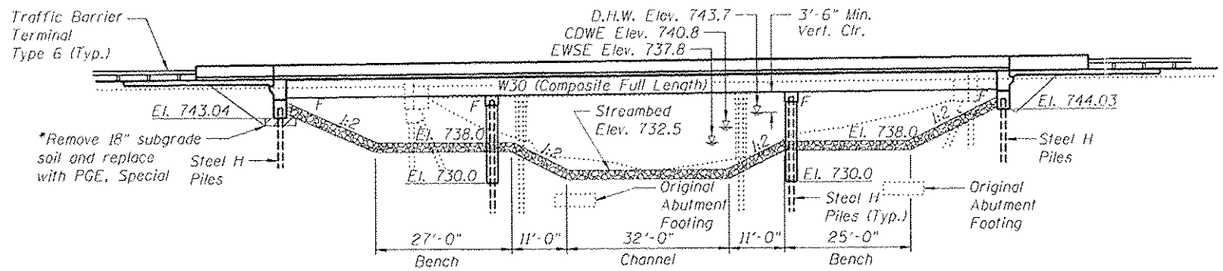
Bench Mark: Chiseled "□" on NW wingwall, Elev. 747.08

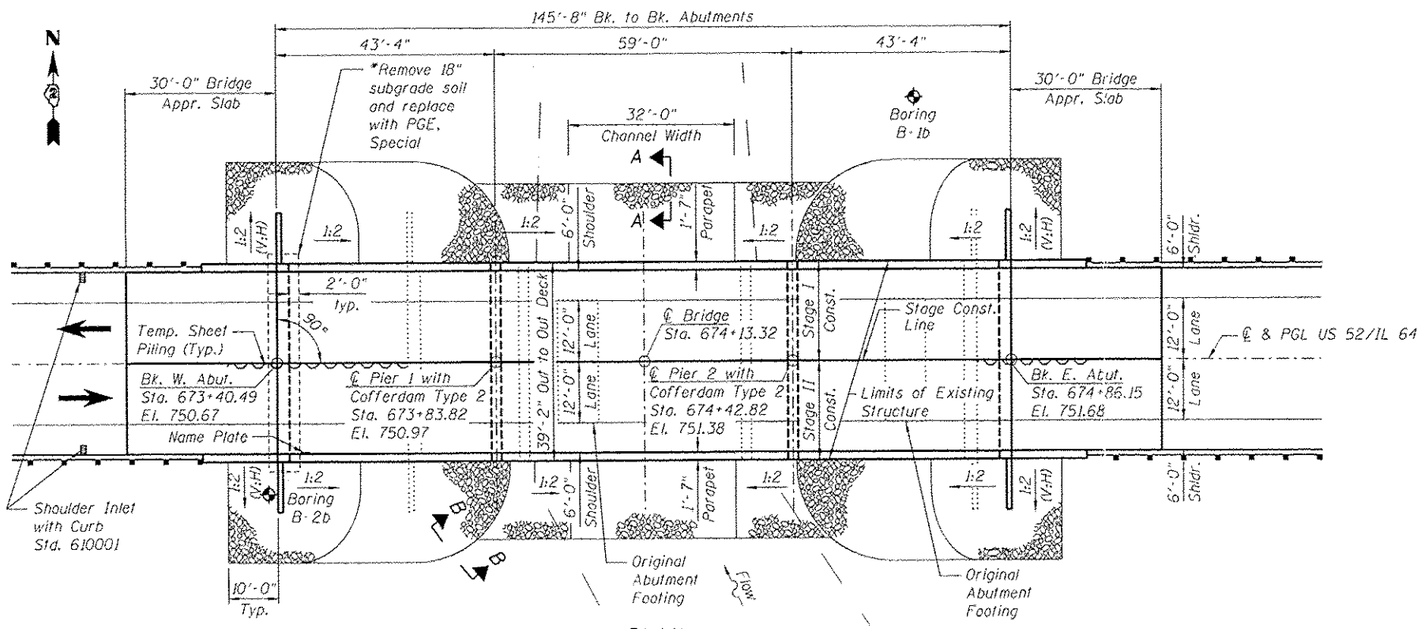
Existing Structure: S.N. 008-0029 originally constructed in 1983 as F.A. Route 17 Section 4BR-2. Three simple span PPC Deck Beams superstructure supported on pile bent abutments and pile encased solid wall piers. In 2003, asphalt overlay was removed and replaced with 5" reinforced concrete wearing surface as FA17, Section (4BR-1 & 4BR-2)M. In 2008, four PPC Deck Beams were replaced as FAP17, Section (4BR-2)D & (4BR-1)D. Bk. to Bk. abutments is 112'-10¾" and Out to Out width is 39'-2".

