

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 303 IL 173	2010-086-F	LAKE	29	3	17 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

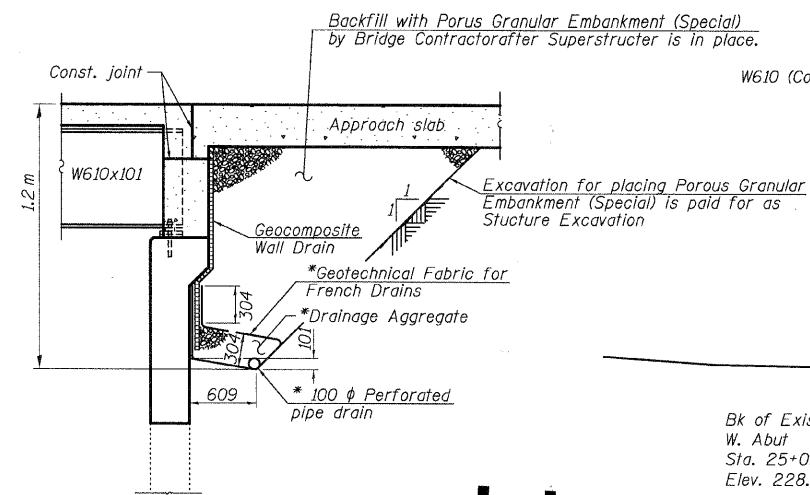
Bench Mark: USGS Reference Mark on S.W. wingwall of structure 049-0055 Elev. 228.867

Existing Structure: S.N. 049-0055, single span 9.720m Back to Back abutments, 15.748m Out to Out, R.C. slab bridge on closed abutments. Built as IL Route 173, Section 134B at Sta. 830+21 (English) in 1931. The contractor shall remove the existing superstructure and replace it with a single span Composite Steel Wide Flange Superstructure. 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



SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)

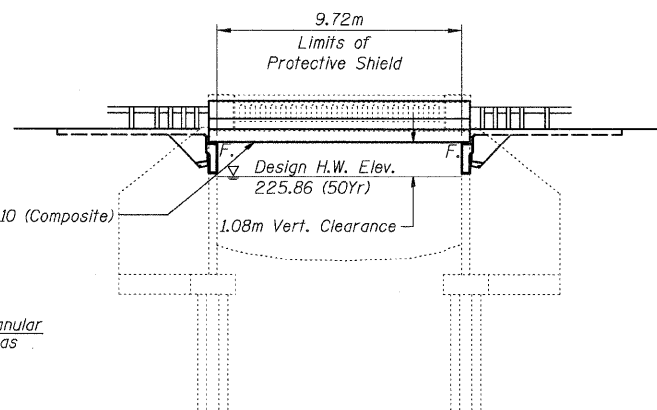
* Included in the cost of Pipe Underdrains for Structures

All drainage systems components shall extend to 308mm from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into the concrete headwalls. (See Article 601.04 of the Standard Specifications and Highway Standard 601101) Drain may be connected to existing drain holes in existing abutment.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

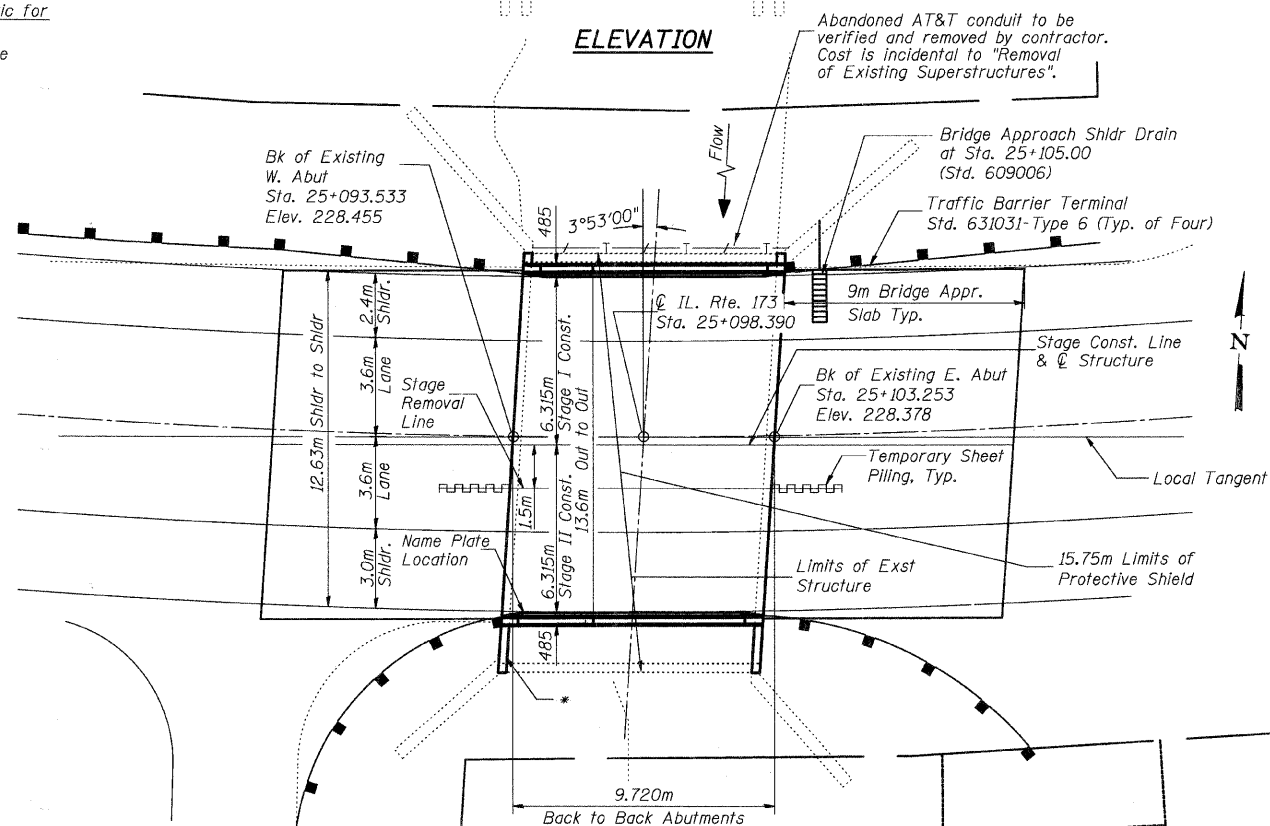
Ralph E. Anderson (SE)
ENGINEER OF BRIDGES AND STRUCTURES

