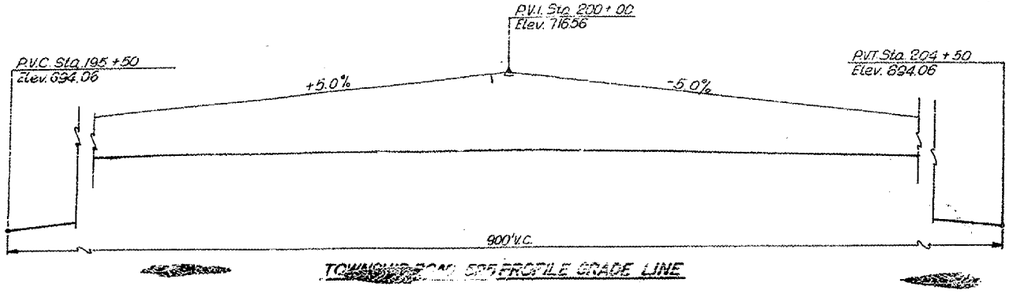
CONTRACT NO. 66577

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	50(1HB-2,1HB)BP	LASALLE	17	8
	ILLINOIS			

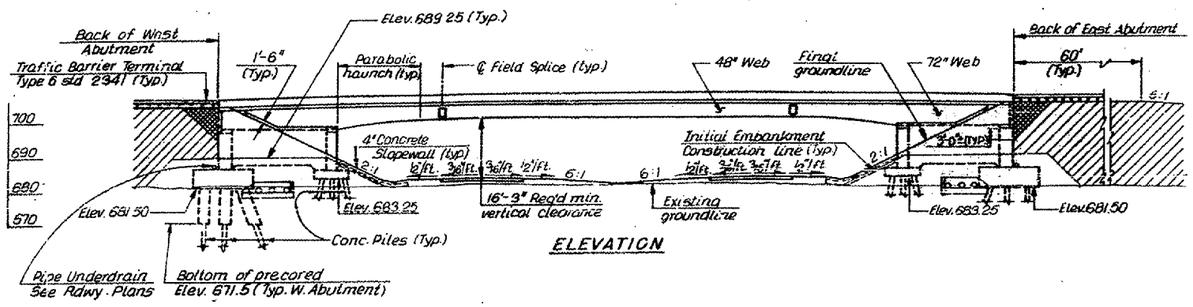
Bench Mark: Bench mark #15 is a railroad spike in the power pole at Sta. 208+57.1, 23 Lt. Elev. 682.612

Existing Structure: None

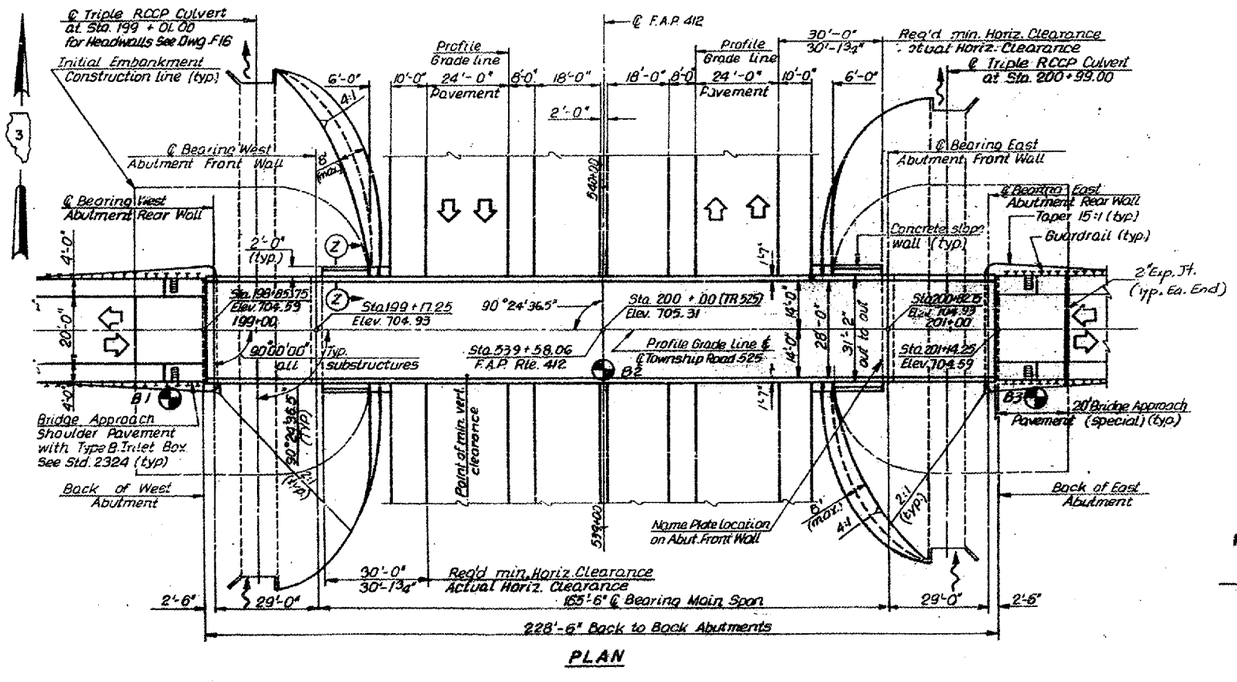
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOWNSHIP ROAD 525 PROFILE GRADE LINE



ELEVATION



PLAN

SPECIFICATIONS

DESIGN SPECIFICATIONS: Design Specifications American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 1983, with 1984, 1985 and 1986 interims.

CONSTRUCTION SPECIFICATIONS: State of Illinois Standard Specifications for Road and Bridge Construction, Adopted October 1, 1983 and Special Provisions thereto.

DESIGN LOADING: AASHTO HS 20-44. Allowance for future wearing surface is 25 psf. The superstructure is designed to accomodate 1" settlement at the front walls of both abutments; and 1/2" differential settlement between the two front walls. In both cases no settlement was assumed at the rear walls.

UNIT STRESSES:

Concrete: f'c = 3,500 psi

Reinforcing steel: fy = 60,000 psi

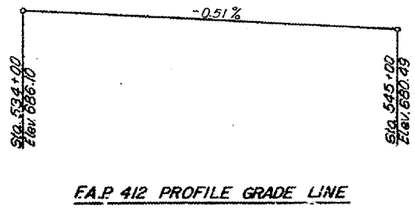
Structural Steel: fy = 50,000 psi M223, Gr. 50
fy = 36,000 psi M183

Prestressing rods: fpu = 150,000 psi

Max. Range of Temperature = 120°F (-10°F to +110°F)

LEGEND

- indicates boring location
- indicates guardrail
- indicates water flow
- indicates embankment placement after construction of abutment rear wall.
- indicates porous granular embankment to be placed after construction of the abutment and after construction of the superstructure.
- indicates direction of traffic lane



F.A.P. 412 PROFILE GRADE LINE

STATE OF ILLINOIS
JEROME J. GAY
4193
ILLINOIS STRUCTURAL ENGINEER

Jerome J. Gay

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
James T. Pulver
Engineer of Bridges and Structures

GENERAL NOTES

Dwg. No. F1 of 17

STRUCTURAL STEEL: Fasteners shall be high strength bolts having 7/8" diameter with 15/16" diameter open holes unless otherwise noted. Tightening and inspection of all high strength bolt connections shall conform to the requirements of the latest issue of the Specification for Structural Joints using ASTM A325 (M164) or A490 (M253) bolts for slip-critical connections. Except tightening methods using either the load indicating washers or the calibrated wrench are not allowed.

Calculated weight of AASHTO M223, Grade 50 structural steel = 234,400 Lbs. Calculated weight of AASHTO M183 structural steel = 26,300 Lbs. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material of the steel girders.

The [illegible] shall be used for shop and field painting of structural steel except where otherwise noted.

DIMENSIONS: Dimensions shall not be scaled from the plans. All plan dimensions are measured horizontal.

CONCRETE: Exposed edges of concrete shall be chamfered 3/4 inch unless otherwise shown.

REINFORCEMENT: Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60. The concrete cover over the reinforcement shall be 2" clear unless otherwise shown. Bars shown thus 8x7 #4 etc. indicate 8 lines of bars with 7 lengths per line. Reinforcement bars designated (E) shall be epoxy coated. All dimensions relating to reinforcing bars are to center of bars unless otherwise shown. Dimensions relating to bending of bars are out to out of the bar.

BEARING SEATS: Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed if necessary.

BORING DATA: See Dwg. No. F17

ANCHOR BOLTS: Anchor bolts shall be set before bolting cross frames over abutment front walls.

TEST PILES: The contractor shall drive 1 Concrete test pile at each abutment front wall and 1 test pile at each abutment rear wall as directed by the Engineer before ordering the remainder of the piles.

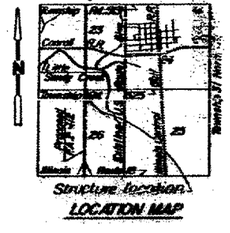
WATERPROOFING: The back of the abutment rear walls shall be waterproofed according to Article 503.11 of the Standard Specifications.

FIELD WELDING: Field welding of construction accessories will not be permitted to the bottom flange of girders nor to the top flange of girders in spans 1 and 3, nor to the top flange of girders in span 2 for a distance equal to one-fourth the span length from the abutment front walls. Field welding in other areas will be permitted only when approved by the Engineer.

SLOPE WALLS: Slope walls shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

EMBANKMENT: The initial embankment configuration shown shall be the minimum embankment that must be constructed prior to the construction of the abutments.

CONCRETE PILES: Concrete piles shall be driven in holes at the West Abutment precored through the embankment to Elev. 671.5 in accordance with article 513.09(c) of the Standard Specifications.



LOCATION MAP

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS FOR INFORMATION ONLY BRIDGE LOCATION 1 S.N. 050-0214

SCALE: VERT.
HORIZ.
DATE 04/18/05

DRAWN BY RW
CHECKED BY

Date: 04/18/05
project: c:/projects/cmoln05/cm3018/details.dgn