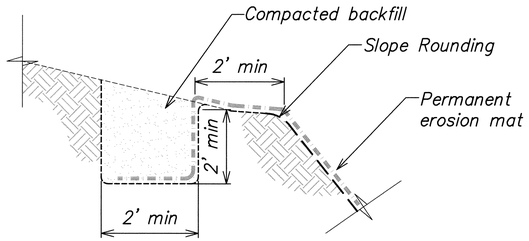
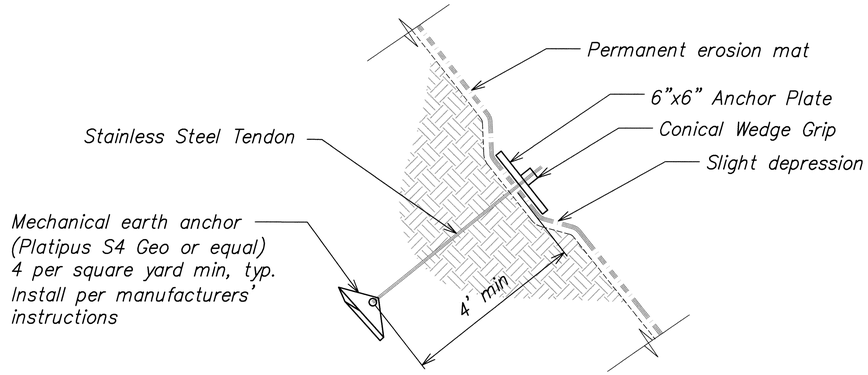
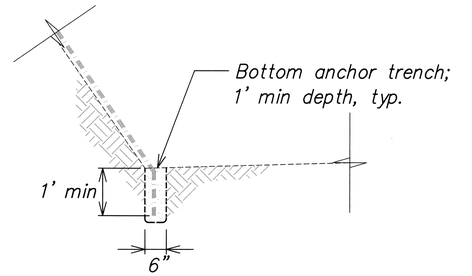
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
KAUAI	HAWAII	HWY-K-06-07	2007	22	31



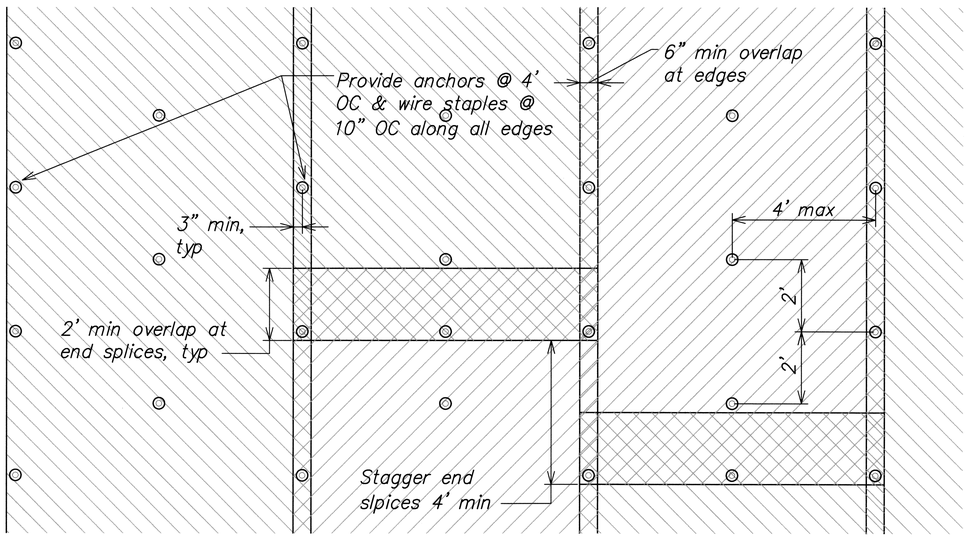
1/22 TOP ANCHOR TRENCH DETAIL
NOT TO SCALE



2/22 MECHANICAL EARTH ANCHOR DETAIL
NOT TO SCALE



3/22 BOTTOM ANCHOR TRENCH DETAIL
NOT TO SCALE



4/22 EROSION MAT/ANCHOR LAYOUT
NOT TO SCALE

Notes:

1. Secure all erosion mat edges with mechanical earth anchors at 4 feet on center and 8 gauge wire staples at 10 inches on center.

