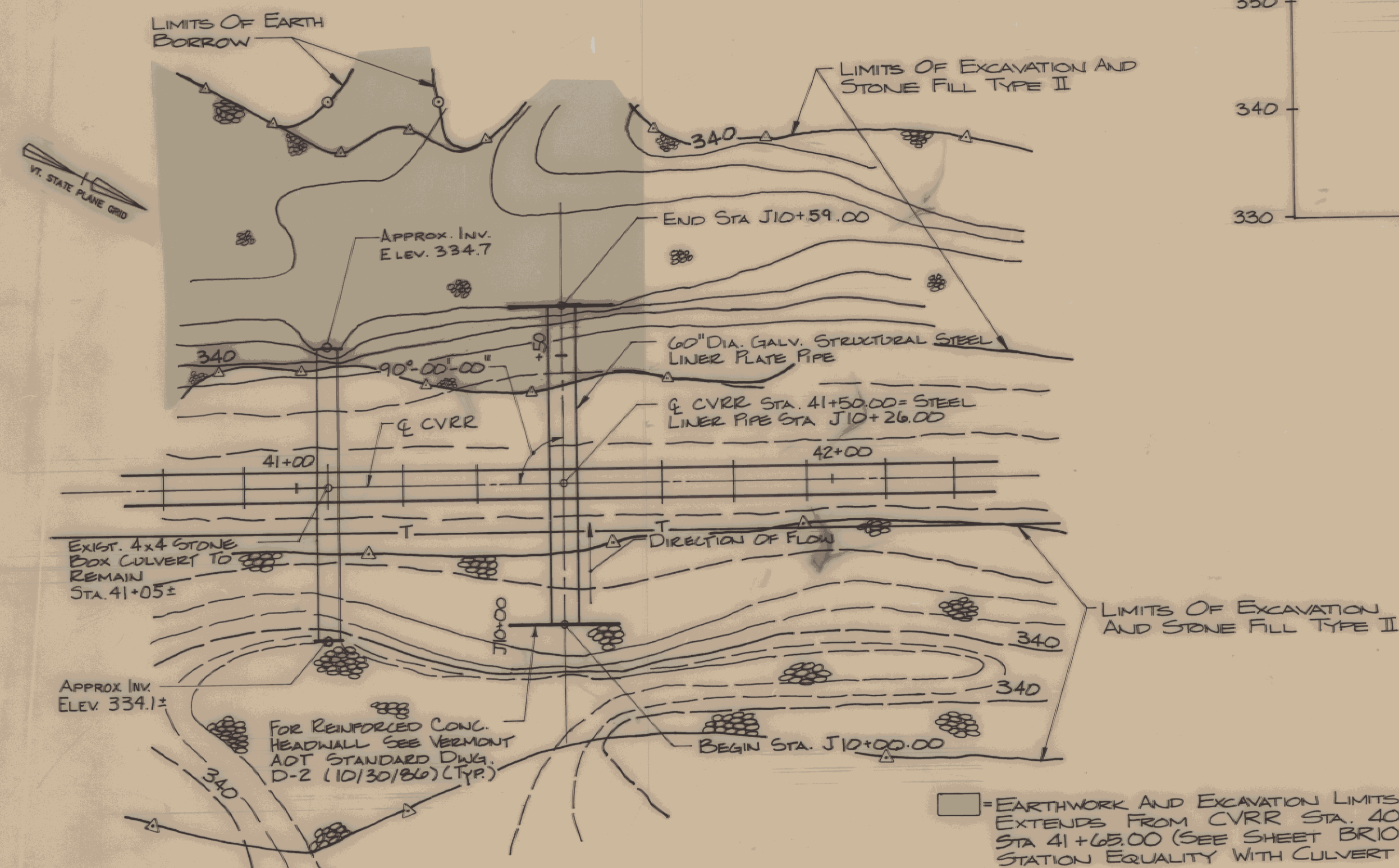
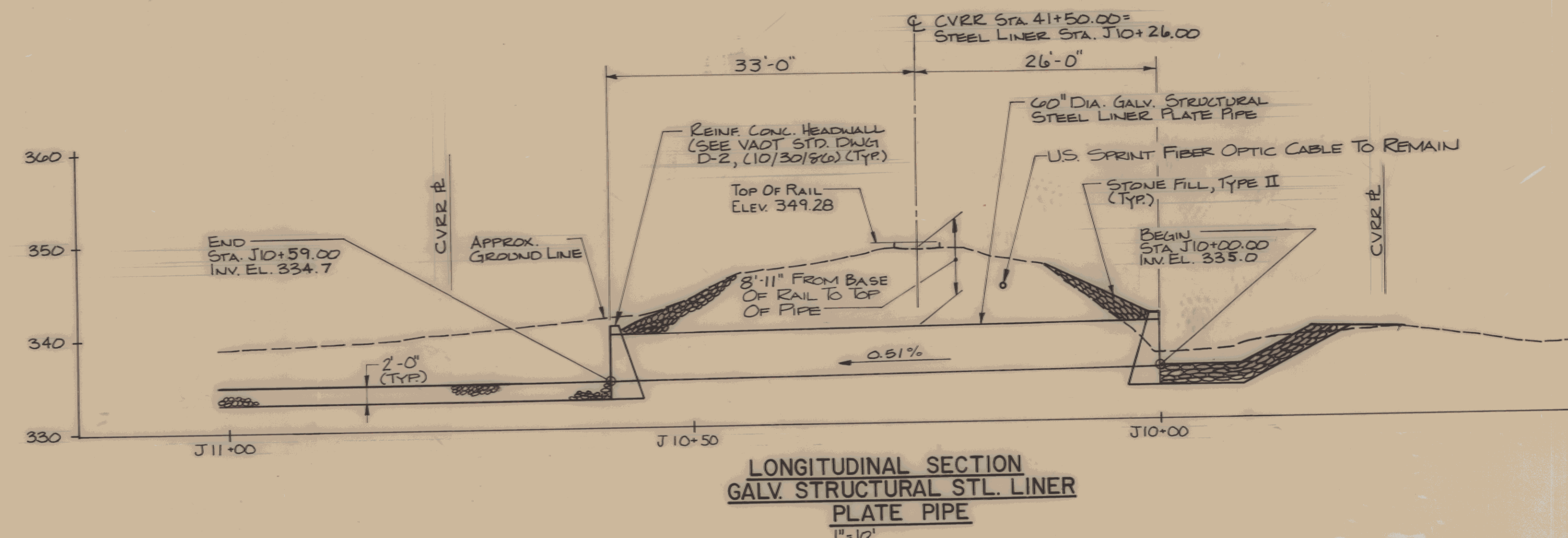




