

Bench Mark: BM#4676-2; 21.25' LT. @ Station 242+93.20, Elev. = 667.685

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 1
F.A.P. 721	(113BR) BR	DEWITT	81	26	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

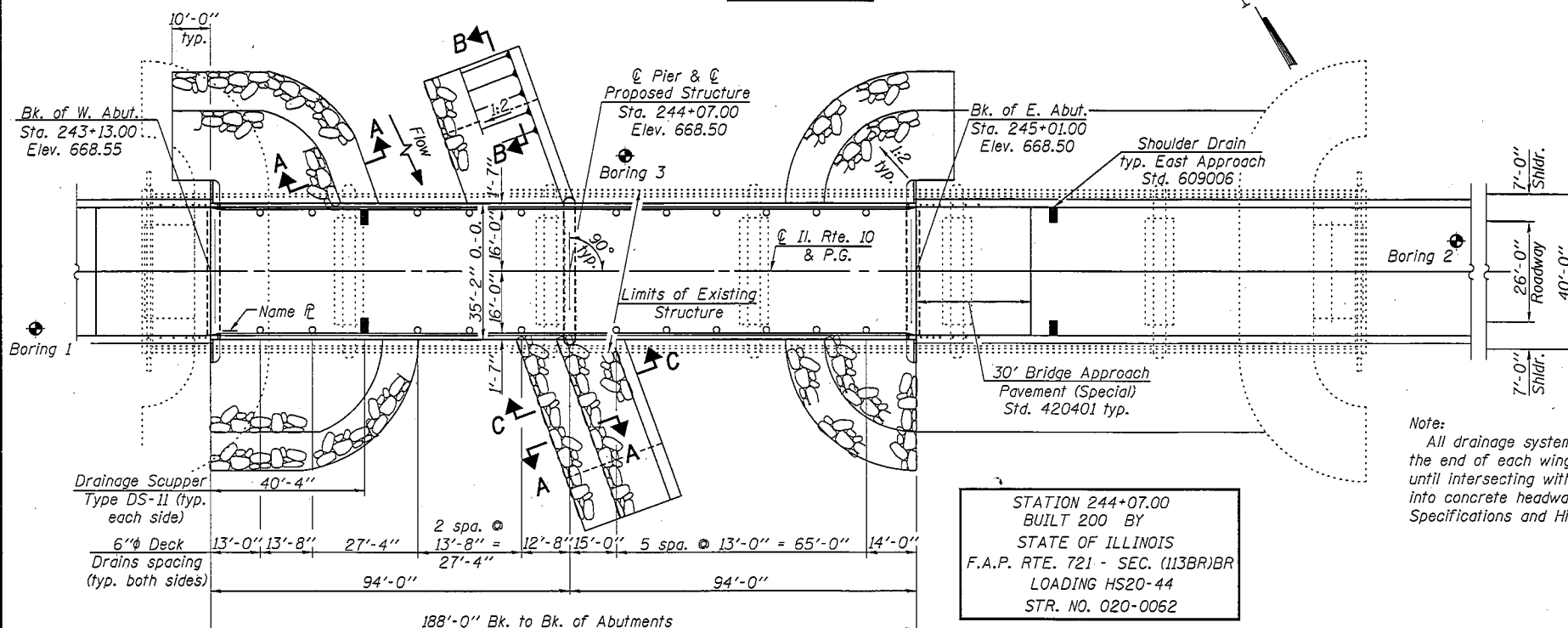
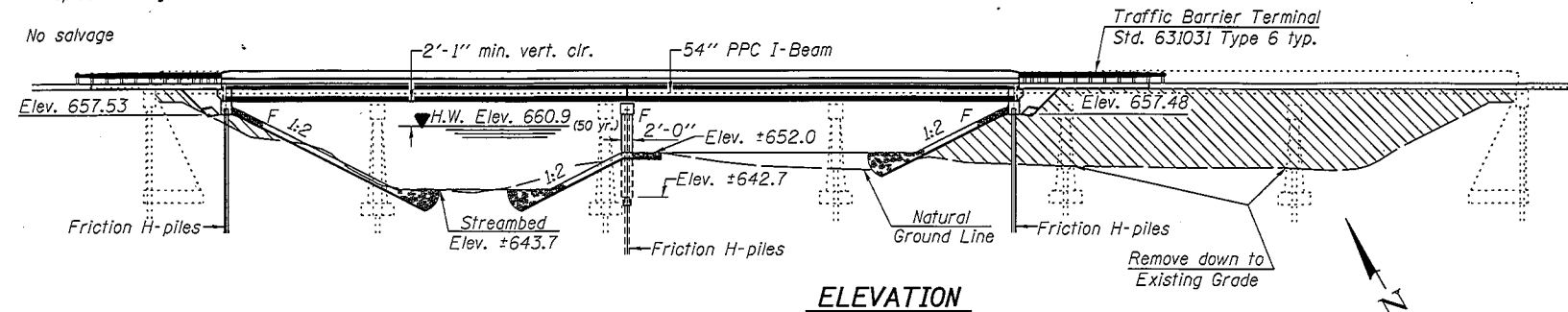
Contract #70232

