

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	19
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				

BENCHMARKS

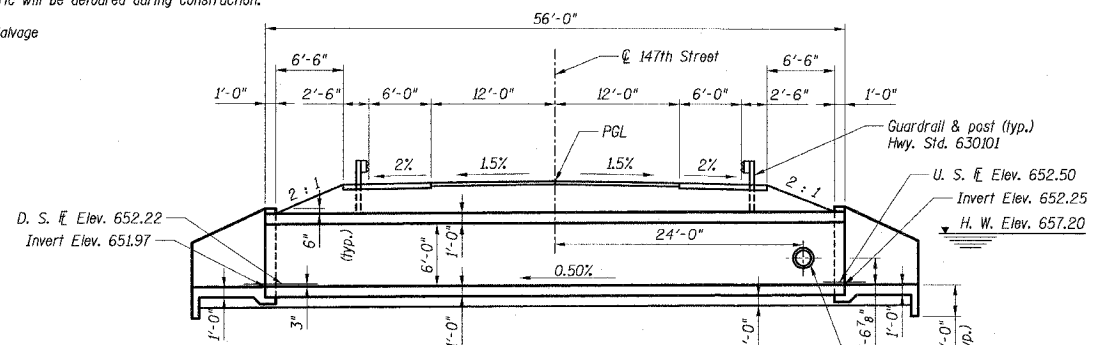
Chiseled square at east end of bridge north curb, Elevation 657.79

EXISTING STRUCTURE

S. N. 016-0571, built in 1922, is a single-span reinforced concrete slab bridge supported on concrete abutments with a length of 28'-0" back to back of abutments and a width of 24'-0" face to face of curbs.

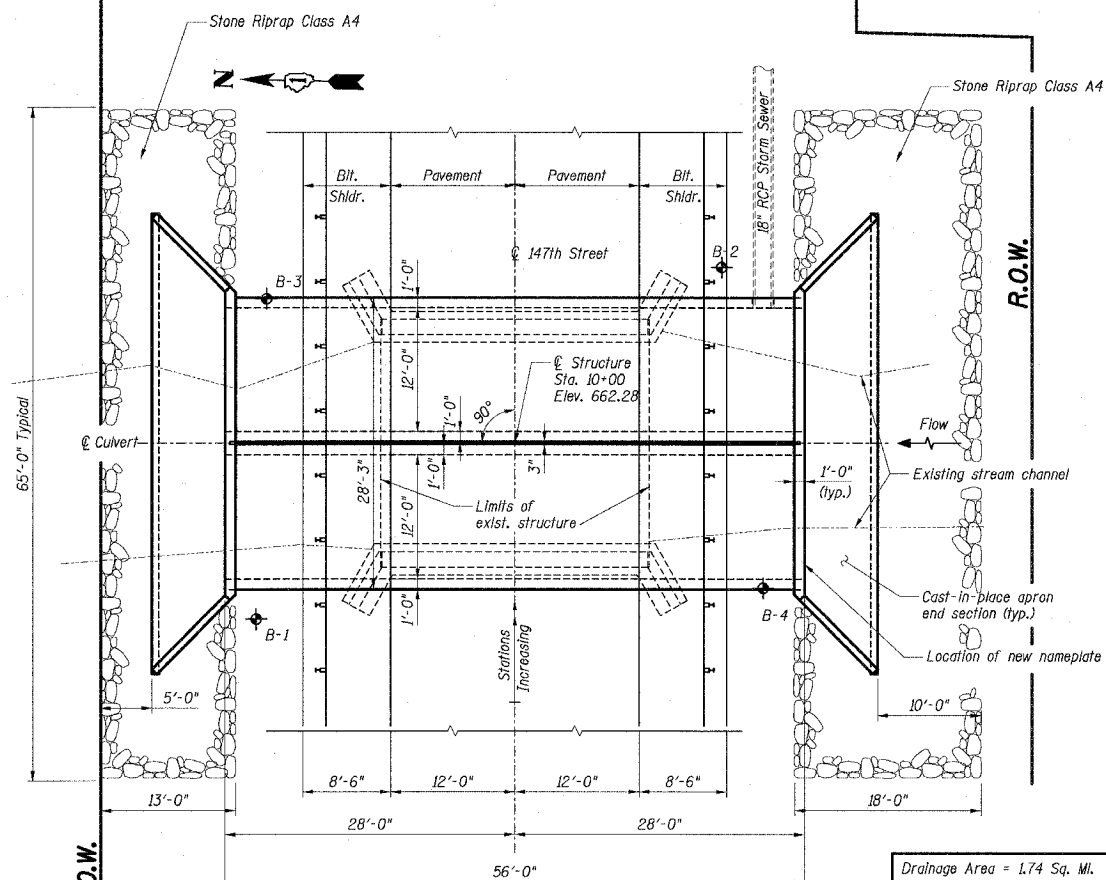
Traffic will be detoured during construction.