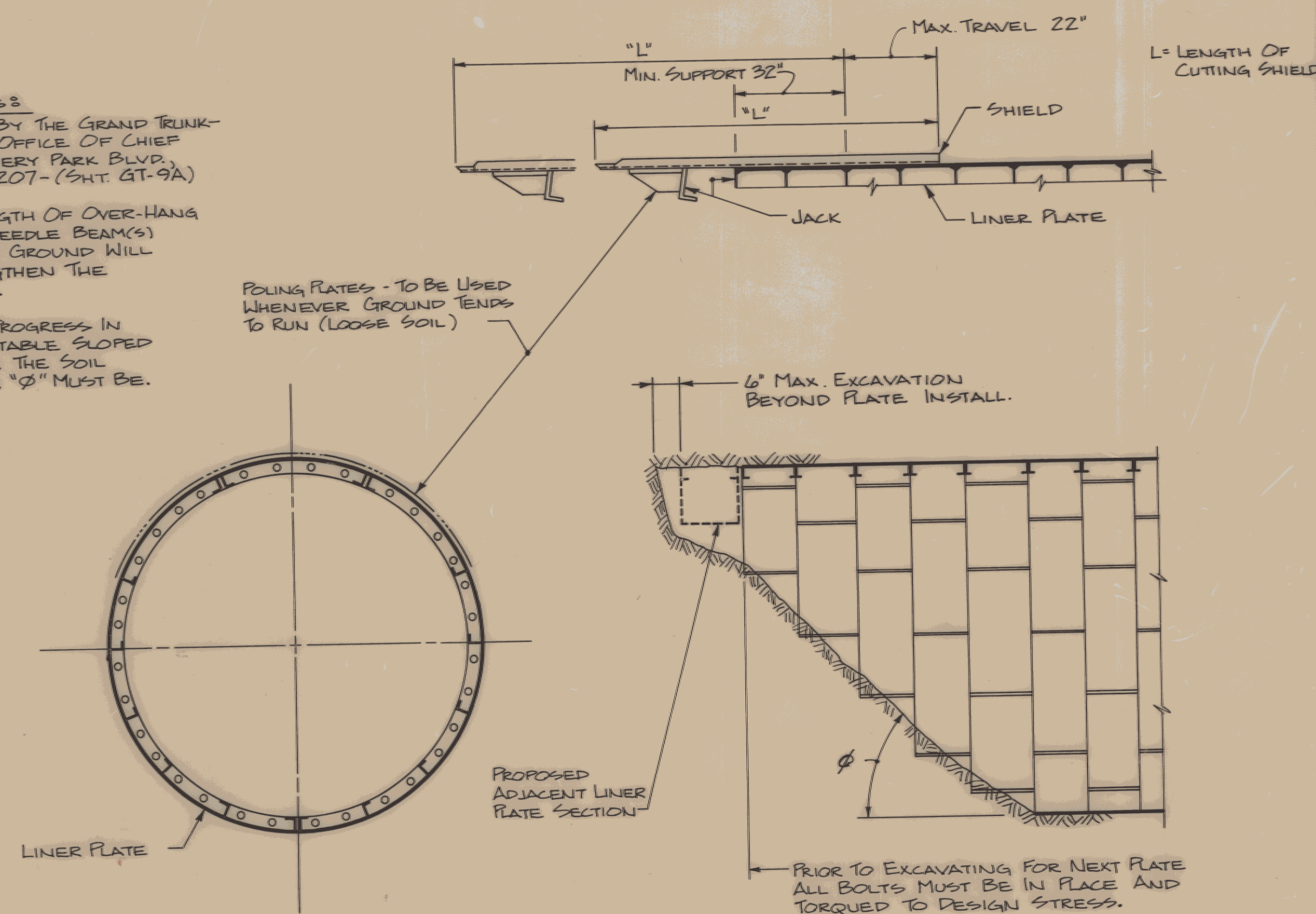
PLAN
GALV. STRUCTURAL STEEL LINER
PLATE PIPE
1"=20'