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (II, Modified). See Special Provisions.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
Up to 1/4 inch will be ground off the bridge slab and bridge approach pavement.
Reinforcement bars designated (E) shall be epoxy coated.
The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

INDEX OF SHEETS

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17. Bar Splicers
18. Boring Logs

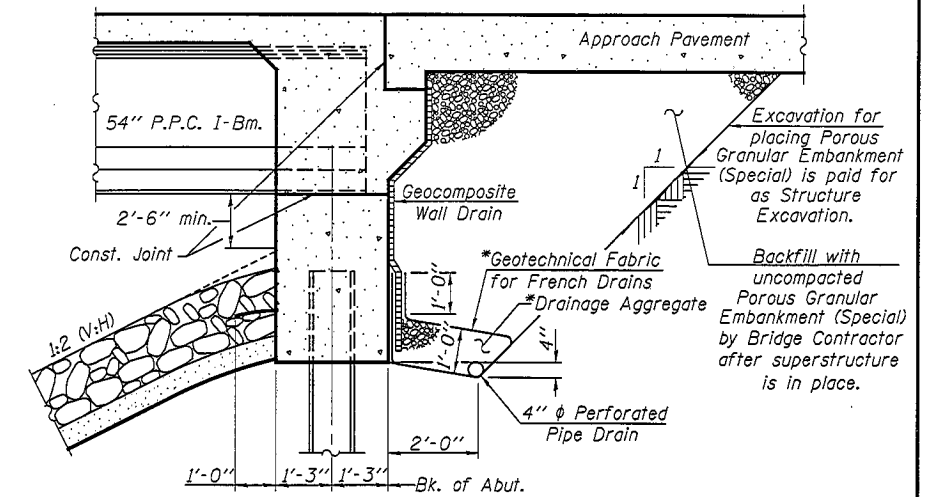


STATION 244+07.00
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RTE. 721 - SEC. (113BR)BR
LOADING HS20-44
STR. NO. 020-0062

NAME PLATE

See Std. 515001

Note:
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 THRU INTEGRAL ABUTMENT

