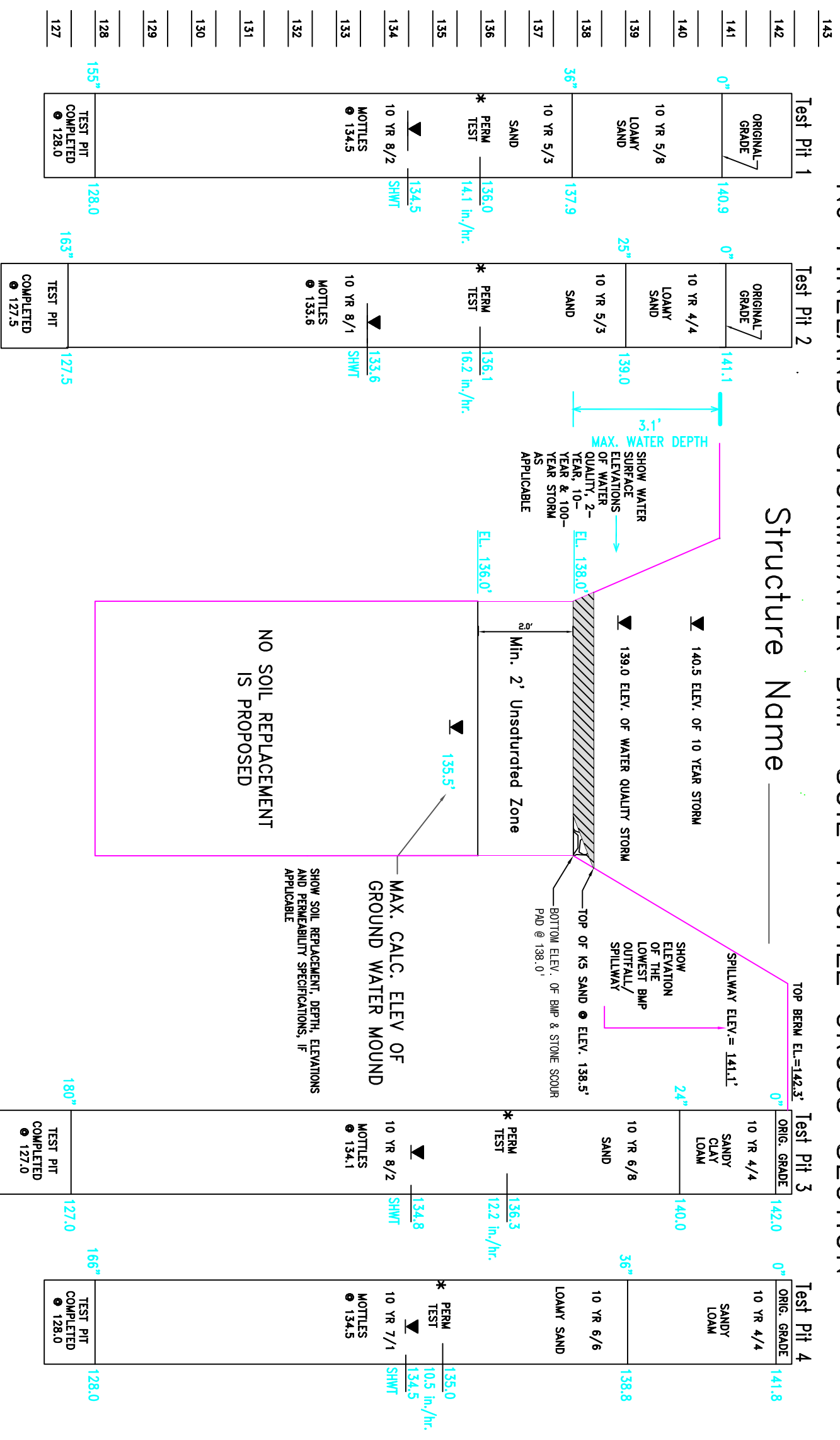


BMP DESIGN EXAMPLE

NJ PINELANDS STORMWATER BMP-SOIL PROFILE CROSS-SECTION



NOTES:

- 1) HIGHEST SHWT ELEVATION = 134.8
- 2) MAXIMUM CALC. GROUND WATER MOUND ELEV. = 135.5
- 3) LOWEST ELEVATION (INVERT) OF BMP BOTTOM = 138.0
- 4) DISTANCE BETWEEN BOTTOM OF BMP AND SHWT = 3.2' & MAX GW MOUND = 2.5'
- 5) SOIL REPLACEMENT IS NOT PROPOSED
- 6) IF PROPOSED, SOIL REPLACEMENT EXTENDS TO N/A
- 7) ELEV. AND RATES OF OF PERM TESTS: TP-1 TEST @ 136.0' = 14.1 in./hr. TP-2 TEST @ 136.1' = 16.2 in./hr. TP-3 TEST @ 136.3' = 12.2 in./hr. & TP-4 TEST @ 135.0' = 10.5 in./hr. THE TEST IN LOAMY SAND AT ELEV. 135.0 IN TEST PIT 4 CHARACTERIZES THE MOST HYDRAULICALLY RESTRICTIVE SOILS TO REMAIN BELOW THE BMP.
- 8) SOIL LOGS EXTEND A MINIMUM OF 8' BELOW THE BMP BOTTOM OR TWO TIMES THE MAXIMUM WATER DEPTH IN THE BMP:
 - a. EIGHT FEET BELOW THE BMP BOTTOM = ELEV. 128.0, OR
 - b. TWO TIMES THE MAXIMUM DEPTH OF WATER (D_w) IN THE BMP (AS DEFINED BY THE LOWEST SPILLWAY INVERT ELEV.) = ELEV. 129.8'.
 THEREFORE THE TEST PITS MUST PENETRATE TO MIN. ELEV. 128.0

DESIGNED BY: _____ NAME _____

NJPE No. _____ GE 0000

DATE _____ JUNE 18, 2012

LAST REV. _____ N/A

- * SHOW ORIGINAL GROUND SURFACE ELEVATION AT EACH TEST PIT LOCATION.
- * SHOW DEPTH AND ELEVATION OF EACH HORIZON BOUNDARY IN TEST PIT LOGS.
- * SHOW TEXTURE & MUNSEL COLOR(S) OF EACH HORIZON IN TEST PIT LOGS.
- * SHOW ELEVATION OF SEASONAL HIGH WATER LEVEL IN EACH TEST PIT LOG.
- * SHOW TEST PIT DEPTHS ARE MIN. 8' BELOW BASIN OR TWO TIMES (2x) MAX. WATER DEPTH
- * SHOW ELEVATION AND PERMEABILITY RESULTS (in./hr.) FOR EACH PERMEABILITY TEST
- * SHOW MAX. WATER DEPTH IN BMP (BETWEEN BOTTOM OF BMP AND LOWEST SPILLWAY/OUTFALL ELEV.)
- * SHOW PERM. TESTS IN MOST RESTRICTIVE SOIL TO REMAIN BELOW THE BMP INVERT (4'OR 2X MAX. WATER DEPTH)