

Benchmark: Chiseled "□" on W. Headwall of Box Culvert (N. End) 1.2 miles S. of Rte. 136 on 850 E
Elevation = 610.51

Existing Structure: SN 055-5111 built in 1993 as a 17" Deep simple span PPC Deck beam bridge, 24'± out to out, 42'± back to back of abutments with type S-1 Steel guard railing. Road will be closed to traffic during construction.

No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 315	55-2	McDONOUGH	1025	449	8 SHEETS
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-			

Contract No. 68205

INDEX OF SHEETS

- Sheet
- 1 General Plan & Elevation
 - 2 General Notes & Total Bill of Material
 - 3 Plan With Apron Detail
 - 4 Reinforcement Bars & Section Details
 - 5-8 Boring Logs

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.0% g
Site Coefficient (S) = 1.0

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

P.I. Sta. = 103+28.42

$\Delta = 55^\circ-54'-18.49"$ (Rt)

R = 295'

T = 156.54'

L = 287.84'

E = 38.96'

P.C. Sta. = 101+71.88

P.T. Sta. = 104+59.72

S.E. = 5.39%

TR 226 PROPOSED

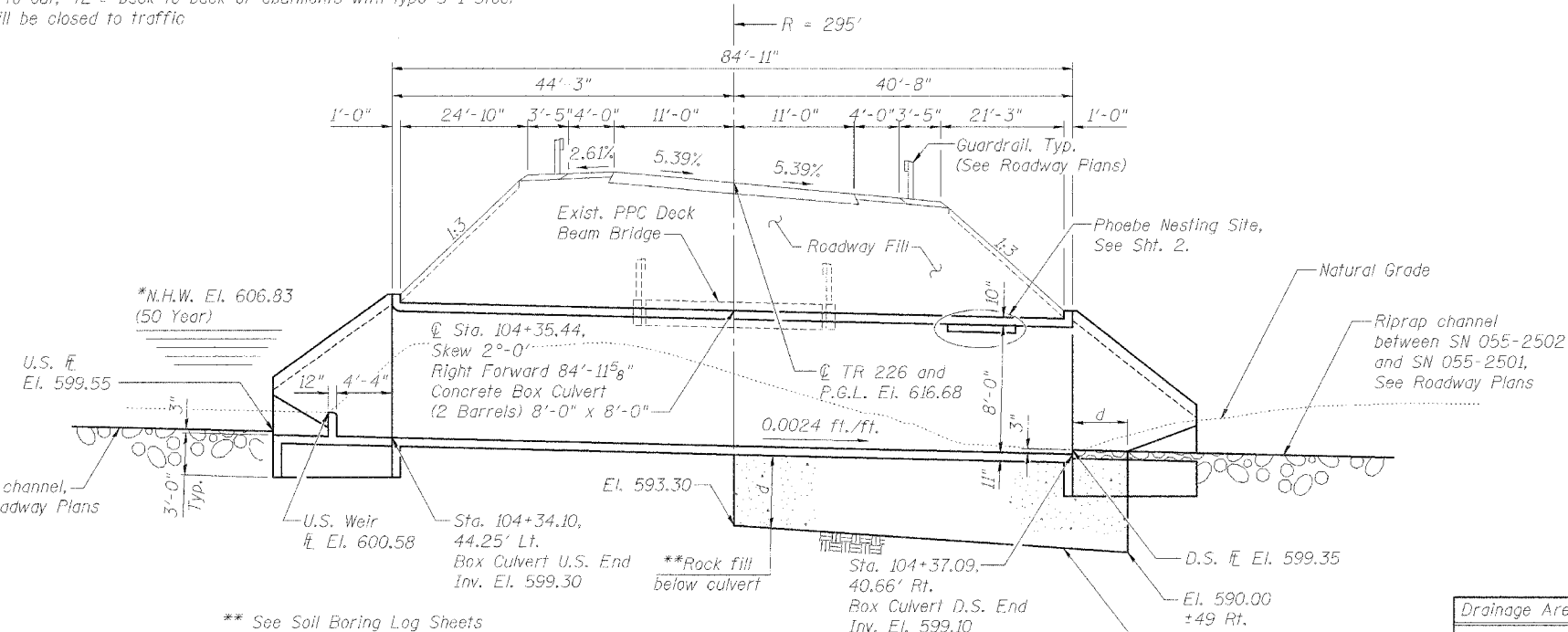
CURVE DATA

WATERWAY INFORMATION

Drainage Area = 1.33 sq. mi. Low Grade Elev. 616.34 @ Sta. 104+90.40

Flood	Frag. Yr.	0	Opening Sq. Ft.		*Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	857	135.43	128	606.83	0.82	-0.13	607.65	606.70
Base	100	1007	135.43	128	606.64	1.50	0.97	608.14	607.61
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	1218	135.43	128	607.09	1.69	1.77	608.78	608.86