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Concrete Superstructure	Cu. Yd.	242		242
Concrete Structures	Cu. Yd.		104	104
Structure Excavation	Cu. Yd.		282	282
Furnishing and Erecting Precast Prestressed Concrete I Beams, 54"	Foot	1119		1119
Reinforcement Bars, Epoxy Coated	Pound	50760	11690	62450
Test Pile Steel HP12x63	Each	3		3
Furnishing Steel Piles HP12x63	Foot	741		741
Driving Piles	Foot	741		741
Name Plates	Each			1
Porous Granular Embankment (Special)	Cu. Yd.		266	266
Stone Riprap, Class A5	Sq. Yd.		1475	1475
Filter Fabric	Sq. Yd.		1475	1475
Protective Coat	Sq. Yd.	826		826
Diamond Grinding (Bridge Section)	Sq. Yd.	809		809
Drainage Scuppers, DS-11	Each	2		2
Floor Drains	Each	22		22
Underwater Structure Excavation Protection-Location 1	Each			1
Geocomposite Wall Drain	Sq. Yd.		110	110
Pipe Underdrains for Structures 4"	Foot		163	163
Bar Splicers	Each	64		64
Bridge Deck Grooving	Sq. Yd.	627		627
Concrete Encasement	Cu. Yd.		7.0	7.0
Asbestos Bearing Pad Removal	Each			168

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

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS

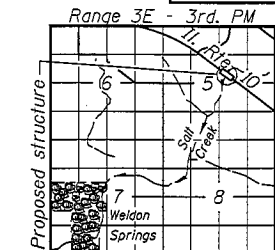
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_ci = 5,000$ psi
 $f'_s = 270,000$ psi (1/2" ϕ low lax. strands)
 $f'_si = 201,960$ psi (1/2" ϕ low lax. strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.6%
Site Coefficient (S) = 1.0

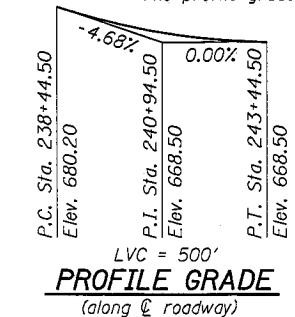


LOCATION SKETCH

GENERAL PLAN

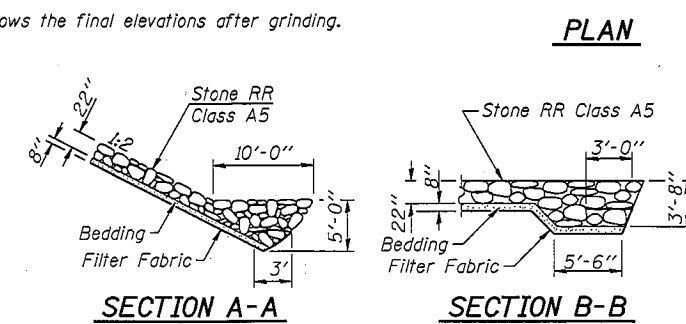
ILLINOIS ROUTE 10 OVER
SALT CREEK
F.A.P. ROUTE 721 - SECTION (113BR)BR
DEWITT COUNTY
STATION 244+07.00
STRUCTURE NO. 020-0062

The profile grade shows the final elevations after grinding.



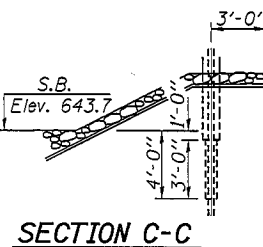
PROFILE GRADE

(along ϕ roadway)



SECTION A-A

SECTION B-B



SECTION C-C

WATERWAY INFORMATION

Exist. Low Grade Elev. 667.7 ft. @ Sta. 244+00
Prop. Low Grade Elev. 667.8 ft. @ Sta. 249+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	50	10385	2503	1812	660.9	0.3	0.8	661.2	661.7
Base	100	11816	2701	1917	661.6	0.4	1.0	662.0	662.6
Max. Calc.	500	15201	3104	2168	663.0	0.4	1.4	663.4	664.4

DESIGNED: [Signature]
CHECKED: [Signature]
DRAWN: R. Sommer
CHECKED: [Signature]

EXAMINED: [Signature] Sept. 7 2007
PASSED: [Signature]
ENGINEER OF BRIDGE DESIGN
STATE OF ILLINOIS
081-004625

EXPIRES 11-30-2008 10 Yr. Velocity through Exist. Bridge = 3.5 fps 10 Yr. Velocity through Prop. Bridge = 4.8 fps