



0 20 40
HORIZONTAL SCALE IN FEET

CALCULATED
MLB
CHECKED
TRB

CULVERT PLAN AND DETAIL

BUT -129-7.20

8
19

EXISTING STRUCTURE

SFN: 0903248
TYPE: REINFORCED CONCRETE DECK ON REINFORCED CONCRETE ABUTMENTS

SIZE: 10' X 4', 37' LONG
SKEW: 12° LF
ALIGNMENT: TANGENT
DATE BUILT: 1949
CONDITION: FAIR

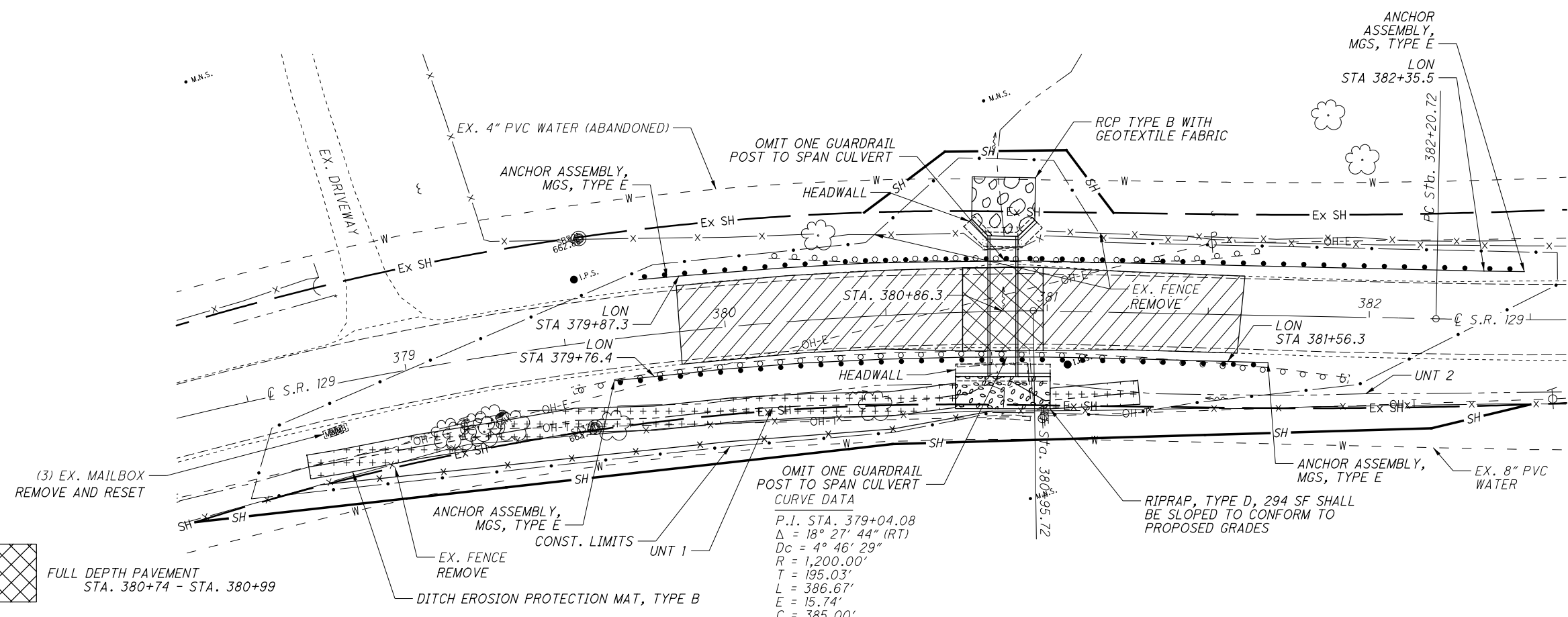
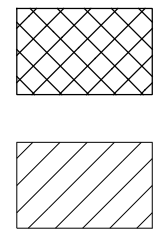
PROPOSED STRUCTURE

CFN: 1987570
TYPE: REINFORCED CONCRETE BOX CULVERT

SIZE: 8' X 4', 44' LONG
SKEW: 12° LF
ALIGNMENT: TANGENT
ABRASION: LEVEL 2
DESIGN SERVICE LIFE: 75 YEARS
STREAM pH: 6.5

HYDRAULIC DESIGN DATA

DRAINAGE AREA: = 196.6 ACRES
Q₂₅ = 133 CFS
Q₁₀₀ = 166 CFS
HW₂₅ = 661.9 FT
HW₁₀₀ = 662.5 FT
ROADWAY = 664.1 FT
V₂₅ = 8.5 FPS
V₁₀₀ = 9.1 FPS
OHWM = 660.3

