

- 1. SITE PREPARATION: THE SITE MUST BE SHAPED TO THE DESIGN GRADE AND THEN FINE GRADED TO BE FREE OF SOIL CLODS, CLUMPS, ROCKS, OR VEHICLE IMPRINTS OF ANY SIGNIFICANT SIZE THAT WOULD PREVENT THE ENKAMAT FROM LYING FLUSH TO SURFACE CONTOURS.
- 2. ANCHOR TRENCH: ANCHOR TRENCHES ARE REQUIRED TO SECURELY FASTEN THE ENKAMAT TO THE GROUND SURFACE. IN CHANNEL APPLICATIONS, THE INITIAL ANCHOR TRENCH IS INSTALLED AT THE BEGINNING OF THE CHANNEL AND INTERMEDIATE CHECK SLOTS ARE SPACED AT APPROXIMATELY 25 FEET* INTERVALS DOWNSTREAM DEPENDING ON FLOW CONDITIONS AND WHETHER YOU SOIL FILL OR NOT. THE ENKAMAT IS INSTALLED INTO THE BOTTOM OF THE TRENCH AND FASTENED WITH PINS SPACED 3 FEET APART. THE ANCHOR TRENCH / INTERMEDIATE CHECK SLOTS ARE THEN BACKFILLED AND COMPACTED IN A MANNER AS TO NOT DAMAGE THE ENKAMAT. * IN LIEU OF EXCAVATED CHECK SLOTS, A DOUBLE ROW OF PINS [OR A NUMBER 1 OR 2 REBAR PINNED ACROSS THE MAT] MAY BE USED AT 25-FOOT INTERVALS.
- 3. ENKAMAT INSTALLATION: ROLL THE ENKAMAT DOWN THE SLOPE OR CHANNEL. THE OVERLAP BETWEEN ROLLS IS 3 TO 4 INCHES. THE SPLICE BETWEEN ROLLS IS BETWEEN 2 AND 3 FEET. SHINGLE THE ROLL IN THE DIRECTION OF WATER FLOW. INSTALL PINS DOWN THE CENTER OF EACH MAT (MAT IS 3.25 FEET WIDE) STAGGERING THEM BETWEEN THE OUTSIDE PINS WITH A SPACING INTERVAL OF 3 TO 5 FEET. PINS PATTERNS WILL VARY DEPENDING UPON APPLICATION, SOIL TYPE, SLOPE OR CHANNEL SLOPE, GEOMETRY, ETC. A RULE OF THUMB FOR ESTIMATING THE AMOUNT OF PINS REQUIRED FOR A PROJECT IS:

1:1 TO 2:1 SLOPES 3-4 PINS PER SQ. YD.

3:1 AND LESSER SLOPES 2-3 PINS PER SQ. YD.

HIGH FLOW CHANNEL 3-4 PINS PER SQ. YD.

LOW FLOW CHANNEL 2-3 PINS PER SQ. YD.

ALWAYS INSTALL TWO ROWS OF PINS SPACED 1.5 X 1.5 FEET APART AT ALL ROLL SPLICE LOCATIONS.

