

WATERWAY INFORMATION TABLE

Drainage Area = 26,030 sq. mi		Max. Recorded H.W.E. = 446.34 ft						
Prop. Low Grade Elev. = 466.53 ft, Sta. 60+15								
Flood	Frequency (yr.)	Discharge (cfs.)	Waterway Opening (sf)	Natural HWE	Created Head Existing	Created Head Proposed	Headwater Elevation Existing	Headwater Elevation Proposed
Design	10	99,400	38,175	443.6	0.0	0.0	443.6	443.6
Base	50	118,300	44,826	447.2	0.0	0.0	447.2	447.2
Max. Calc.	100	125,500	45,982	447.8	0.0	0.0	447.8	447.7
	500	139,100	47,863	448.8	0.0	0.0	448.8	448.8

DESIGN SCOUR ELEVATION TABLE

	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	Pier 9
Ground Elev.	433.4	435.4	435.8	431.2	410.0	410.1	431.1	431.4	431.3
Scour Elev.	426.1	428.1	428.5	394.3	388.4	388.4	394.3	424.1	424.1

STATION 71+19.00
 BUILT 20... BY
 STATE OF ILLINOIS
 F.A.P. ROUTE 745, SEC. 123B-2
 LOADING AASHTO HL-93
 STRUCTURE NO. 069-0525

NAME PLATE
 See Std. 515001

LOADING HL-93

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

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

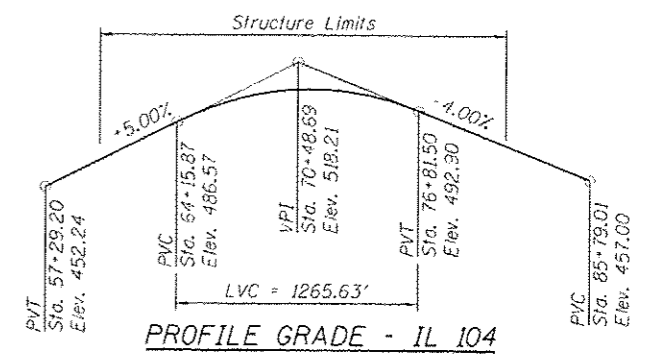
FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (AASHTO M 270 Grade 50 and 50W)
 fy = 70,000 psi (AASHTO M 270 Grade HPS 70W, Unit 2 Tie Girders)

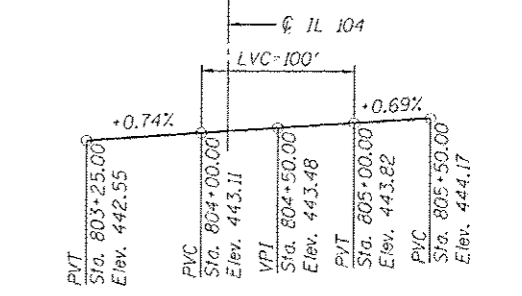
Arch Hangers (ASTM A586 structural strand):
 fu = 220,000 psi for Class A coating
 fu = 200,000 psi for Class C coating

SEISMIC DATA

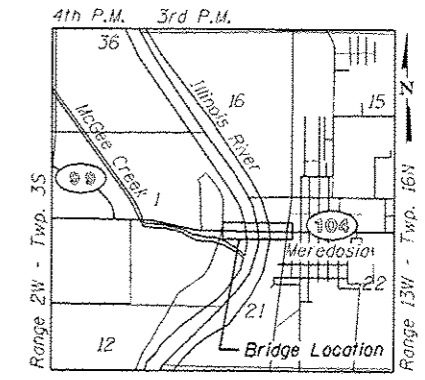
Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.225g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.298g
 Soil Site Class = E



PROFILE GRADE - IL 104



PROFILE GRADE - FRONTAGE ROAD



LOCATION SKETCH

GENERAL PLAN & ELEVATION 2 OF 2
 ILLINOIS ROUTE 104 OVER
 ILLINOIS RIVER (PUBLIC WATER)
 F.A.P. RTE. 745 - SEC. 123B-2
 MORGAN COUNTY STATION 71+19.00
 STRUCTURE NO. 069-0525

FILE NAME: I:\17-2004\174347... USER NAME: JLR... DESIGNED: JLR... CHECKED: VCP... DATE: 11/25/2014... PLOT SCALE: 1"=40'... PLOT DATE: 11/25/2014...

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 2 OF 2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	123B-2	MORGAN	782	383
SN 069-0525		CONTRACT NO. 72B58		

SHEET NO. S-2 OF 146 SHEETS