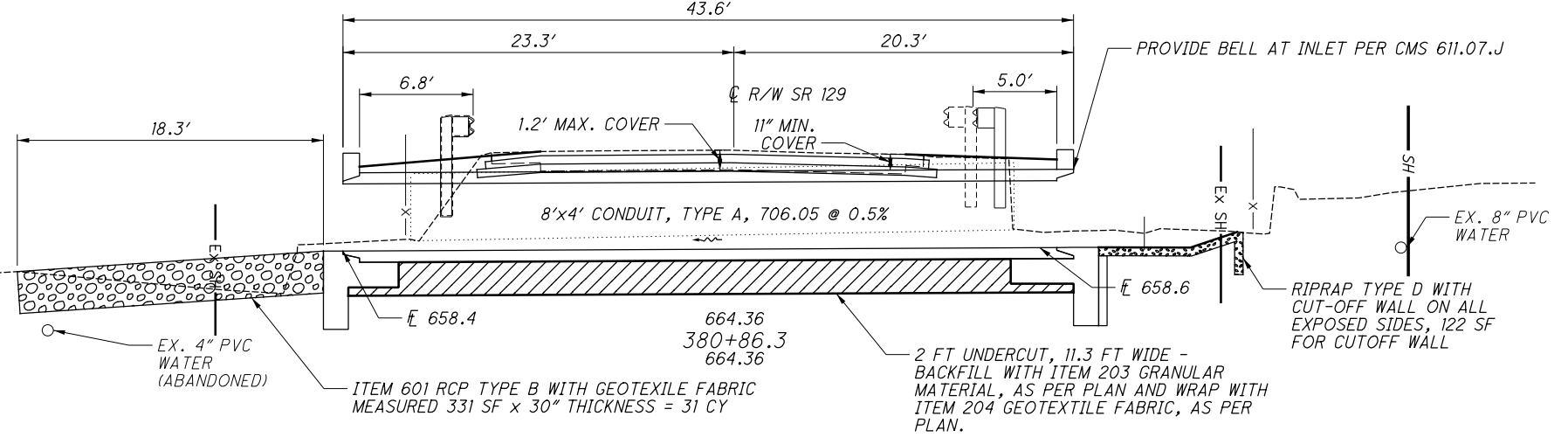


OMIT ONE GUARDRAIL POST TO SPAN CULVERT

CURVE DATA
P.I. STA. 379+04.08
Δ = 18° 27' 44" (RT)
Dc = 4° 46' 29"
R = 1,200.00'
T = 195.03'
L = 386.67'
E = 15.74'
C = 385.00'
C.B. = S 80° 54' 46" E

ESTIMATED QUANTITIES (CLE-222-0311)

ITEM	GRAND TOTAL	UNIT	DESCRIPTION
202	LS	LS	STRUCTURE REMOVED
202	2	EACH	HEADWALL REMOVED
202	295	FT	GUARDRAIL REMOVED
202	20	FT	PIPE REMOVED, 24" AND UNDER, AS PER PLAN
202	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN
202	310	LF	FENCE REMOVED
203	32	CY	GRANULAR MATERIAL, TYPE E, AS PER PLAN
204	32	CY	EXCAVATION OF SUBGRADE
204	127	CY	GEOTEXTILE FABRIC, AS PER PLAN
601	46	SY	RIPRAP, TYPE D
601	31	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC
606	262.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS
606	4	EA	ANCHOR ASSEMBLY, MGS TYPE E
621	3	EA	RAISED PAVEMENT MARKER, TWO-WAY, YELLOW/YELLOW
621	3	EA	RAISED PAVEMENT MARKER REMOVED
626	5	EA	BARRIER REVLECTOR, TYPE 2, BI-DIRECTIONAL
642	0.06	MI	EDGE LINE, 6"
642	0.03	MI	CENTER LINE
670	190	SY	DITCH EROSION PROTECTION MAT, TYPE B



CULVERT UNDERCUT DETAIL

PROVIDE A 2 FOOT UNDERCUT AS SHOWN IN THE CULVERT PROFILE VIEW ON THIS SHEET AND IN THE CULVERT UNDERCUT DETAIL BELOW. THE WIDTH OF THE UNDERCUT SHALL BE THE WIDTH OF THE CULVERT PLUS 1 FOOT ON EACH SIDE FOR EXCAVATION AND BEDDING PER CMS 611. THE CULVERT UNDERCUT SHALL BE BACKFILLED WITH ITEM 203-GRANULAR MATERIAL, TYPE E, AS PER PLAN AND WRAPPED WITH ITEM 204-GEOTEXTILE FABRIC.

