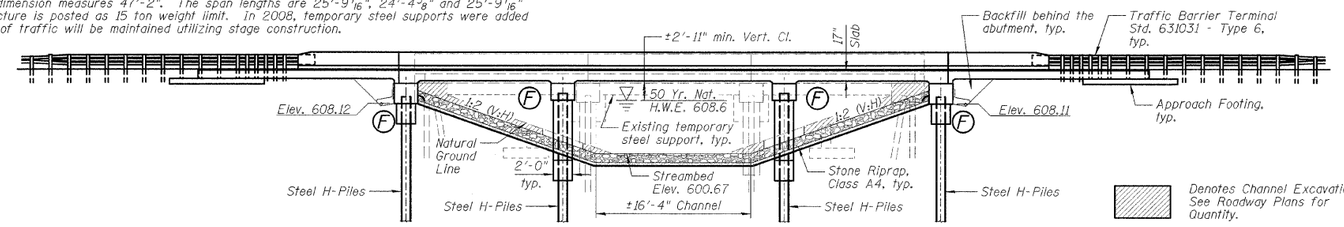
Benchmarks: 1.) Benchmark 2: Railroad spike in the first power pole East of the Route 17 bridge over the Tributary into Reddick Run. Approximately 78' North of the ℄ of Route 17 and 83' Northwest of the end of the Northerly guardrail. Station 409+03/78' LT., Elevation = 608.80.
2.) Benchmark 4: Railroad spike in the first power pole West of the Route 17 bridge over the Tributary into Reddick Run. Approximately 78' North of the ℄ of Route 17 and 73' Northeast of the end of the Northerly guardrail. Station 406+99/78' LT., Elevation = 609.29.

Existing Structure: SN 053-0151, built in 1979 as Section 15BR-3. The superstructure consists of 15 precast prestressed concrete deck beams with a concrete parapet attached to the exterior beams and bituminous wearing surface. The substructure consists of precast concrete pile bent abutments and two concrete solid shaft pile bent piers supported by precast concrete piles. The back-to-back of abutments dimension measures 75'-11¼" and the out-to-out dimension measures 47'-2". The span lengths are 25'-9 7/16", 24'-4 3/8" and 25'-9 7/16" with a 45° left forward skew. The existing structure is posted as 15 ton weight limit. In 2008, temporary steel supports were added to support beams in multiple locations. One lane of traffic will be maintained utilizing stage construction.

Salvage: Temporary Steel Supports.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Horizontal dimensions ℄ Rt. L's to Roadway)

Denotes Channel Excavation, See Roadway Plans for Quantity.

WATERWAY INFORMATION

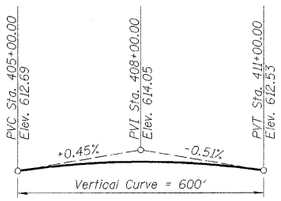
Drainage Area = 7.9 Sq. Mi. Low Grade Elev. 610.80 @ Sta. 400+90.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	536	169	175	608.1	0.3	0.3	608.5	608.4
Design	50	783	188	197	608.6	0.5	0.4	609.1	609.0
Base	100	880	193	204	608.8	0.5	0.4	609.3	609.2
Overtopping	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max. Calc.	500	1108	205	218	609.1	0.7	0.6	609.8	609.7

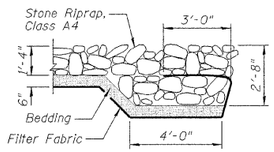
10 Yr. Velocity = 2.8 ft/sec. (Proposed)
10 Yr. Velocity = 2.9 ft/sec. (Existing)

