DRAINAGE DETAILS (NOT TO SCALE)

CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

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PROJECT REFERENCE NO. W - 5600R/W SHEET NO.

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN

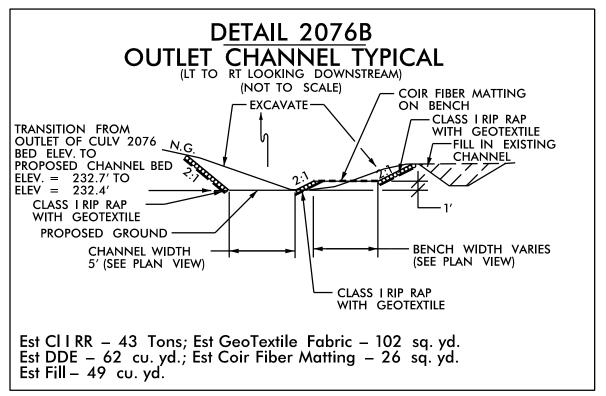
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

2D-3 **HYDRAULICS** /15/2626 NEER 46:23 PS SEAL 31977

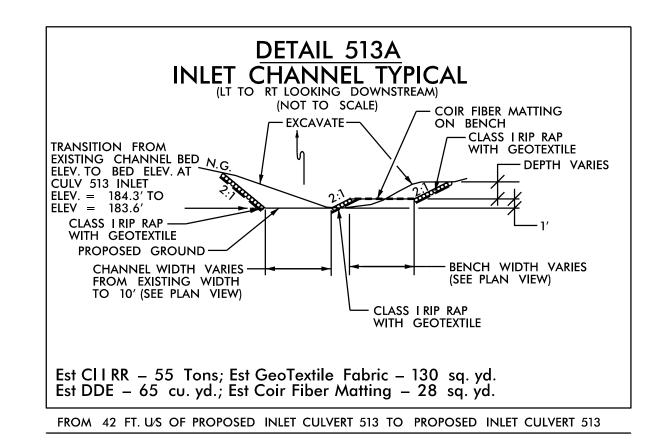
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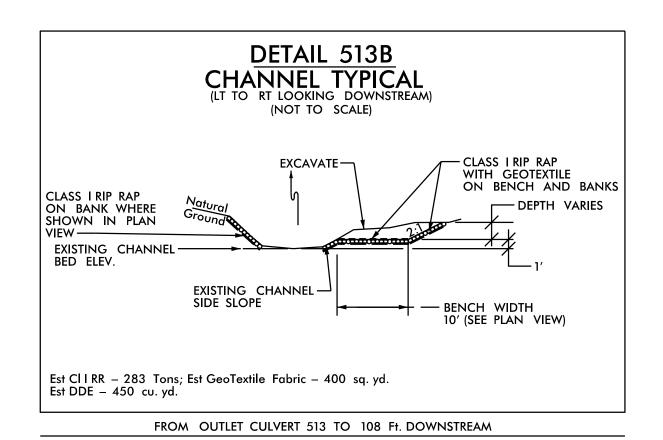
DETAIL 2076A INLET CHANNEL TYPICAL (NOT TO SCALE) - COIR FIBER MATTING — EXCAVATE — ON BENCH CLASS I RIP RAP TRANSITION FROM EXISTING CHANNEL BED N.G. WITH GEOTEXTILE — DEPTH VARIES ELEV. TO BED ELEV. AT CULV 2076 INLET ELEV. = 233.0' TO ELEV = 232.94'CLASS I RIP RAP WITH GEOTEXTILE PROPOSED GROUND -BENCH WIDTH VARIES CHANNEL WIDTH 5' (SEE PLAN VIEW) (SEE PLAN VIEW) - CLASS I RIP RAP *LAID BACK RIP RAPPED SLOPED WHERE CHANNEL WORK DIVERGES FROM EXISTING (SEE PLAN VIEW EXTENTS) Est Cl I RR — 17 Tons; Est GeoTextile Fabric — 42 sq. yd. Est DDE — 22 cu. yd.; Est Coir Fiber Matting — 17 sq. yd.

