

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAP 303	134(B&B-2)R-1	LAKE	137	81
IL 173				

23 SHEETS

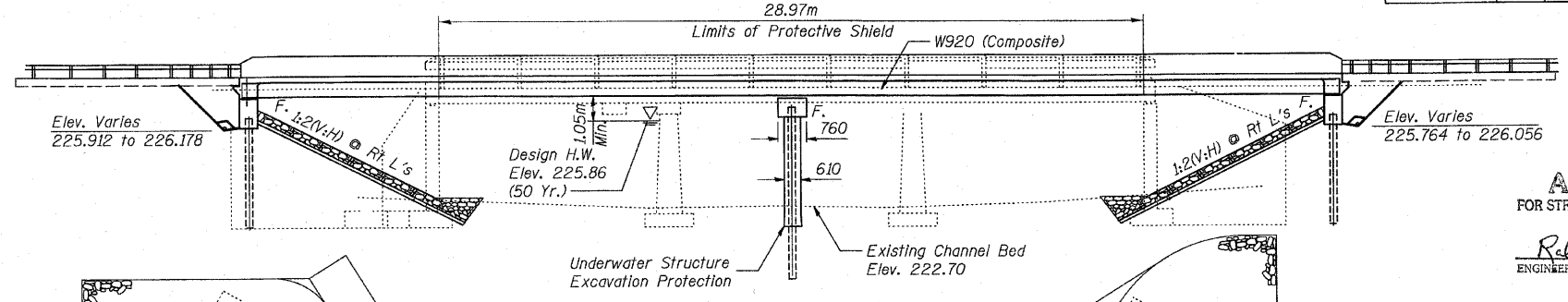
Bench Mark: USGS reference mark on S.W. wingwall of structure 049-0055 (Elev. 228.867)

Existing Structure:
S.N. 049-0056, three span 29.58m Back to Back abutments, 15.748m Out to Out, R.C. slab bridge on closed abutments. Built as IL Route 173, Section 134B-BR at Sta. 860+77 (English) in 1931. The contractor shall remove the existing structure and replace it with a two span steel girder composite superstructure on integral abutments. The road shall be kept open to traffic at all times utilizing stage construction.

Note: All dimensions in millimeters (mm) except as noted.

No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

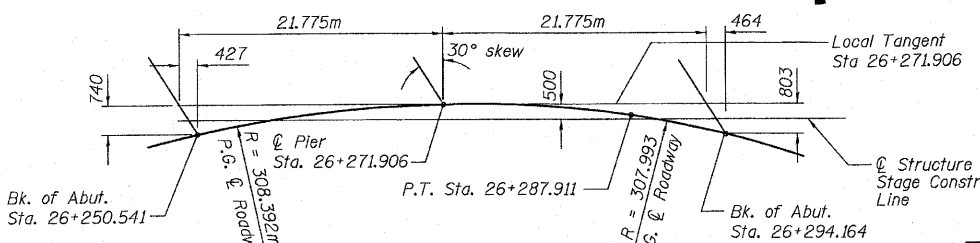
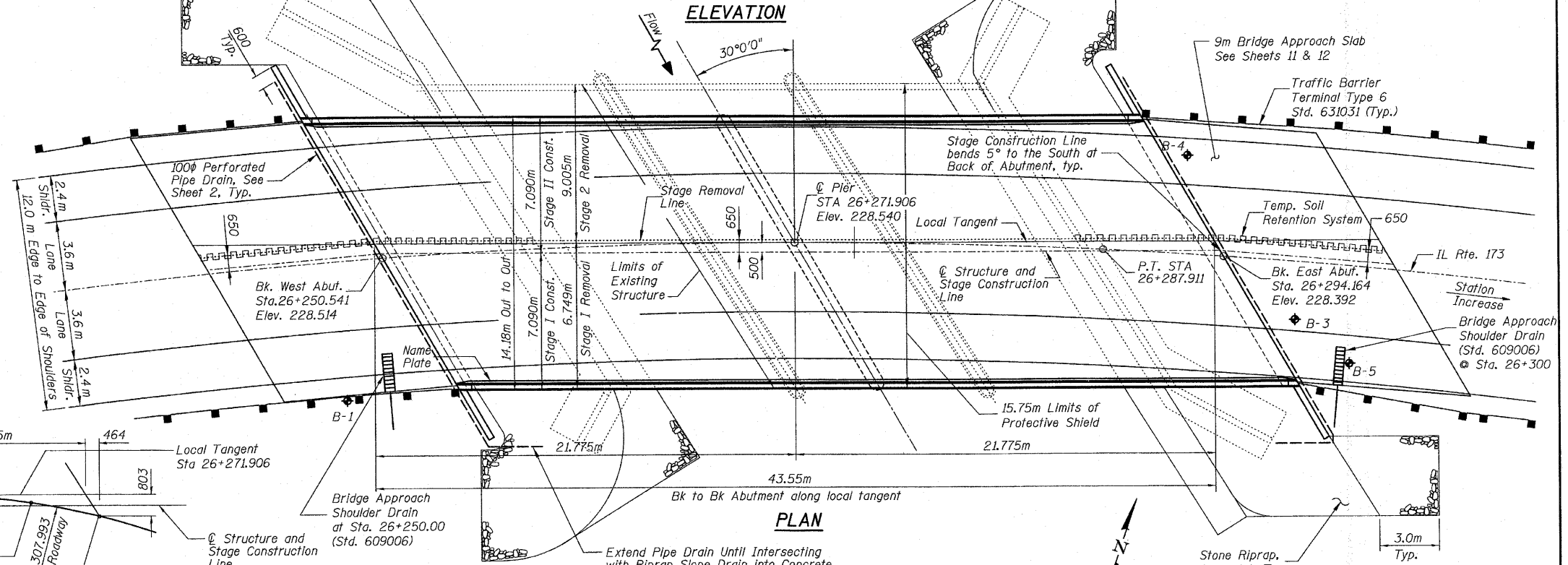


APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson (IV)
ENGINEER OF BRIDGES AND STRUCTURES

INDEX OF SHEETS

- | SHEET NUMBER | SHEET DESCRIPTION |
|--------------|--------------------------------------|
| 1. | General Plan and Elevation |
| 2. | Bill of Material, General Data |
| 3. | Stage Construction |
| 4. | Top of Slab Elevations - 1 |
| 5. | Top of Slab Elevations - 2 |
| 6. | Top of West Approach Slab Elevations |
| 7. | Top of East Approach Slab Elevations |
| 8. | Deck Plan and Cross Section |
| 9. | Superstructure Details - 1 |
| 10. | Superstructure Details - 2 |
| 11. | Bridge Approach Slab - 1 |
| 12. | Bridge Approach Slab - 2 |
| 13. | Framing Plan and Design Data Tables |
| 14. | Steel Girder Details |
| 15. | Low-Profile Fixed Bearings |
| 16. | West Abutment |
| 17. | East Abutment |
| 18. | Pier |
| 19. | Temporary Concrete Barrier |
| 20. | Bar Splicer Details |
| 21. | HP Pile Details |
| 22. | Soil Boring Logs B-1 & B-3 |
| 23. | Soil Boring Logs B-4 & B-5 |



OFFSET SKETCH

HORIZONTAL CURVE DATA-1 HORIZONTAL CURVE DATA-2

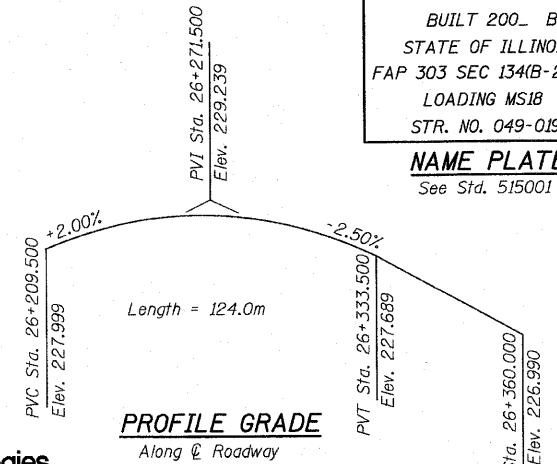
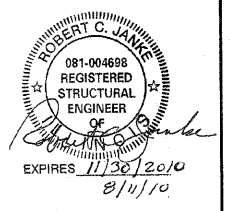
$\Delta = 20^\circ 20' 01''$	$\Delta = 18^\circ 59' 40''$
$T = 55.304m$	$T = 51.525m$
$R = 308.392m$	$R = 307.993m$
$L = 109.443m$	$L = 102.100m$
$E = 4.920m$	$E = 4.280$
$S.E. = 0.054$	$S.E. = 0.054$
P.C. STA = 26+178.468	P.C. STA = 26+287.911
P.T. STA = 26+287.911	P.T. STA = 26+390.011
P.I. STA = 26+233.772	P.I. STA = 26+339.436

STATION 26+271.906
BUILT 200_ BY
STATE OF ILLINOIS
FAP 303 SEC 134(B-2) R-1
LOADING MS18
STR. NO. 049-0198
NAME PLATE
See Std. 515001

LOADING MS18
Allow 2.4 kN/m² for future wearing surface.
DESIGN SPECIFICATIONS
AASHTO 1996, 1997 Through
2000 and 2002 Interims

DESIGN STRESSES
FIELD UNITS
 $f_c = 24 \text{ MPa}$
 $f_y = 420 \text{ MPa}$ (reinforcement)
 $f_y = 250 \text{ MPa}$ (M270M Grade 250)
 $f_y = 345 \text{ MPa}$ (M270M Grade 345)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.2

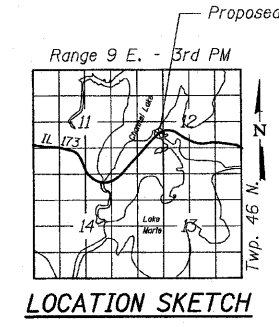


PROFILE GRADE
Along @ Roadway

WATERWAY INFORMATION

Drainage Area = 2256 km² Low Grade Elev. 226.7m @ Sta. 26+287

Flood	Freq. Yr.	Q C.M.S.	Opening Sq. M		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
NPDES	25	0	67.40	70.90	225.69	225.69	0.00	0.00	225.69	225.69
Design	50	0	71.40	73.00	225.86	225.86	0.00	0.00	225.86	225.86
Base	100	0	75.60	78.50	226.04	226.04	0.00	0.00	226.04	226.04
Overtopping		0					0.00	0.00		
Max. Calc.	500	0	84.90	91.20	226.44	226.44	0.00	0.00	226.44	226.44



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

