

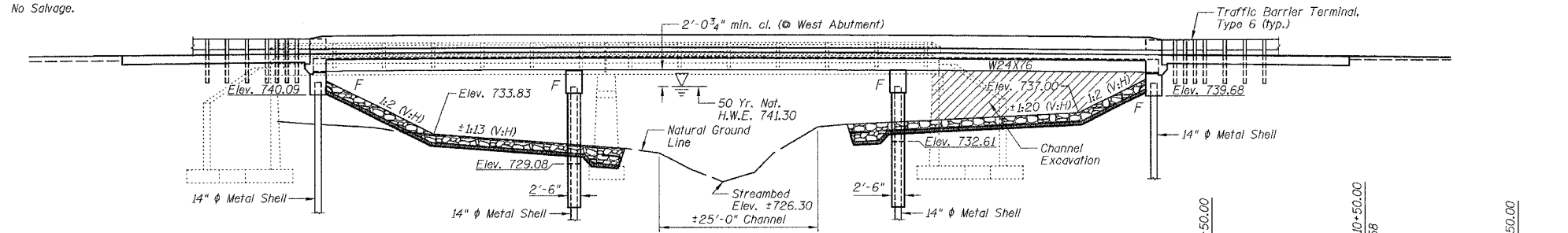
Benchmarks: "□" top of hub guard, Southwest corner of Structure, Elevation = 746.15 @ Sta. ±811+04/15.7' LT.

Existing Structure: SN 027-0006 was originally constructed in 1925 as a two span reinforced concrete thru girder bridge with closed concrete abutments and a solid shaft pier supported on untreated timber piles. In 1980, the substructure was widened and the superstructure was replaced with PPC deck beams. The back-to-back abutment dimension measures 105'-1 1/2" while the out-to-out width measures 32'-0". The structure is to be replaced using stage construction.

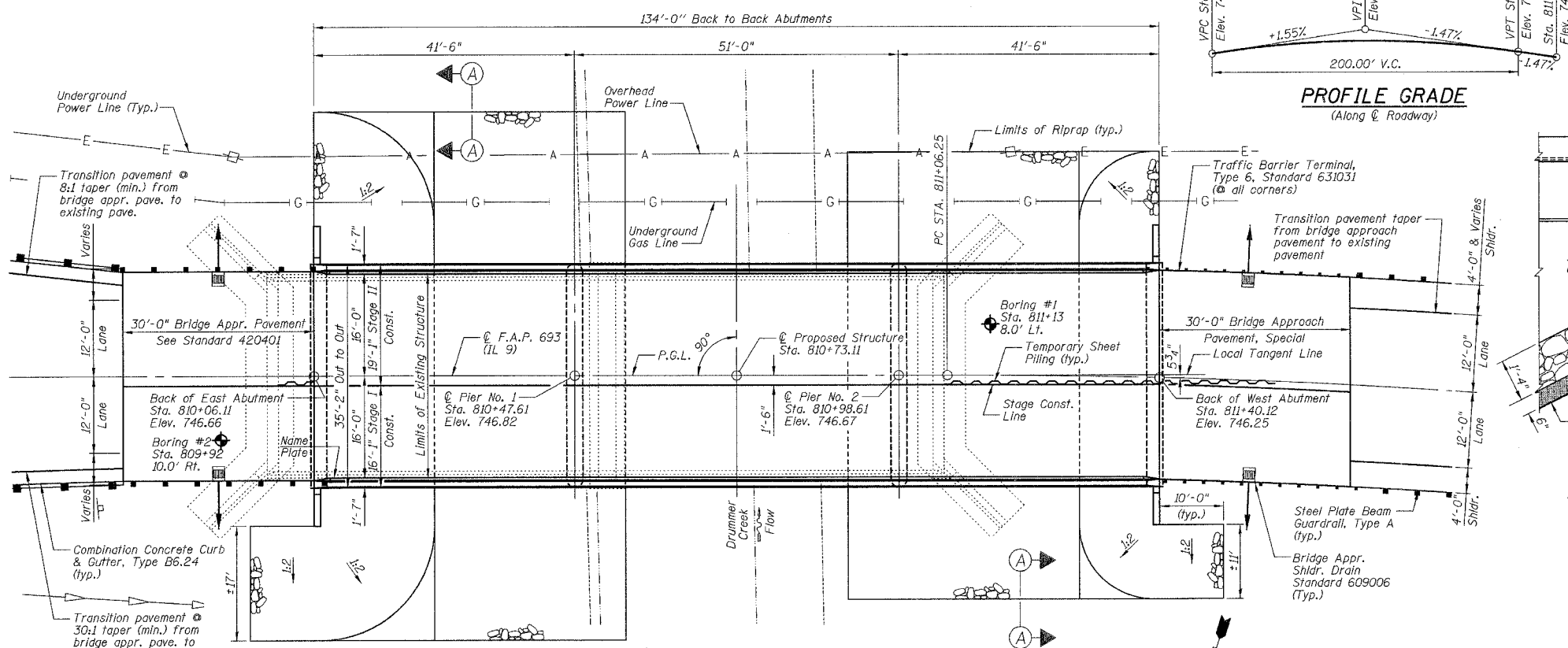
No Salvage.

POLICE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO.
FAP 693	19BR-1	FORD	50	14	20 SHEETS
FED. ROAD DIST. NO. 7	BLDG. NO.	FED. AID PROJECT			

Contract #66697



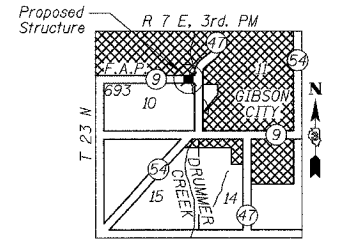
ELEVATION



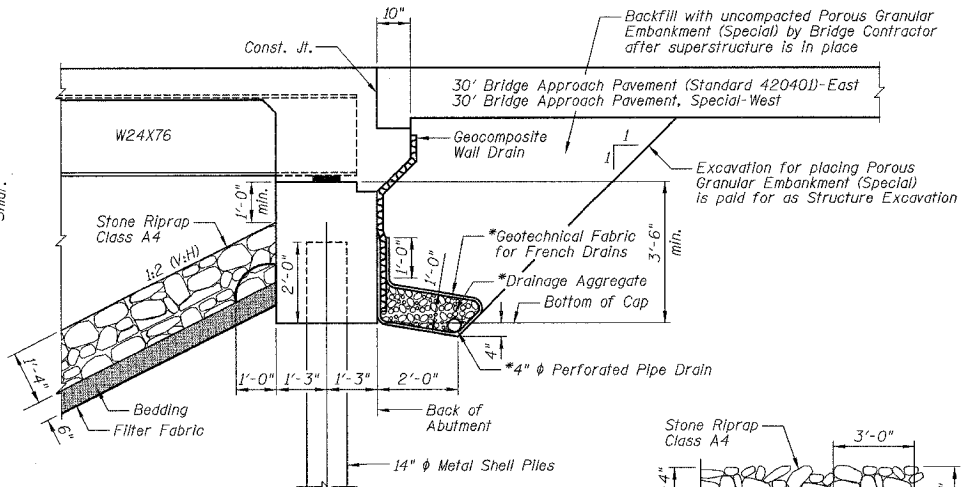
PLAN

STATION 810+73.11
BUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RT. 693 SEC. 19BR-1
LOADING HS20
STRUCTURE NO. 027-0096

NAME PLATE
See Std. 515001

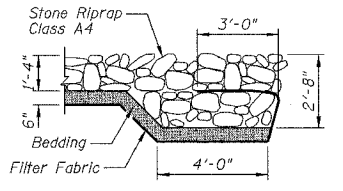


LOCATION SKETCH

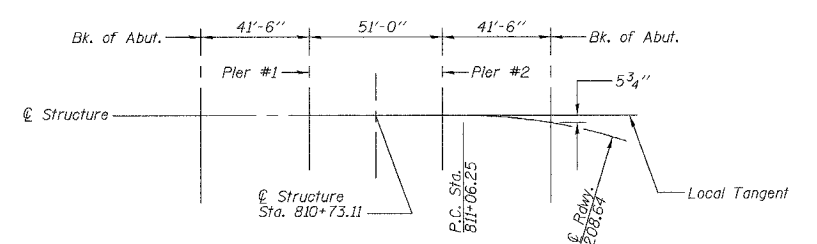


PIPE UNDERDRAIN AND RIPRAP DETAIL

*Included in the cost of Pipe Underdrains for Structures.
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)



SECTION A-A



OFFSET SKETCH

WATERWAY INFORMATION

Drainage Area = 19.92 Sq. Mi.		Exist./Prop. Low Grade Elev. 742.58 ft. @ Sta. 817+00	
Flood Yr.	Freq. Q	Opening Sq. Ft.	Nat. Head - Ft.
10	1310	636	739.2
50	2005	846	741.3
100	2298	926	742.1
200	2647	977	742.7

DESIGN SCOUR TABLE

Location	East Abutment	Pier No. 1	Pier No. 2	West Abutment
Design Scour Elevation	740.09	728.00	731.50	739.68

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi (Cast-In-Place)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (Structural Steel)
- M270 Grade 50W

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.045
Site Coefficient (S) = 1.0

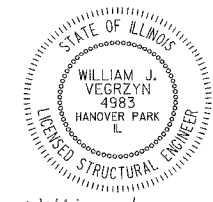
HORIZONTAL CURVE DATA

P.I. STA. = 812+87.00
Δ = 17°00'40" (RT)
D = 4°44'26"
R = 1208.64'
T = 180.75'
L = 358.84'
E = 13.44'
S.E. RUN = N.C.
P.C. STA. = 811+06.25
P.T. STA. = 814+65.09

NOTE:
See Roadway Plans for Curb & Gutter, Guardrail, Traffic Barrier Terminals, and Approach Shoulder Drains

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



William J. Vegryz
Expires 11-30-08



200 West Front Street
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
IL RTE 9 OVER DRUMMER CREEK
FAP RTE 693 - SECTION 19BR-1
FORD COUNTY
STATION 810+73.11
STRUCTURE NO. 027-0096

DATE: 8/7/2007

DRAWN BY LCM
CHECKED BY BLB