

Benchmark: Chiseled "□" top of southeast wingwall of SN 101-0114. Elev. = 728.74

Existing Structure: SN 101-0114 to be removed. Originally built in 1928 as SBI Route 75 Section 115. In 1971, SBI 75, Section 115BR replaced and widened the original superstructure. Single span prestressed concrete box beam with closed abutments on timber piles. 38'-4 3/4" Bk. to Bk. Abutments.

One lane traffic to be maintained using stage construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAP 505	115 BR-1	WINNEBAGO	35	10
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

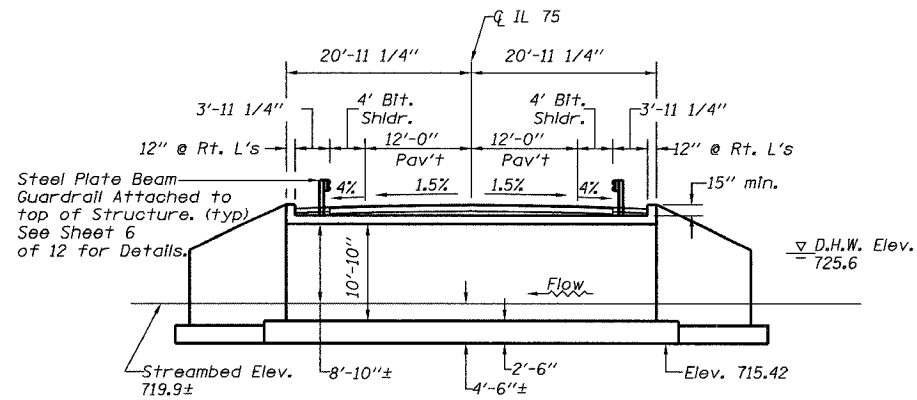
Contract #64940

WATERWAY INFORMATION

Drainage Area= 8.2 Sq. Mi. Low Grade Elev.= 730.3 (Exist./Prop.) @ Sta. 67+00

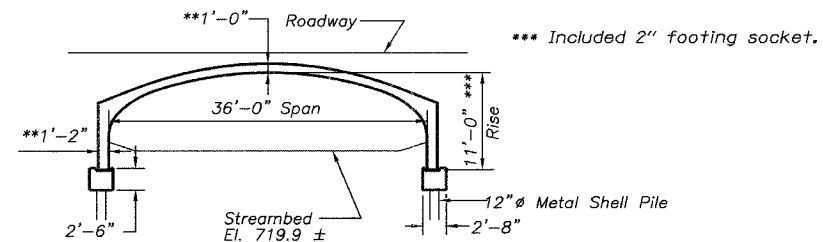
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater Elev.	
			Exlst.	Prop.		Exlst.	Prop.	Exlst.	Prop.
	10	918	143	178	725.1	0.8	0.7	725.9	725.8
Design	50	1371	159	193	725.6	1.4	1.2	727.0	726.8
Base	100	1556	162	196	725.7	1.7	1.5	727.4	727.2
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	1988	171	205	726.0	2.5	2.1	728.5	728.1

10-Year velocity through existing bridge= 6.4 Fps
10-Year velocity through prop. bridge= 5.2 Fps



PROPOSED LONGITUDINAL SECTION

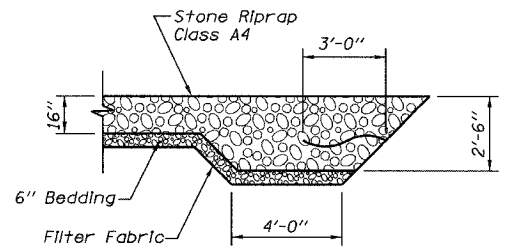
Looking East
(Dimensions are at Rt. L's to Roadway unless noted)



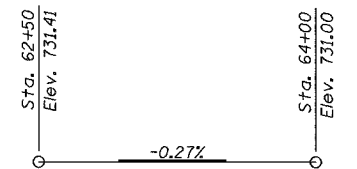
SECTION THRU STRUCTURE

(At Rt. L's to Structure)