No Salvage



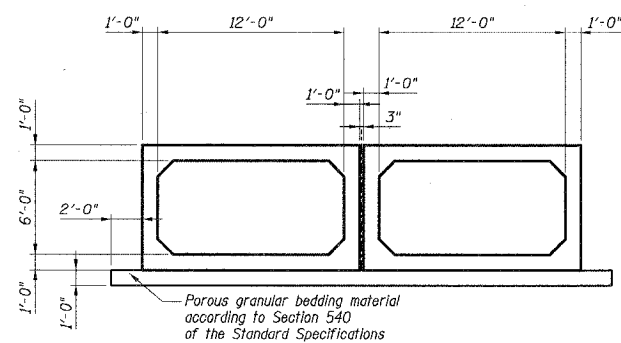
LONGITUDINAL SECTION

(Looking East)

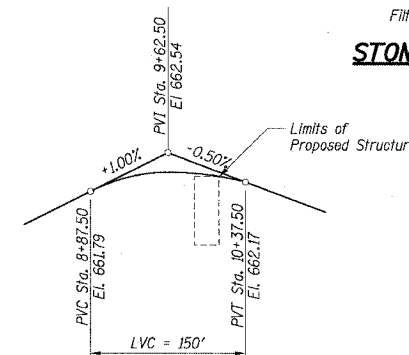


PLAN

Indicates Soil Boring location.

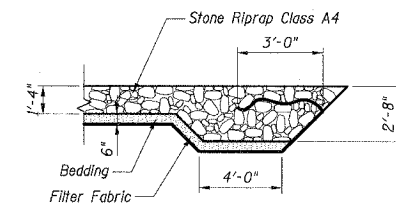


SECTION THRU BARREL (PRECAST)

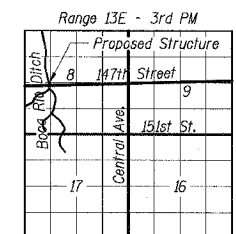


PROFILE GRADE

(along centerline of roadway)



STONE RIPRAP ANCHOR DETAIL



LOCATION SKETCH

DESIGN LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges" and AASHTO M259 - Precast Reinforced Concrete Box Sections

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi

f_y = 60,000 psi (reinforcement)

PRECAST UNITS

f'c = 5,000 psi (minimum)

f_y = 65,000 psi (welded wire fabric)

f_y = 60,000 psi (reinforcement bars)

INDEX OF SHEETS

- S-1 General Plan
- S-2 End Section Details
- S-3 Soil Boring Logs

TOTAL BILL OF MATERIAL

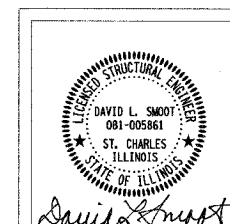
Item	Unit	Total
STONE RIPRAP, CLASS A4	50 YD	158.3
FILTER FABRIC	50 YD	158.3
REMOVAL OF EXISTING STRUCTURES	EACH	1
PRECAST CONCRETE BOX CULVERT 12' X 6'	FOOT	112
BOX CULVERT END SECTIONS	EACH	2

Notes:

1. Reinforcement bars shall conform to the requirements of Illinois Modified ASTM A706.
2. For cast-in-place concrete, all edges shall be chamfered 3/4".
3. For utility information, the Contractor shall contact J.U.L.I.E. at (800) 892-0123 before any excavation, grading or below-grade work.
4. All construction joints shall be bonded.
5. Excavation behind existing abutment walls shall be done before removing the existing superstructure.

STATION 10+00 (147th STREET)
BUILT 20 BY
STATE OF ILLINOIS
F.A.U. ROUTE 1602, SEC. 74 B-1
F.A. PROJECT
LOADING HS-20
STRUCTURE NO. 016-2846

NAME PLATE



By: David L. Smoot
Date: September 20, 2006
License Expires: 11/30/2006

ROBERT H. ANDERSON & ASSOC.

WATERWAY INFORMATION

Flood	Freq. Yr.	Q CFS	Opening - Sq. Ft.		Natural H. W. E.	Head - Ft.		Headwater Elev.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	278	67	101	656.7	0.3	0.0	657.0	656.7
Design	50	439	67	113	657.2	0.9	0.2	658.1	657.4
Base	100	502	67	115	657.3	1.2	0.3	658.5	657.6
Overtopping									
Max. Calc.	500	853	67	130	657.9	1.5	0.9	659.4	658.8

SHEET S-1



Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
147th STREET OVER BOCA RIO DITCH
F.A.U. ROUTE 1602, SECTION 74 B-1
COOK COUNTY
STRUCTURE NUMBER 016-2846

GENERAL PLAN

DRAWN BY: DLS

DATE: SEPTEMBER 2006

CHECKED BY: JLR

9/20/2006 H:\DOT\BRI\06\1-24062\DESIGN\GN\GN1_90F32-1-24062GP.DGN