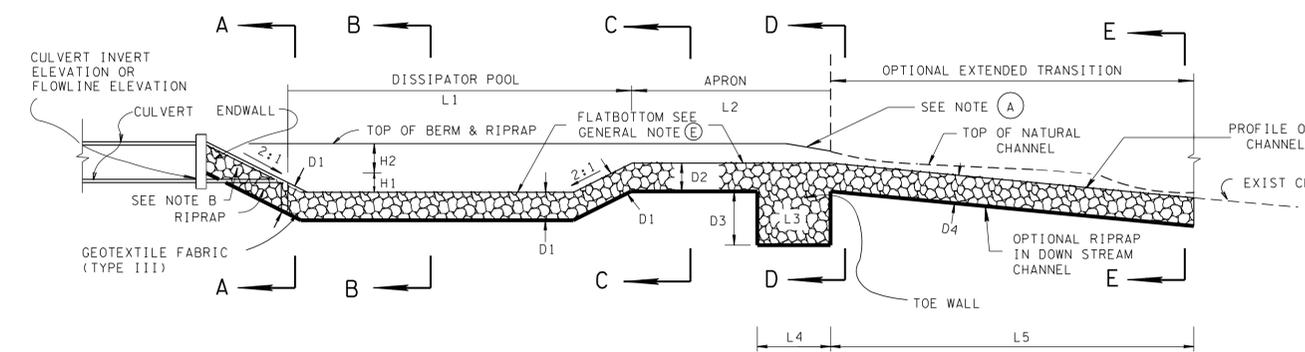
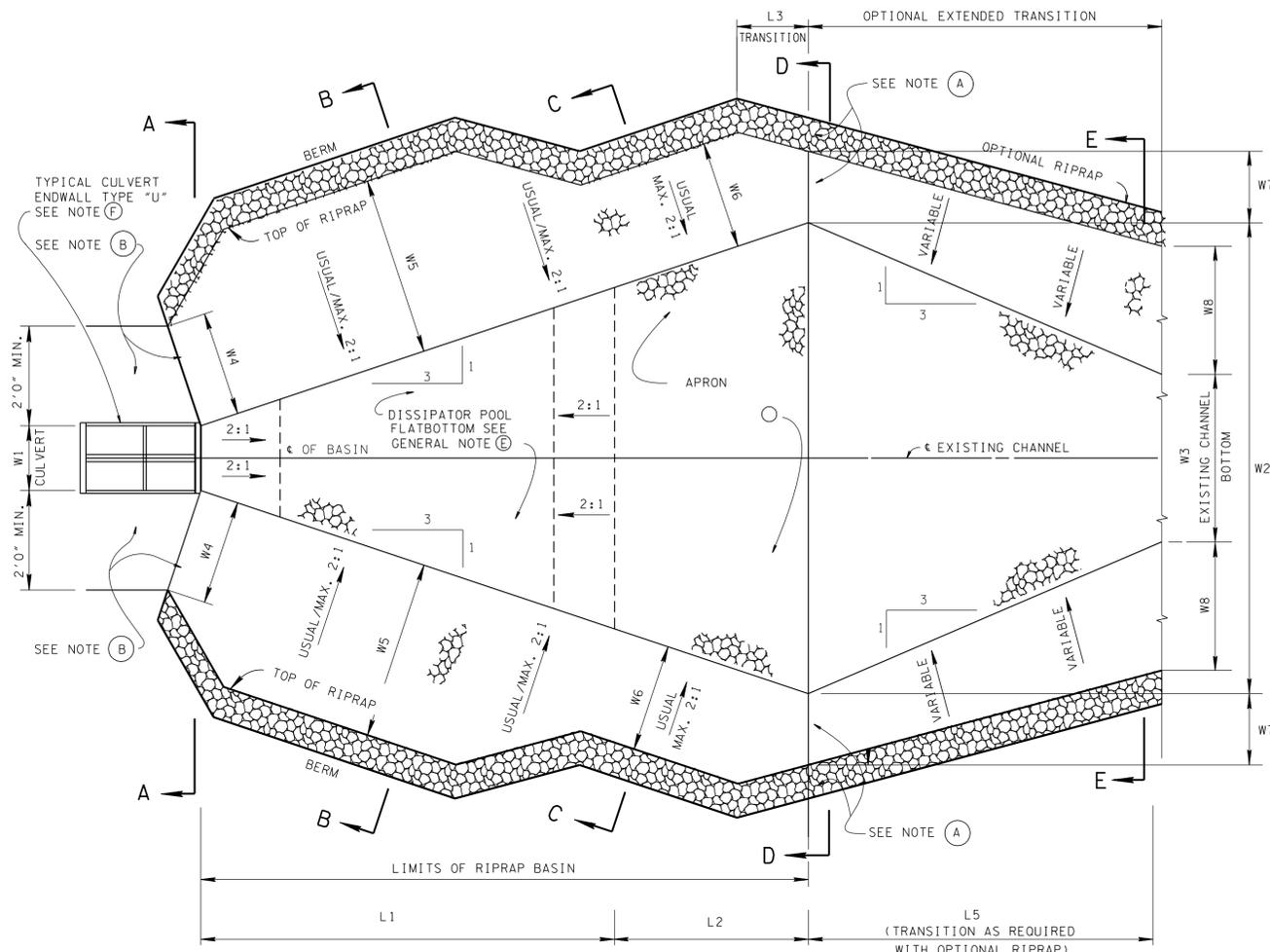
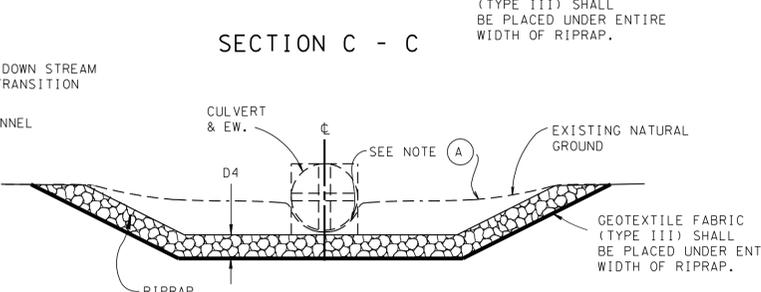