HYDRAULIC DATA (STR. NO. II)

DRAINAGE AREA = 0.19 SQ. MI.	DESIGN FLOW Q ₁₀₀
Q ₁₀ = 42 C.F.S.	Q ₁₀ HEADWATER ELEVATION = 338.4
Q ₂₅ = C.F.S.	Q ₂₅ HEADWATER ELEVATION =
Q ₅₀ = C.F.S.	Q ₅₀ HEADWATER ELEVATION =
Q ₁₀₀ = 110 C.F.S.	Q ₁₀₀ HEADWATER ELEVATION = 340.7
TAILWATER DEPTH AT Q ₁₀₀ = 2.99 FEET, ELEVATION 337.7	
OUTLET VELOCITY AT Q ₁₀₀ = 8.97 FEET PER SECOND	
ORDINARY HIGHWATER DEPTH FEET	
COMMENTS:	



UNDER TRACK PIPE NOTES:
1) THIS DETAIL SUPPLIED BY THE GRAND TRUNK WESTERN RAILROAD, OFFICE OF CHIEF ENGINEER, 1333 BREWERY PARK BLVD. DETROIT, MICHIGAN, 48207 (SHT. GT-9A)
2) AS "G" FLATNESS & LENGTH OF OVER-HANGS INCREASE, NEEDLE BEAMS RESTING IN UNDISTURBED GROUND WILL BE REQUIRED TO STRENGTHEN THE CANTILEVERED SECTION.
3) LINER PLATE SHALL PROGRESS IN STEPS TO MAINTAIN STABLE SLOPED HEADWALL. THE LOOSEER THE SOIL THE FLATTER THE ANGLE "G" MUST BE.



UNDER TRACK PIPE INSTALLATION REQUIREMENTS - MULTI-PLATE NTS

ESTIMATED QUANTITIES (STRUCTURE II) * Denotes Roadway Item AS BUILT 6/10/94 P.C.

NO.	ITEM	UNIT	TOTAL	FINAL
203.27	UNCLASSIFIED CHANNEL EXCAVATION FINAL PAID IN ROADWAY DS.837	C.Y.	1350	1350
203.30	EARTH BORROW	C.Y.	30	
501.25	CONCRETE CLASS B	C.Y.	25	24.600
507.15	REINFORCING STEEL	L.B.	50	50
515.10	GALV. STRUCTURAL STEEL LINER PLATE PIPE (60" - 0.1046") (MOD.)	L.F.	59	59
613.11	STONE FILL TYPE II FINAL PAID IN ROADWAY DS.837	C.Y.	520	520

SEE CHANGE ORDER NO.6
ITEM 515.10A

STATE OF VERMONT AGENCY OF TRANSPORTATION

TOWN OF	ESSEX	Bridge No. 14-1 & 14-2
HIGHWAY NO.		Log Sta.
		Surv. Sta. CVRR 38+00
		CVRR CULVERT AND STEEL LINER PLATE PIPE
		STRUCTURE NO. II PLAN AND DETAILS (B.R. No. 14-1)
Designed by	PJB	Drawn by RMF
Checked by	RJS	Bridge Design Supervisor
PROJECT	WILLISTON-COLCHESTER	PROJECT NO. PB 033-1(?)
Bridge Sheet No.	BRIO & 1103	Sheet 229 of 400