Benchmark: BM #120 Chiseled "X" S. Bolt on fire hydrant, N.E. Quad. IL. Rte. 9 and TR 300E Road, Station 859+51.22/24.97' RT., Elevation = 747.90.
BM #121 Railroad spike in power pole with guy wire, Station 862+79.19/32.94' LT., Elevation = 748.03.

Existing Structure: Structure No. 027-0005, originally built in 1925 as Section 19B. The original construction consisted of a reinforced concrete T-Girder superstructure supported by reinforced concrete closed abutments. In 1980, under Section 19BR-1, the superstructure was replaced with precast prestressed concrete deck beams. The back-to-back of abutments dimension measures 42'-8 3/8" and the out-to-out dimension measures 31'-0". In 2008, the fascia beams were replaced and temporary steel supports were added to support two of the interior deck beams. One lane of traffic will be maintained utilizing stage construction.

Salvage: Temporary Steel Supports.

SCOUR INFORMATION

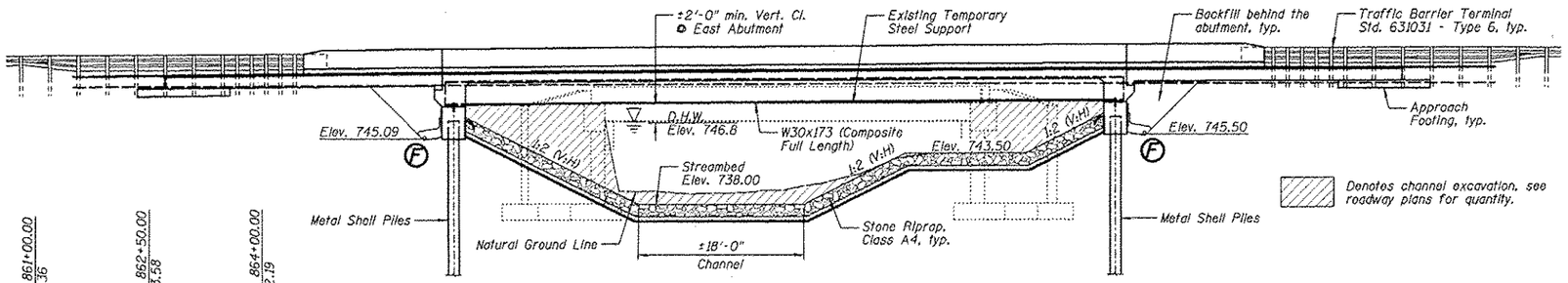
	West Abutment	East Abutment
Design Scour Elevation	745.50	745.09

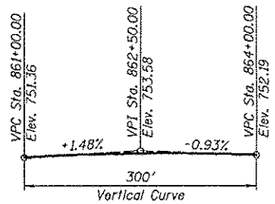
WATERWAY INFORMATION

Drainage Area = 9.4 Sq. Mi.
Existing Low Grade Elev. 750.0 ℄ Sta. 860+00
Proposed Low Grade Elev. 750.0 ℄ Sta. 860+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	1280	199	272	745.7	0.3	0.1	746.0	745.8
Design	50	2090	245	343	746.8	0.6	0.1	747.5	747.0
Base	100	2450	266	377	747.4	0.8	0.1	748.2	747.5
Overtopping	275	3000	N/A	493	N/A	N/A	0.3	N/A	750.1
Max. Calc.	500	3340	323	493	750.7	1.3	0.4	752.0	751.1

10 Yr. Velocity = 6.8 ft/sec. (Existing)
10 Yr. Velocity = 4.0 ft/sec. (Proposed)





PROFILE GRADE
(Along ℄ Roadway)

ELEVATION

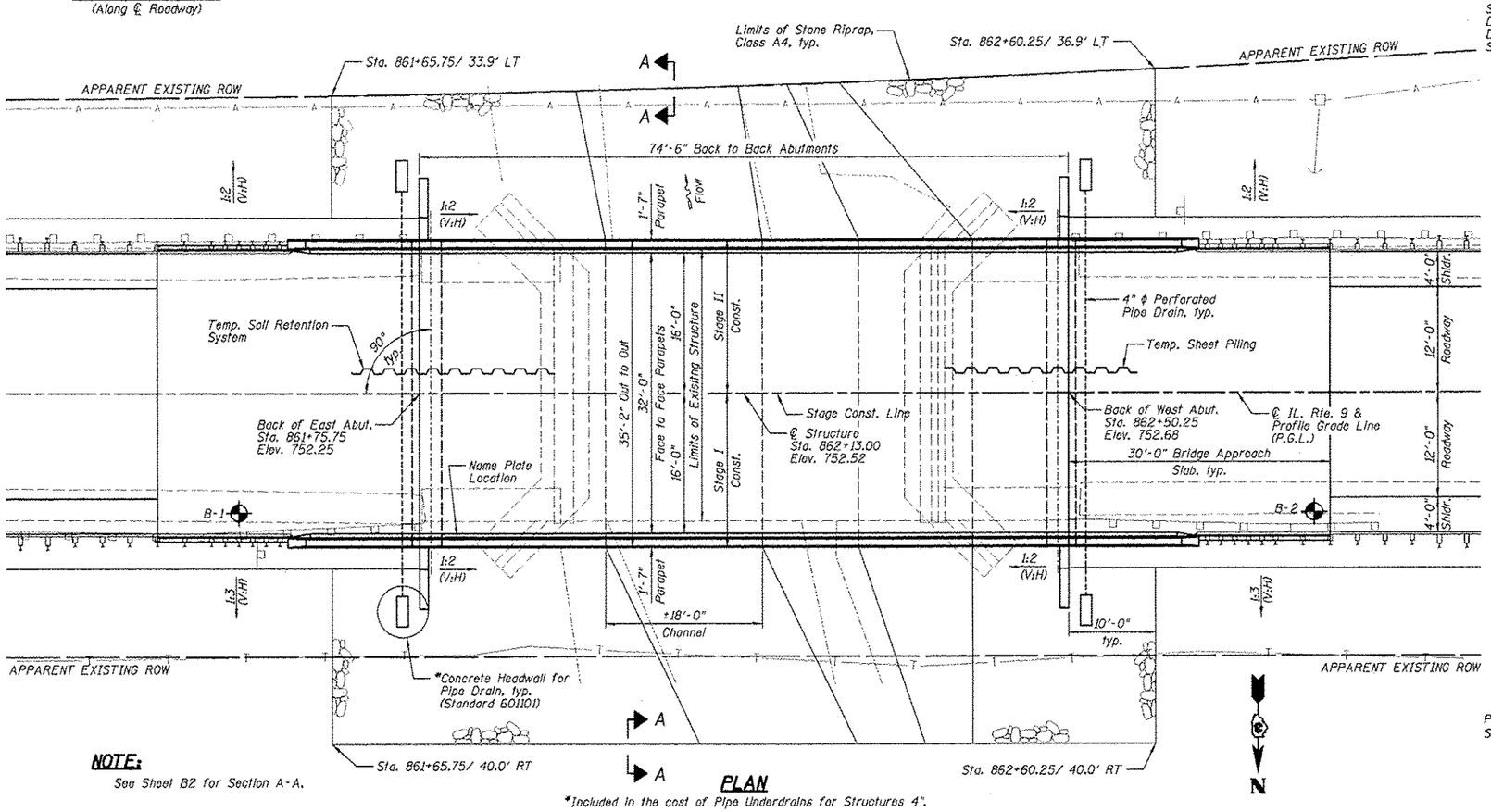
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications, 5th Edition (2010 Interim Revisions)

DESIGN STRESSES
FIELD UNITS:
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M270 Grade 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.122g
Design Spectral Acceleration at 0.2 sec. (SDs) = 0.203g
Soil Site Class = D

INDEX OF SHEETS

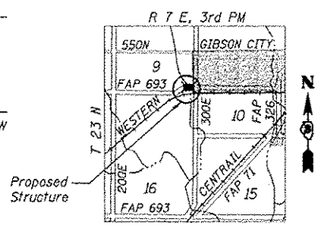


NOTE:
See Sheet B2 for Section A-A.

PLAN
*Included in the cost of Pipe Underdrains for Structures 4".

Joseph M. Lowrance Date 08-13-12.
JOSEPH M. LOWRANCE
ILLINOIS STRUCTURAL ENGINEER
NO. 081-006446
Exp. Date 11/30/12

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
IL. ROUTE 9 OVER WEST BRANCH OF DRUMMER CREEK
F.A.P. 693 - SECTION 19BR
FORD COUNTY
STATION 862+13.00
STRUCTURE NO. 027-0101

Farnsworth GROUP, INC.
2706 McGraw Drive
Bloomington, Illinois 61704
309/663-8435, 309/663-1571 fax

DESIGNED - TCR | REVISED
CHECKED - JML | REVISED
DRAWN - JWK | REVISED
DATE - 8/10/12 | CHECKED - MSW | REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. B1 OF 30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19BR	FORD	61	23
		CONTRACT NO. 66A12		
		ILLINOIS FED. AID PROJECT		

24-8712