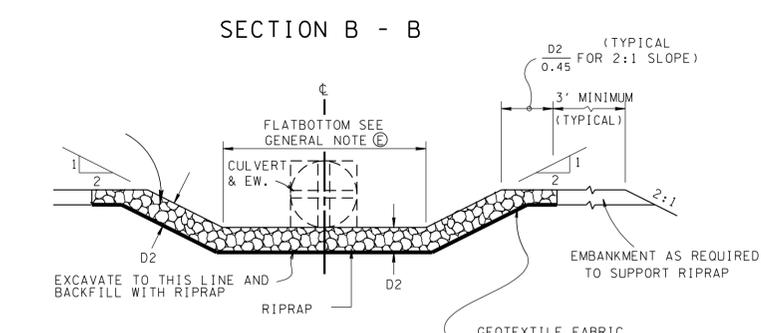
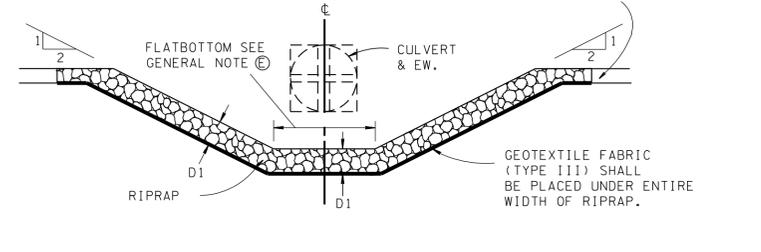
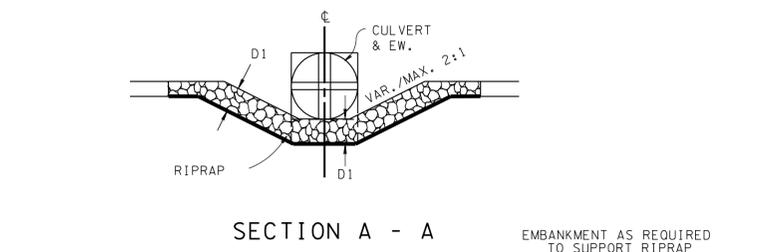