Existing structure shall be removed and replaced. Traffic to be maintained utilizing stage construction.

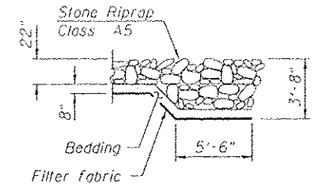
Existing steel shoring to be removed and taken to the nearest IDOT maintenance yard for salvage.



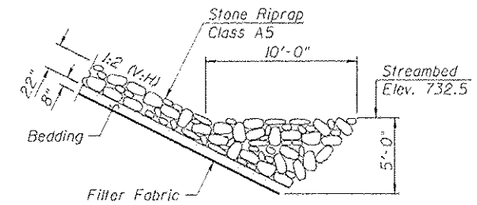
ELEVATION



PLAN



SECTION A-A



SECTION B-B

INDEX OF SHEETS

SA-1. General Plan & Elevation
SA-2. General Data
SA-3. Stage Construction Details
SA-4. Temporary Concrete Barrier for Stage Construction
SA-5. Top of Slab Elevations 1
SA-6. Top of Slab Elevations 2
SA-7. Top of Slab Elevations 3
SA-8. West Approach Top of Slab Elevations
SA-9. East Approach Top of Slab Elevations
SA-10. Superstructure
SA-11. Superstructure Details
SA-12. Integral Abutment Diaphragm Details
SA-13. Bridge Approach Slab Details 1
SA-14. Bridge Approach Slab Details 2
SA-15. Framing Plan
SA-16. Structural Steel Details
SA-17. Bearing Details
SA-18. West Abutment
SA-19. East Abutment
SA-20. Pier 1
SA-21. Pier 2
SA-22. Bar Splicer Assembly and Mechanial Splicer Details
SA-23. HP Pile Details
SA-24. Boring Logs

LOADING HL-93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 Grade 50W)

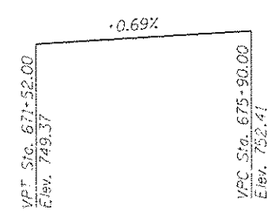
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration @ 1.0 sec (S_{D1}) = 0.055
Design Spectral Acceleration @ 0.2 sec (S_{DS}) = 0.090
Soil Site Class = C

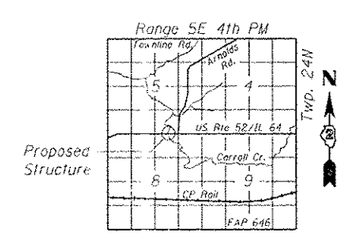
* Geofabric shall be installed at the base of undercut excavation, cost included with PGE, Special. The limits and quantites of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field. Work paid for as Removal and Disposal of Unsuitable Material for Structures.

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS DEBORAH A. BROWN 081-005152 LICENSED STRUCTURAL ENGINEER
Signature 6-27-13 Date
November 30, 2014 Expires



PROFILE GRADE
(along ℄ US Route 52/IL 64)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
US 52/IL 64 OVER CARROLL CREEK
SECTION 4BR-5
F.A.P. RTE. 17
CARROLL COUNTY
STA. 674+13.32
STRUCTURE NO. 008-0049

ZROKA engineering
Zroka Engineering, P.C.
4216 North Hermitage
Chicago, IL 60613

USER NAME = SAW	DESIGNED - JLA	REVISED -	
	CHECKED - DAZ	REVISED -	
PLOT SCALE = 0:2.0000 ' / in.	DRAWN - SAW	REVISED -	
PLOT DATE = 6/27/2013	CHECKED - JLA	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S.N. 008-0049
SHEET NO. SA-1 OF SA-24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5	CARROLL	150	40
		CONTRACT NO. 64D83		

ILLINOIS FED. AID PROJECT