ORIGINAL PLAN	SURVEY PLOTTED BY	R.M. TOMTIL DATE
	DRAWN BY	BRANDON WEAVER "
NOTE BOOK	TRACED BY	" "
	DESIGNED BY	DANNY HAMASUYO "
	QUANTITIES BY	BRANDON WEAVER "
	CHECKED BY	ARDALAN NIKOU "
No.		

REDUCED PLAN
(HALF SIZE)
0 1 2 3
3 INCHES ON ORIGINAL PLAN

EarthTech
A tyco International Ltd. Company

ARDALAN R NIKOU
LICENSED PROFESSIONAL ENGINEER
No. 6198-C
HAWAII, U.S.A.

EXPIRATION DATE OF THE LICENSE 4/30/2008
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

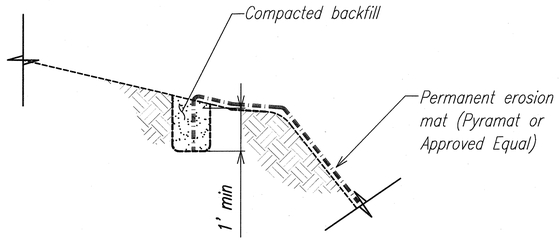
EROSION CONTROL MAT DETAILS

KAUMUALII HIGHWAY & RICE STREET, EMERGENCY SLOPE STABILIZATION
PROJECT NO. HWY-K-06-07

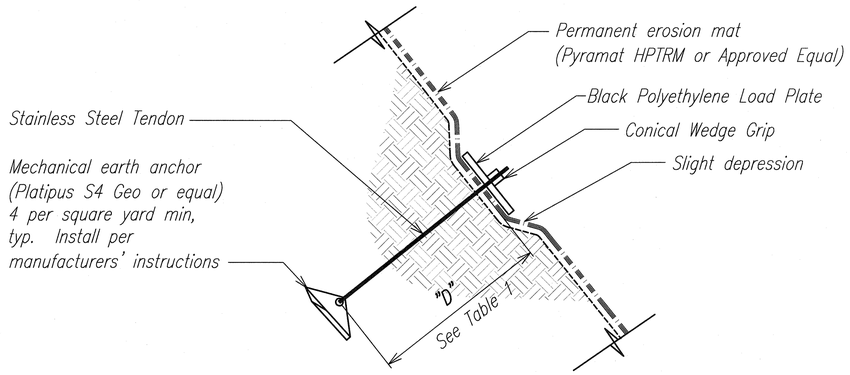
Scale: As Noted Date: Apr 2007

SHEET No. 1 OF 1 SHEETS

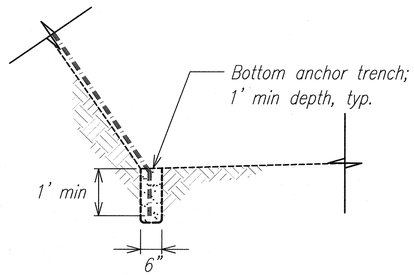
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
KAUAI	HAWAII	HWY-K-06-07	2007	C.O. 22S-1	31



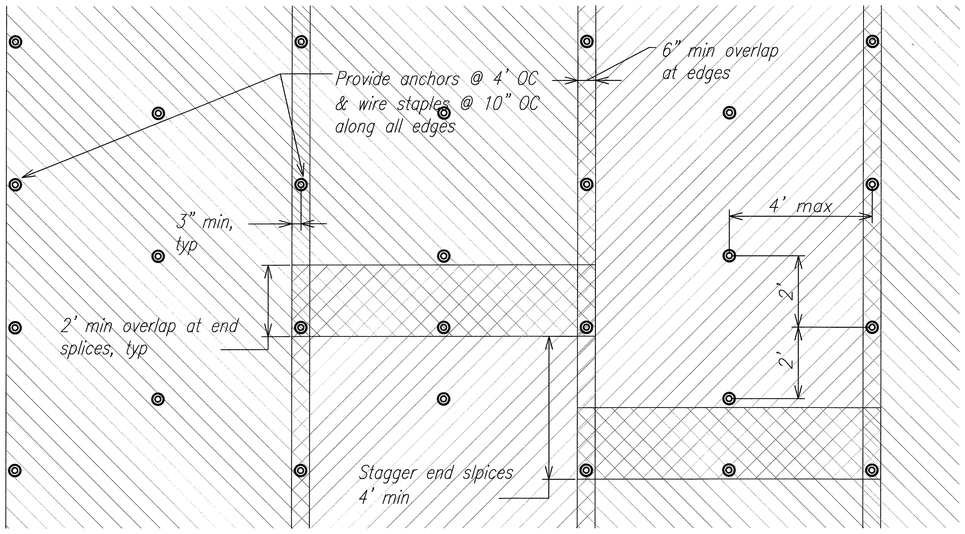
1 TOP ANCHOR TRENCH DETAIL
C.O. 22S-1 NOT TO SCALE