FROM 20 FT. US OF PROPOSED INLET CULVERT 2076 TO PROPOSED INLET CULVERT 2076

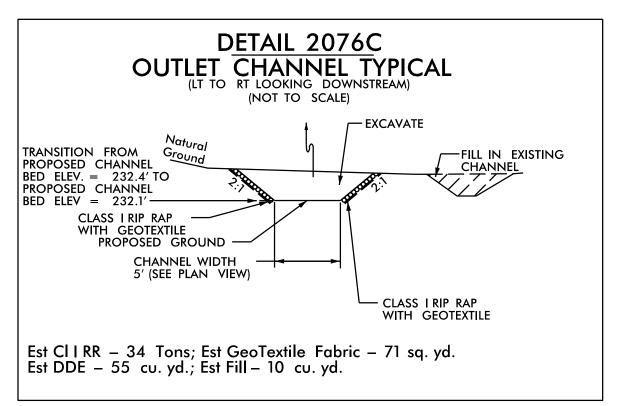


FROM PROPOSED OUTLET CULVERT 2076 TO 46 FT. D/S OF PROPOSED OUTLET CULVERT 2076

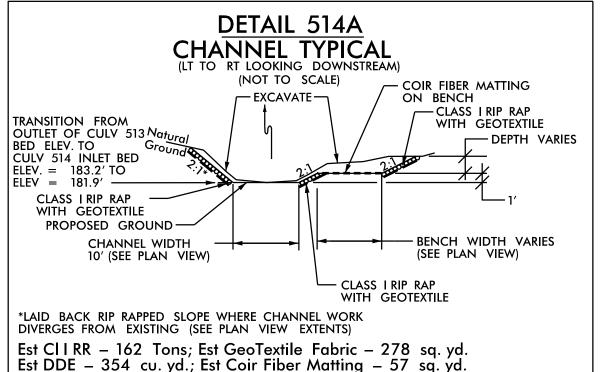




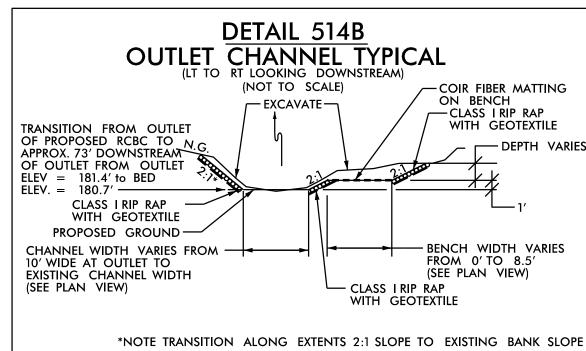
DETAIL 500514 (NOT TO SCALE) SKEWED MULTI-BARREL CULVERT LOW FLOW CHANNEL, SILLS AND FLOOD PLAIN *NOTES: 1) NATIVE MATERIAL BETWEEN SILLS/BAFFLES IN THE CULVERT SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL. NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE THE STREAM OR 10.0′ → FLOODPLAIN AT THE PROJECT SITE DURING CONSTRUCTION. ONLY MATERIAL THAT IS EXCAVATED FROM THE STREAM BED MAY BE USED TO LINE THE LOW FLOW CULVERT BARREL. RIP-RAP MAY BE USED TO SUPPLEMENT THE NATIVE MATERIAL IN THE HIGH FLOW CULVERT BARREL(S). IF RIP-RAP IS USED TO LINE THE HIGH FLOW CULVERT BARREL(S), NATIVE MATERIAL SHOULD BE PLACED ON TOP TO FILL VOIDS AND PROVIDE A FLAT SURFACE FOR ANIMAL - HIGH SILL PASSAGE. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS. 2) SILLS ARE TO BE 1.0 FT. WIDE, CAST 2.0' SEPARATELY AND ATTACHED BY DOWELS. 3) TOP OF LOW FLOW SILLS SHOULD MATCH STREAM BED ELEVATION IN LOW FLOW CHANNEL OF STREAM. (THALWEG) SILLS AT INLET AND OUTLET 4) DO NOT SET ELEVATION OF HIGH SILLS ABOVE BANK FULL. 5) NUMBER OF SILLS DETERMINED BY THE ENGINEER. -----BACK FILL WITH NATIVE MATERIAL TO SILL HEIGHT FLOOD PLAIN NO SILLS REQUIRED IN THE LOW FLOW BARREL FLOOD PLAIN BENCH BENCH PLAN VIEW



FROM 46 FT. D/S OF PROPOSED OUTLET CULVERT 2076 TO 81 FT. D/S OF PROPOSED OUTLET CULVERT 2076



FROM 108 Ft. DOWNSTREAM OF CULVERT 513 OUTLET TO INLET CULVERT 514



9/13

Est Cl I RR - 192 Tons; Est GeoTextile Fabric - 393 sq. yd. Est DDE – 736 cu. yd.; Est Coir Fiber Matting – 40 sq. yd. FROM CULVERT 514 OUTLET TO APPROXIMATELY 73' DOWNSTREAM