** May vary per pre-caster's final design.

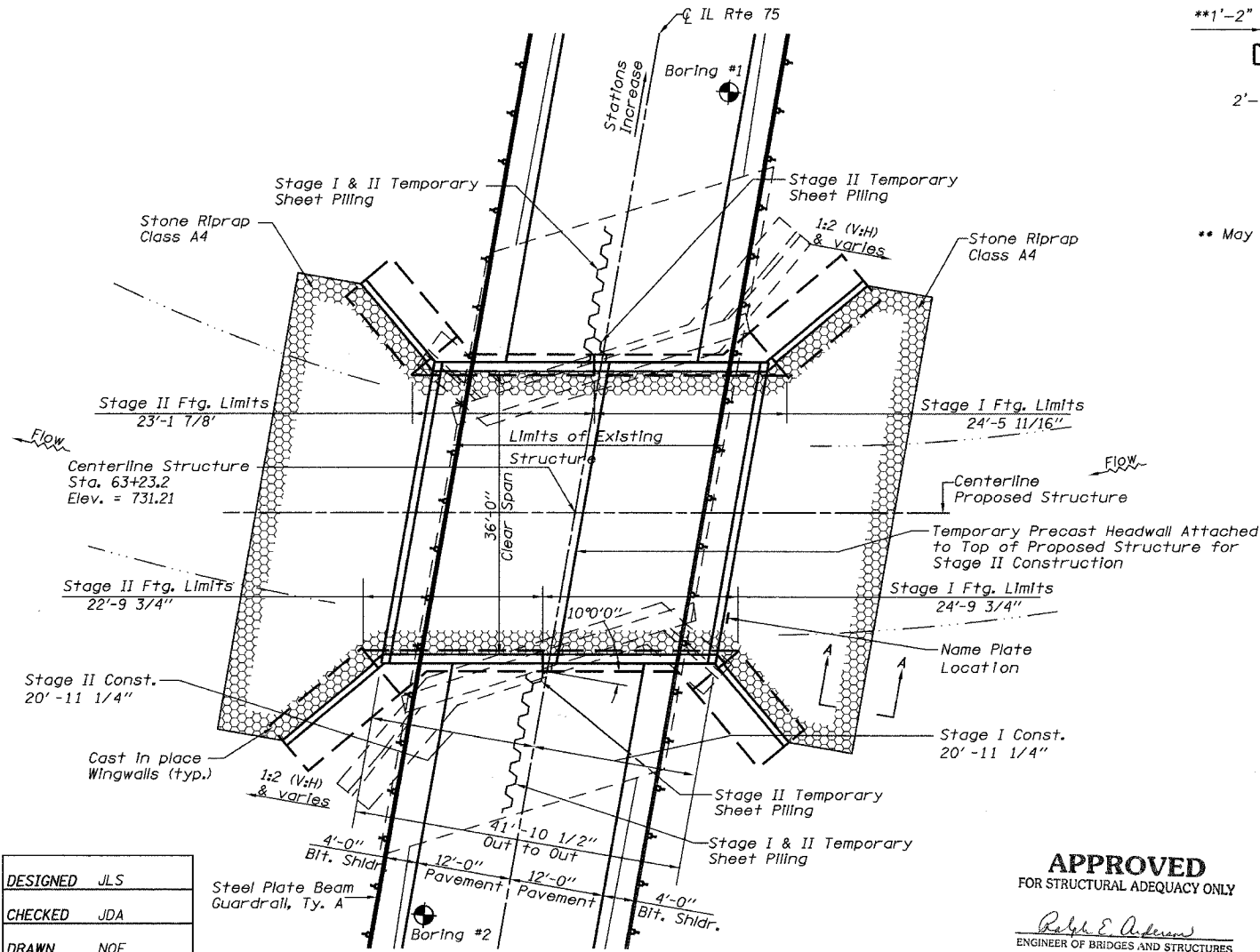


SECTION A-A



PROFILE GRADE

(Along Centerline Roadway)



PLAN

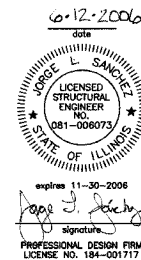
STATION 63+23.20
BUILT 200... BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC. 115BR-1
LOADING HS20
STR. NO. 101-0183

NAME PLATE DETAIL

See Std. 515001

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

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

DESIGN STRESSES

Field Units

f'c = 3,500 psi

fy = 60,000 psi (reinforcement)

Precast Units

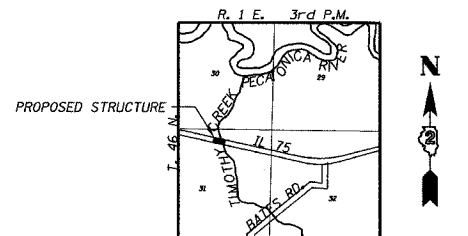
f'c = 5,000 psi

fy = 60,000 psi (reinforcement)

fy = 65,000 psi (welded wire fabric)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.032
Site Coefficient (S) = 1.2



LOCATION SKETCH

GENERAL PLAN
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

CHAMBLIN & ASSOCIATES
PERU ILLINOIS MORRIS

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS