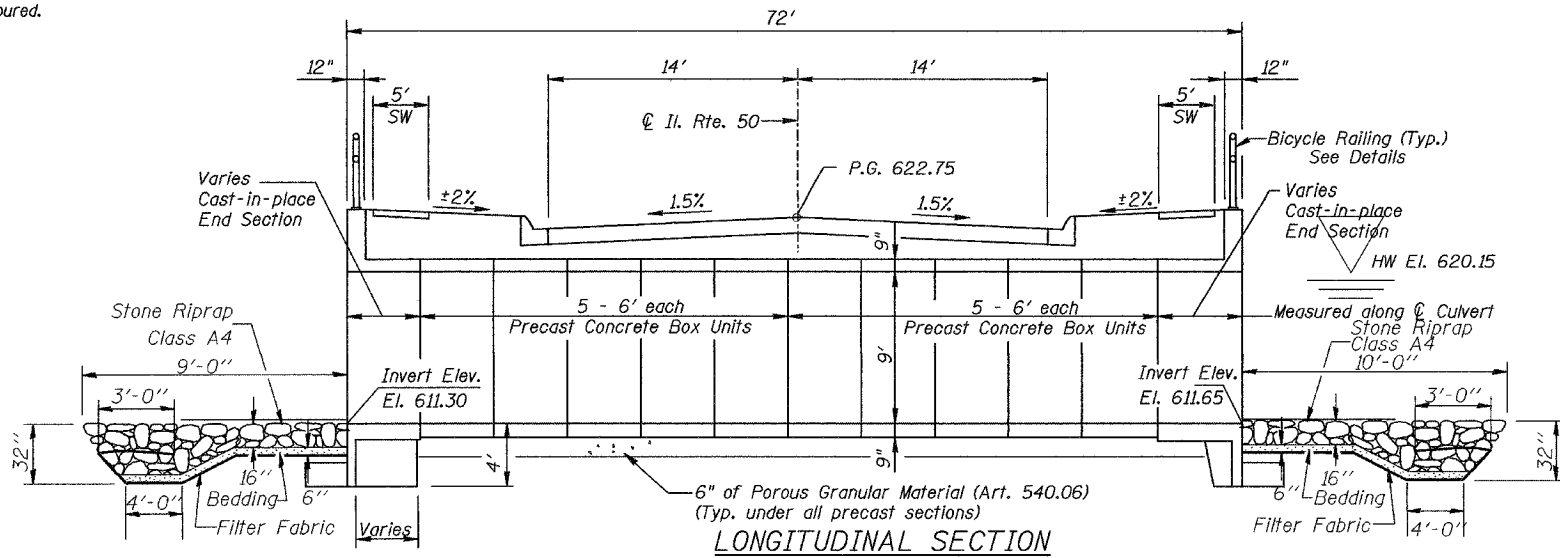


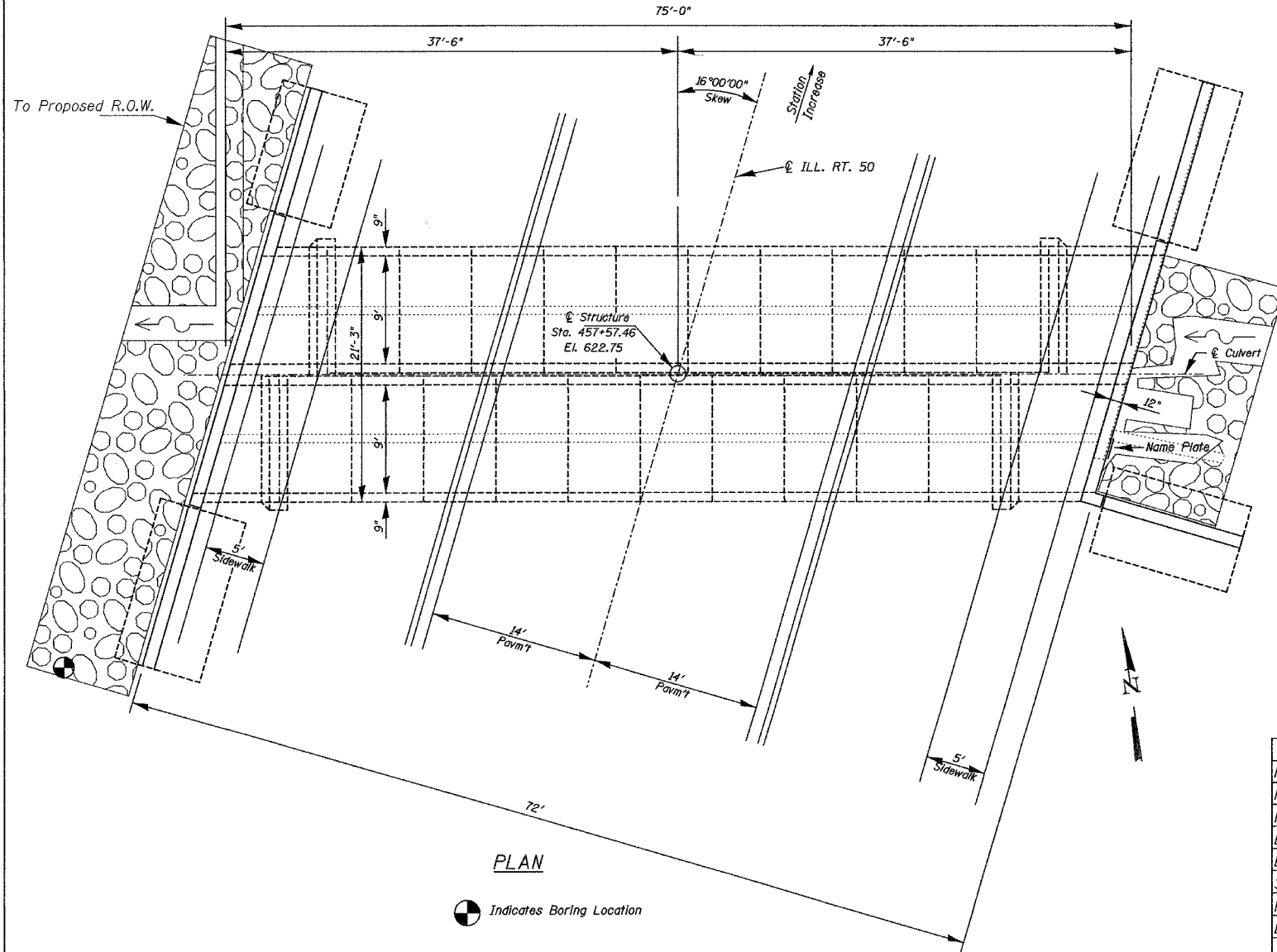
Bench Mark: Railroad Spike in Power Pole, Sta. 458+88.4 72.2'Lt, El. 627.54