2 MECHANICAL EARTH ANCHOR DETAIL
C.O. 22S-1 NOT TO SCALE



3 BOTTOM ANCHOR TRENCH DETAIL
C.O. 22S-1 NOT TO SCALE



Note: Secure all erosion mat edges with mechanical earth anchors at 4 feet on center and 8 gauge wire staples at 10 inches on center.

4 EROSION MAT ANCHOR LAYOUT
C.O. 22S-1 NOT TO SCALE

HYDRO-MULCH SEEDING:

1. The grass type shall be Narrowleaf Carpetgrass (Axonopus affinis). Grass seed shall not contain Fireweed seed (Senecio Madagascariensis). This requirement shall be lab certified.

2. Fertilizer. Add prescribed fertilizer to hydro-mulch at the following proportions per 1000 square feet of seeded area.

11-52-0 (MAP)	7 pounds
K-Mag (0-0-22-11 Mg)	3 pounds"

3. Bonded Fiber Matrix. Bonded fiber matrix (BFM) shall be a mixture of paper mulch fibers and calcium sulfate hemihydrate (gypsum plaster). Gypsum plaster shall be Airtrol Geobinder or approved equal. The BFM shall be designed for application by conventional hydro-mulching equipment. The BFM shall be such that when applied the material shall form a uniform protective crust-like barrier with 4 to 8 hours after application. Seed and fertilizer shall be mixed first into the water followed by the addition of the mulch fibers (non-tackified variety) and mixed into a homogenous slurry. The gypsum plaster shall then be added to the slurry at the following proportions per 1000 square feet of seeded area.

Water	100	gallons
Mulch Fibers	70	pounds
Gypsum Plaster	200	pounds

4. Hydro-mulching shall be applied prior to installing erosion control matting.

5. The Contractor shall provide irrigation of the hydro-mulched area until final acceptance of the planted area by the Engineer.

ANCHORED EROSION MAT:

1. Erosion Mat shall be Pyramat High Performance Turf Reinforcement Mat (green color) or approved equal. The mat must be a permanent type, UV resistant, made of woven polypropylene fibers, and must have a minimum tensile strength of 4,000 lb/ft as tested per ASTM D-6818.

2. Mechanical Earth Anchors shall be Platipus S4 Geo or approved equal.

3. Clear and grub in accordance with Section 201 – Clearing and Grubbing.

4. Level all slope surfaces within the erosion mat limits. Smoothen ground surface to eliminate undulations that prevent intimate contact between the erosion mat and the ground. The Distance between the erosion mat and the soil should not be greater than ¼ inch. Installed extra staples as needed to achieve the required contact at no additional cost.

5. Hydro-mulch in accordance with Section 641 – Hydro-Mulch Seeding and as specified on this sheet prior to installing the erosion control mat.

6. Mechanical earth anchors shall be driven into the slope at 90-degrees to the slope face to the required depth. Earth anchors shall be spaced at 4 feet center to center with alternating rows staggered. Install 12 inch 8 gauge wire staples at 10 inches on center along all exposed erosion mat edges in addition to mechanical earth anchors.

ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY R.M. TORIL DATE
DRAWN BY BRANDON WEAVER
TRACED BY
DESIGNED BY RANDY HAMAMOTO
QUANTITIES BY BRANDON WEAVER
CHECKED BY ARSALAN NIKOU

AECOM

ARSALAN R. NIKOU
LICENSED PROFESSIONAL ENGINEER
No. 6198-C
HAWAII, U.S.A.

EXPIRATION DATE OF THE LICENSE 4/30/2010
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MP 9.8 – REPAIRS
MISCELLANEOUS DETAILS

KAUMUALII HIGHWAY & RICE STREET, EMERGENCY SLOPE STABILIZATION
PROJECT NO. HWY-K-06-07

Scale: As Noted Date: Apr 2007

SHEET No. 1 OF 1 SHEETS

C.O. 22S-1