- 4. ANCHORING DEVICES: TYPICALLY 11-8 GAUGE OF A 6" X 1" X 6" METAL PINS ARE USED. WHEN SURFACE SOIL CONDITIONS ARE LOOSE, USE 8" X 1" X 8" OR 12" X 1.5" X 12" METAL PINS, 8" 18" PINS WITH 1.5" DIAMETER WASHER, OR 12-30" J-SHAPE PINS (BENT REBAR) HAVING A ¼" DIAMETER. DRIVE PINS OR PINS FLUSH WITH THE GROUND SURFACE.
- 5. SOIL FILLING: THERE ARE TWO OPTIONS WHEN INSTALLING ENKAMAT—SOIL FILLING OR NON—SOIL FILLING. SOIL FILLING ENKAMAT ACCELERATES PERFORMANCE BECAUSE THE ENKAMAT, SOIL AND THE NEW VEGETATION INTERACT TOGETHER TO RESIST SHEAR FORCES WHEN WATER IS FLOWING THOUGH THE CHANNEL OR ON TOP OF A SLOPE. IF SOIL FILLING IS UTILIZED SPREAD 1/2 TO 3/4 INCHES OF FINE SOIL INTO THE MAT TO COMPLETELY FILL IT. A TYPICAL CONDITION WHERE NON-SOIL FILLING IS USED WOULD BE TO COLLECT SEDIMENT WHEN WATER IS FLOWING THROUGH THE CHANNEL FROM AN UP-GRADIENT SOURCE.
- 6. SEEDING: FOR NON-SOIL FILLING APPLICATIONS, BROADCAST SEED OR HYDROSEED OVER THE INSTALLED ENKAMAT. MAKE SURE HYDROMULCH OCCURS AFTER SEEDING TO ENSURE THE SEED REACHES THE TOPSOIL. IF SOIL FILLING, SEED AFTER FILLING IS COMPLETED. YOU MAY ALSO SEED BEFORE AND AFTER SOIL FILLING TO CREATE A BETTER ESTABLISHED ROOT STRUCTURE AND INCREASE VEGETATION STRENGTH. CHECK WITH YOUR LOCAL SEEDING CONSULTANT TO VERIFY APPROPRIATE SEED AND FERTILIZER MIXTURE.
- 7. SOD INSTALLATION: IF COVERING ENKAMAT WITH SOD, SOIL FILLING IS REQUIRED. PLACE SOD IN THE DIRECTION OF WATER FLOW. PERIODICALLY INSTALL A ROW OR TWO PERPENDICULAR TO THE FLOW TO REDUCE THE POSSIBILITY OF WATER FLOWING ALONG THE SEAMS OF THE SOD. IN MOST CASES, YOU SHOULD PIN THE SOD DOWN TO PREVENT MOVEMENT.

8. GREENARMOR™ SYSTEM: HYDRAULICALLY FILL THE TRM WITH 0.5 INCHES OF FGM™, APPLIED WITH HOSE AT CLOSE RANGE. OPTIMUM APPLICATION RATE IS 3,500 LBS/ACRE OR TO THE DEPTH OF WHERE THE TIPS OF TRM ARE STILL EXPOSED. STRICTLY COMPLY WITH FGM MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. FOR OPTIMUM FGM PUMPING AND APPLICATION PERFORMANCE, USE APPROVED MECHANICALLY AGITATED, HYDRAULIC SEEDING/MULCHING MACHINES, HOSE OF SUFFICIENT LENGTH TOREACH THE TRM, USE OF A 50 DEGREE TIP/NOZZLE IS HIGHLY RECOMMENDED. APPLY FGM FROM HOSE POSITIONED OVER SHOULDER WITH NOZZLE APPROXIMATELY AT CHEST LEVEL (48-60"), POINTING STRAIGHT DOWN TO ACHIEVE OPTIMUM TRM INFILL. FOR OPTI-MUM HYDRAULIC PERFORMANCE AND VEGETATIVE ESTABLISHMENT, BE CAREFUL NOT TO OVERFILL THE TRM. THE TIPS OF THE TRM SHALL BE SLIGHTLY EXPOSED. FOR TECHNICAL ASSISTANCE PLEASE CONTACT PROFILE PRODUCTS AT 750 LAKE COOK ROAD, SUITE 440 BUFFALO GROVE, IL 60089 TOLL FREE: 866-325-6262; WEB:WWW.PROFILEPRODUCTS.COM



ENKAMAT 7020 TRM OR EQUIVALENT

HYDROMULCH

FLEXTERRA FGM OR EQUIVALENT

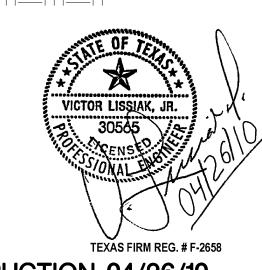
12" MIN. LENGTH x 8 GA. STAPLES/ANCHOR PINS

1' MIN. LAP TO SIDE OF WALL

W/DOUBLE BACK AS SHOWN. ATTACH W/LARGE DIA. WASHERS-& 2 POWDER DRIVEN ANCHORS @ 3'-0" O.C. MAXIMUM. (TYP)

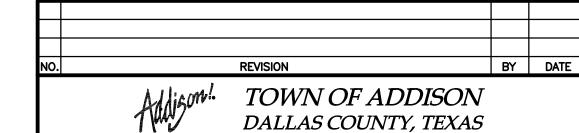
FINISH GRADE

12" TO 24"



LAKE EDGE WALL BY OTHERS

ISSUED FOR CONSTRUCTION 04/26/10



PARK AND STREETSCAPE IMPROVEMENTS *VITRUVIAN PARK*

TYPICAL ARMORING DETAILS

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PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	VL	NERF	APRIL 26 2010	PW#2009-04	SP500