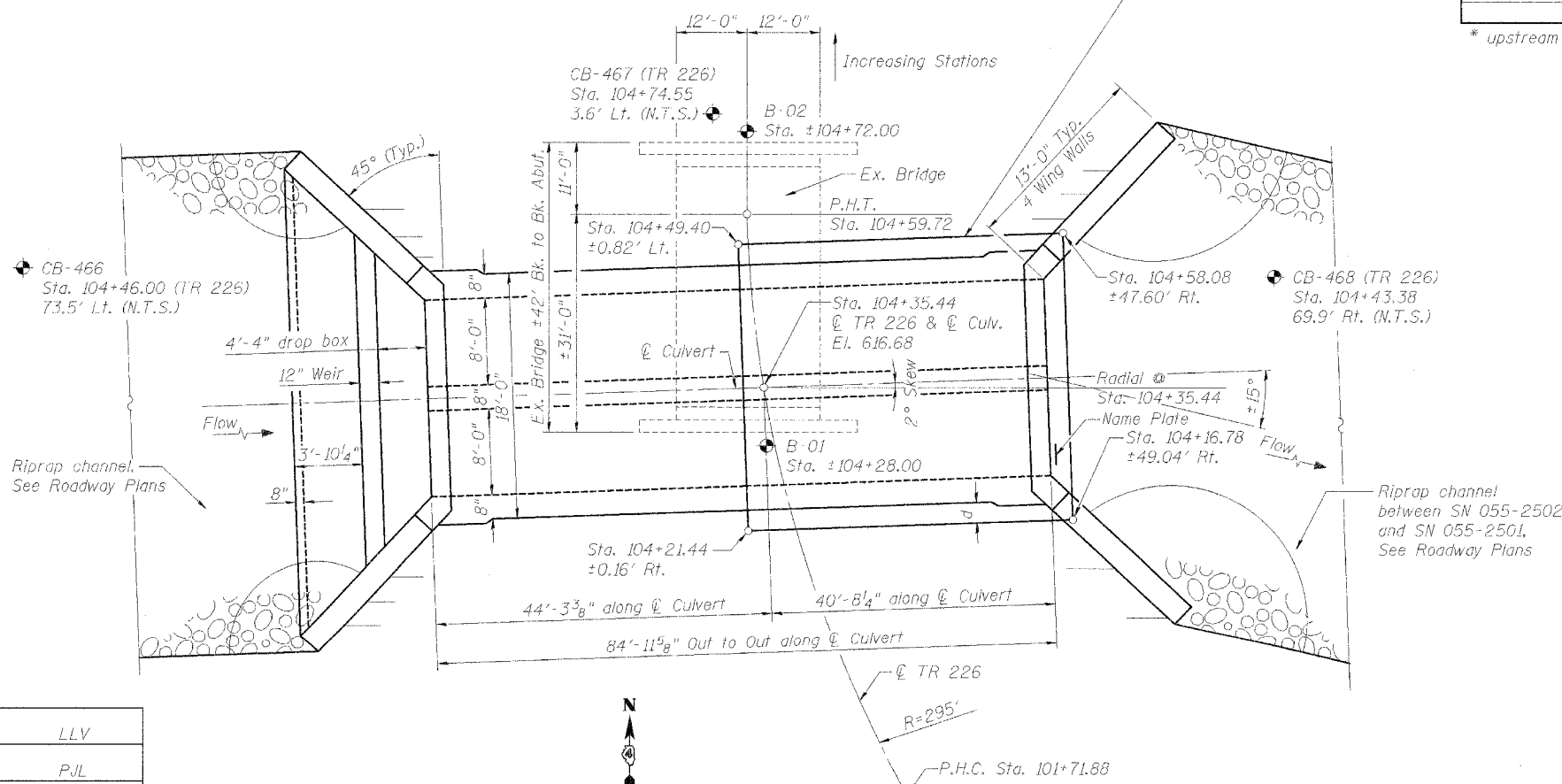
* upstream face of culvert



LONGITUDINAL SECTION

Roadway and Fill Dimensions are at Rt. L's to Roadway
Culvert Dimensions are measured along skew.

** See Soil Boring Log Sheets



PLAN

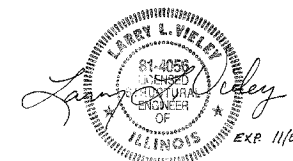
(Boring Locations Indicated as such: ⬤)

STATION 104+35.44
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RT. 315 SEC. 55-2
LOADING HS20
STR. NO. 055-2502

NAME PLATES
(See Std. 515001)

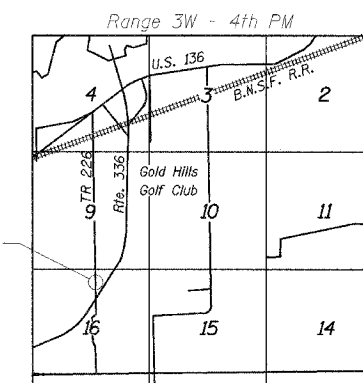
APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Ordum
ENGINEER OF BRIDGES AND STRUCTURES



Larry L. Vieley
Illinois Licensed Structural Engineer
NO. 081-004056
License Expires: November 30, 2006

Date: 3/30/2006



LOCATION SKETCH

GENERAL PLAN & ELEVATION
TWP. ROAD 226 OVER
TRIBUTARY TO KILLJORDAN CREEK
IL. ROUTE 336
F.A.P. ROUTE 315 SECT. 55-2
McDONOUGH COUNTY
STATION 104+35.44
STRUCTURE NO. 055-2502

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IL Design Firm Reg. No. 184-001518

DESIGNED	LLV
CHECKED	PJL
DRAWN	MGM
CHECKED	LLV