SCOUR INFORMATION

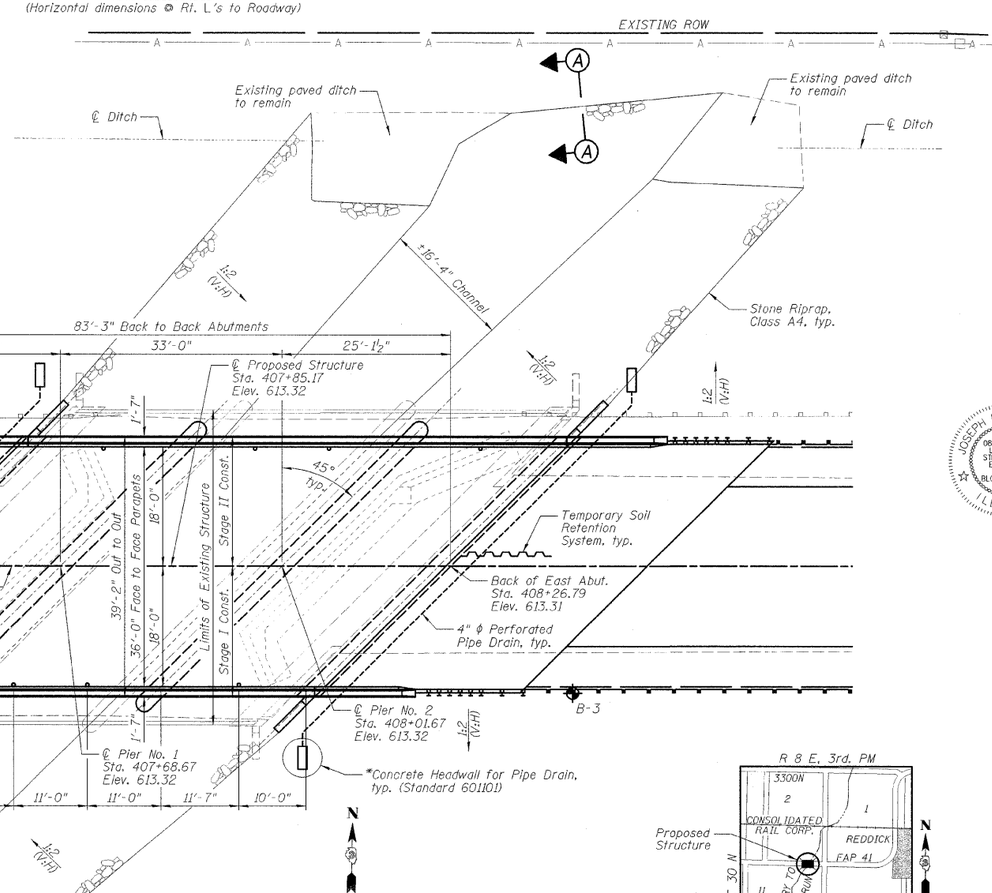
	West Abutment	Pier 1	Pier 2	East Abutment
Design Scour Elevation	608.12	595.58	596.67	608.11



PROFILE GRADE
(Along ℄ Roadway)



SECTION A-A



PLAN

*Included in the cost of Underdrains for Stuctures.

INDEX TO SHEETS

STATION 407+85.17
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RTE. 41 SEC. (15BR-3)-1
LOADING HL93
STR. NO. 053-0185

NAME PLATE
See Standard 515001

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications, 4th Edition (2008 Interim Revisions)

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi (Cast-in-Place)
fy = 60,000 psi (Reinforcement)

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.077 g
Design Spectral Acceleration at 0.2 sec. (SDs) = 0.136 g
Soil Site Class = C

LOCATION SKETCH

JOSEPH M. LOWRANCE 061-006446 LICENSED STRUCTURAL ENGINEER OF BLOOMINGTON, ILLINOIS

Joseph M. Lowrance Date 10/07/09
JOSEPH M. LOWRANCE
ILLINOIS STRUCTURAL ENGINEER
NO. 081-006446
Exp. Date 11/30/10

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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

GENERAL PLAN AND ELEVATION
IL. ROUTE 17 OVER UNNAMED TRIBUTARY TO REDDICK RUN
F.A.P. 41 - SECTION (15BR-3)-1
LIVINGSTON COUNTY
STATION 407+85.17
STRUCTURE NO. 053-0185

DESIGNED	SDH
CHECKED	JML
DRAWN	JWK/DJM
CHECKED	MSW
DATE	10/07/09

SHEET NO. B1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22 SHEETS	41	(15BR-3)-1	LIVINGSTON	45	12
		SN 053-0185	CONTRACT NO. 66833		
	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			