REV. 4-1-08: MISC. EDITS TO DRAWING, TABLE, AND NOTES.
 REV. 12-18-95: CHANGED DRAWING NO. FROM ESC-STR-21 TO EC-STR-21.
 REV. 5-27-01: CHANGED DESCRIPTION OF ITEM NOS. 709-05.06 AND 709-05.07. CHANGED DRAWING NAME.



RIPRAP BASIN LOCATIONS, DIMENSIONS, AND QUANTITIES																										
STATION	DIST. (FT.)	DIR.	SIZE	LENGTH (FT.)	BASIN DIMENSIONS (FT.)										RIPRAP DEPTHS (FT.)				GEOTEXTILE FABRIC (S.Y.)	RIPRAP CLASS (TON)						
					W1	W2	W3	W4	W5	W6	W7	W8	H1	H2	L1	L2	L3	L4		L5	D1	D2	D3	D4	A1	B
TOTAL																										



GENERAL NOTES

(A) WARP BASIN TO CONFORM TO THE NATURAL STREAM CHANNEL. TOP OF RIPRAP IN FLOOR OF BASIN DISSIPATOR POOL OR APRON SHALL BE AT THE SAME OR LOWER ELEVATION THAN THE NATURAL CHANNEL BOTTOM SECTION D-D. MODIFY FLATBOTTOM WIDTH IF THE OPTIONAL EXTENDED TRANSITION IS REQUIRED.

(B) MODIFY THE BASIN DIMENSIONS AS REQUIRED TO MATCH THE CONFIGURATION OF CULVERT END TREATMENTS.

(C) REFER TO TDOT DESIGN DIVISION DRAINAGE MANUAL (CHAPTER 9) FOR HYDRAULIC DESIGN PROCEDURES OF ENERGY DISSIPATORS FOR CULVERT AND CHANNELS.

(D) MODIFY DIMENSION W1 AS REQUIRED TO MATCH CULVERT WITH ENDWALL TYPE "A" (WITH OR WITHOUT CONCRETE PAVED APRONS OR OUTLETS).

(E) DESIRABLE SLOPE IS 0.0% IN DISSIPATOR POOL FLATBOTTOM AND IN APRON FLATBOTTOM.

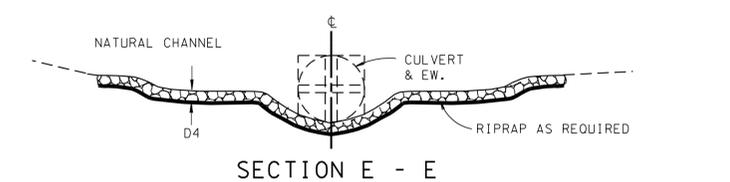
(F) THE ENDWALL SHOWN IN THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. PERMANENT RIPRAP BASIN ENERGY DISSIPATOR MAY BE USED WITH ANY TYPE OF CULVERT ENDWALL.

(G) GEOTEXTILE FABRIC (TYPE III) SHALL MEET REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION M-288, EROSION CONTROL.

(H) PERMANENT RIPRAP BASIN ENERGY DISSIPATORS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) PER CUBIC YARD
709-05.06	MACHINED RIP-RAP (CLASS A-1) PER TON
709-05.08	MACHINED RIP-RAP (CLASS B) PER TON
709-05.09	MACHINED RIP-RAP (CLASS C) PER TON
740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL) PER SQUARE YARD

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF PERMANENT RIPRAP BASIN ENERGY DISSIPATORS.



EROSION CONTROL LEGEND: PERMANENT RIPRAP ENERGY DISSIPATOR

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.
 NOT TO SCALE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 PERMANENT RIPRAP BASIN ENERGY DISSIPATOR
 10-26-92 EC-STR-21