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2



ELEVATION

Abandoned AT&T conduit to be verified and removed by contractor. Cost is incidental to "Removal of Existing Superstructures".



PLAN

* Wire-weight stream gage to be relocated by USGS 6 weeks prior to guard rail removal. Contractor shall coordinate stream gage relocation with USGS.

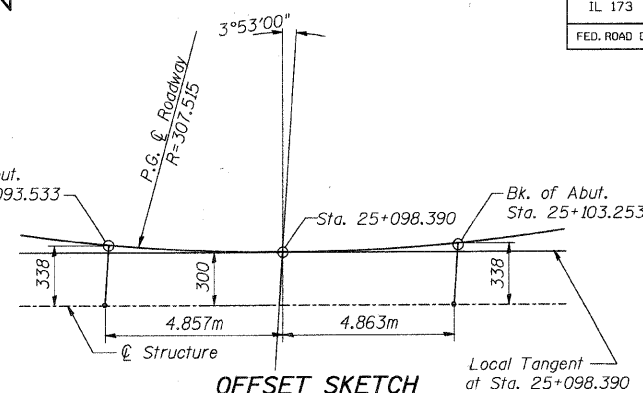
CURVE DATA

$\Delta = 117^{\circ}58'50.836''$
 $T = 511.600$
 $R = 307.515$
 $L = 633.221$
 $E = 289.394$
 $S.E. = 0.083$
 $P.C. STA = 24+702.249$
 $P.T. STA = 25+335.470$
 $P.I. STA = 25+213.849$

WATERWAY INFORMATION

Drainage Area = 2256 km² Low Grade Elev. 226.94 @ Sta. 25+103

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	14.7	14.7	225.69	225.69	0.00	0.00	225.69	225.69
Design	50	0	16.3	16.3	225.86	225.86	0.00	0.00	225.86	225.86
Base	100	0	17.8	17.8	226.04	226.04	0.00	0.00	226.04	226.04
Overlapping			0				0.00	0.00		
Max. Calc.	500	0	21.8	21.8	226.44	226.44	0.00	0.00	226.44	226.44



OFFSET SKETCH

INDEX OF SHEETS

Sheet Number	Description of Sheet
1.	General Plan and Elevation
2.	Stage Construction and General Data
3.	Top of Slab Elevations - 1
4.	Top of Slab Elevations - 2
*** 5.	Top of West Approach Slab Elevations
*** 6.	Top of East Approach Slab Elevations
7.	Deck Plan and Cross Section
8.	Superstructure Details
9.	Bridge Approach Slab - 1
10.	Bridge Approach Slab - 2
11.	Framing Plan
12.	Framing Details and Design Data Tables
13.	Abutment Details
14.	Substructure Repair
*** 15.	Temporary Concrete Barrier
*** 16.	Bar Splicer Details
*** 17.	Cantilever Forming Brackets

*** - This work is not in the fabrication contract and sheet is not included in these plans.

These plans are for the fabrication of the structural steel and bearings. All work shown that is not related to the fabrication is for information only. It is not included in this contract, and is identified as "Not Included in this Contract" or "For Information Only"

STATION 25+098.390
BUILT 200_ BY
STATE OF ILLINOIS
FAP 303 SEC 134B
LOADING MS18
STRUCTURE NO. 049-0055

NAME PLATE

See Std. 515001

Existing Name Plate Shall be Cleaned and Relocated Next to New Name Plate. Cost Included with "Name Plates".

LOADING MS18

Allow 2.4 kN/m² for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO 1996 thru 2000 & 2002 Interims

DESIGN STRESSES

FIELD UNITS

$f'_c = 24$ MPa
 $f_y = 420$ MPa (Reinforcement)
 $f_y = 250$ MPa (M270M Grade 250)
 $f_y = 345$ MPa (M270M Grade 345)

EXISTING UNITS

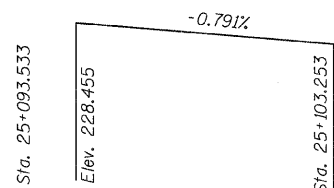
$f'_c = 24$ MPa
 $f_y = 228$ MPa (reinforcement)

SEISMIC DATA

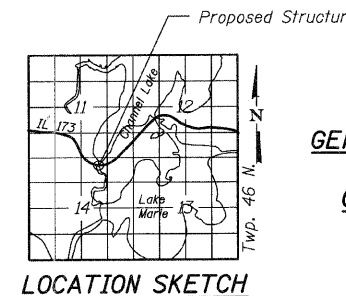
Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.035g
 Site Coefficient (S) = 1.0

PROFILE GRADE

Along \varnothing Roadway



GENERAL PLAN AND ELEVATION
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 2010-086-F
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055



LOCATION SKETCH