Existing Structure: S.N. 046-C802 built around the mid-1930's as a single 10'x8' box culvert.
Traffic to be detoured.

No salvage

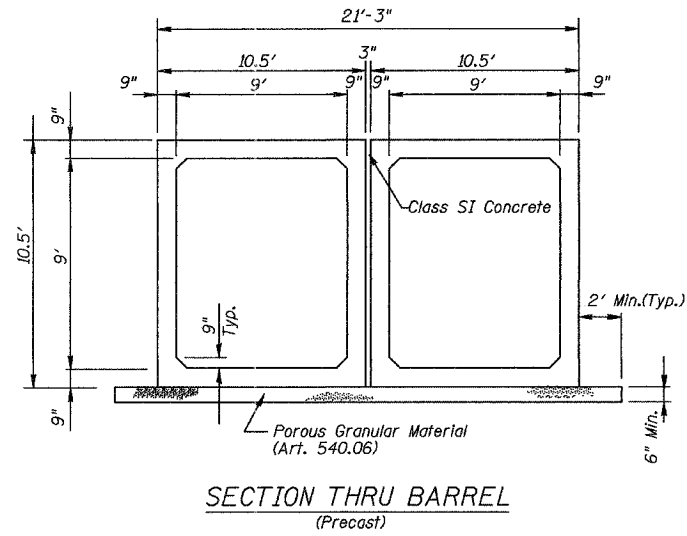


Note:
Dimensions are given at Right L's to \bar{C} of Roadway



PLAN

Indicates Boring Location



SECTION THRU BARREL
(Precast)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(139Z-III)	KANKAKEE	24	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT# 66131

STATION 457+57.46
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. 840A SEC. (139Z-III)
F.A. PROJECT
LOADING HS20
STR. NO. 046-2015
NAME PLATE
(See Standard 515001)

General Notes:

1. Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M273.
2. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322.
3. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

LOADING HS20

Allow 50 lbs/sq ft for future wearing surface

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES
FIELD UNITS

Cast-In-Place:
f'c = 3500 psi
fy = 60,000 psi (Reinf.)

Precast:
f'c = 5000 psi
fy = 65,000 psi (Reinf.)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

WATERWAY INFORMATION

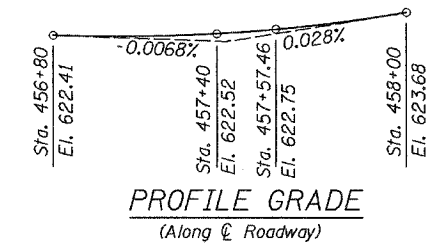
DRAINAGE AREA = 3.1 SQ.		EXIST. LOW GRADE EL. = 622.22 @ STA. 457+00				PROP. LOW GRADE EL. = 622.22 @ STA. 457+00			
FLOOD	FREQUENCY (YR.)	Q (CFS)	OPENING - SQ FT		NAT. H.W.E.	HEAD		HEADWATER EL.**	
			EXIST.*	PROP.*		EXIST.	PROP.	EXIST.	PROP.
DESIGN	10	279	80	162	617.10	1.65	0	618.75	616.92
BASE	50	763	80	162	620.15	4.35	1.31	624.50	621.46
OVERTOPPING (EXIST.)	100	838	80	162	620.52	4.56	1.63	625.15	622.15
OVERTOPPING (PROP.)	20	591	80	162	619.20	3.74		622.22***	
	100	850		162	620.58		1.70		622.22***

- * GROSS AREA OPENING
- ** TAKEN AT THE UPSTREAM FACE OF STRUCTURE, WHICH HAS THE HIGHEST CREATED HEAD
- *** OVERTOPPING ELEVATION

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
REMOVAL OF EXISTING STRUCTURES	EACH	1
NAME PLATES	EACH	1
PRECAST CONCRETE BOX CULVERT 9'X9' (M273)	FOOT	120
BOX CULVERT END SECTION, CULVERT NO. 1	EACH	1
BOX CULVERT END SECTION, SPECIAL, CULVERT NO. 1	EACH	1
STONE RIPRAP, CLASS 4	SQ YD	83
FILTER FABRIC FOR USE WITH RIPRAP	SQ YD	83
BICYCLE RAILING	FOOT	102

REVISIONS	
NAME	DATE
BDD	9/20/04
BDD	1/31/05



PROFILE GRADE
(Along \bar{C} Roadway)

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
F.A.P. ROUTE 840A (IL. ROUTE 50) OVER DRAINAGE DITCH
KANKAKEE COUNTY
SECTION (139Z-III)

STA. 457+57.46 STRUCTURE NO. 046-2015

SCALE: NONE DRAWN BY
DATE CHECKED BY