE FROM THE OPPOSITE MAT SHOULD BE PULLED AND CLAMPED AS CLOSE TO THE NEAREST MAT TO ELIMINATE SLACK BETWEEN THE TWO MATS.

		Date
Designed	ATC/AEC	11/2006
Drawn	C.M. MORRIS	11/2006
Checked	C.E. JOHNSON	11/2006
Approved	G.M. GRIMM	11/2006

MILITARY ENVIRONMENTAL TECHNOLOGY DEMO CENTER
ABERDEEN TEST CENTER

ENVIRONMENTAL QUALITY TECHNOLOGY PROGRAM, A(2.5.E) SUSTAINABLE ARMY LIVE-FIRE RANGE DESIGN AND MAINTENANCE

FIRING POSITION - TANKS

DEFILADE TURNOUT, TURNPAD CABLE CONCRETE DESIGN SPECIFICATIONS

REFERENCE ORIGINAL DESIGN SUPPLIED BY:

US Army Corps of Engineers

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

REVISIONS		
DATE	APPROVED	TITLE

File Name: 9C0520000001K2-002-0

Project Designation: 9C0520000001K2

11/2006

Sheet 2 of 24

9C0520000001K2-002-0

STANDARD DWG. NO.

DATE: 11/2006 | SHEET 2 OF 24