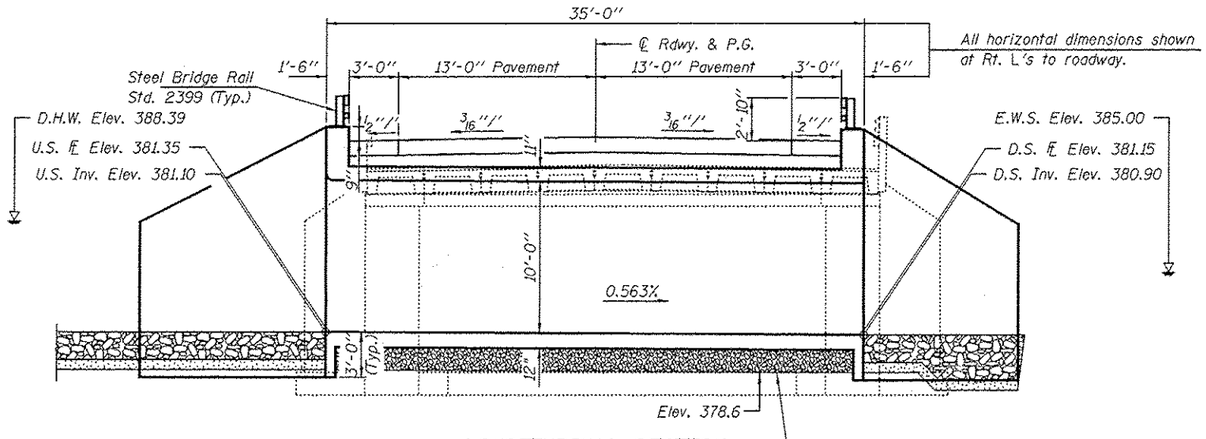
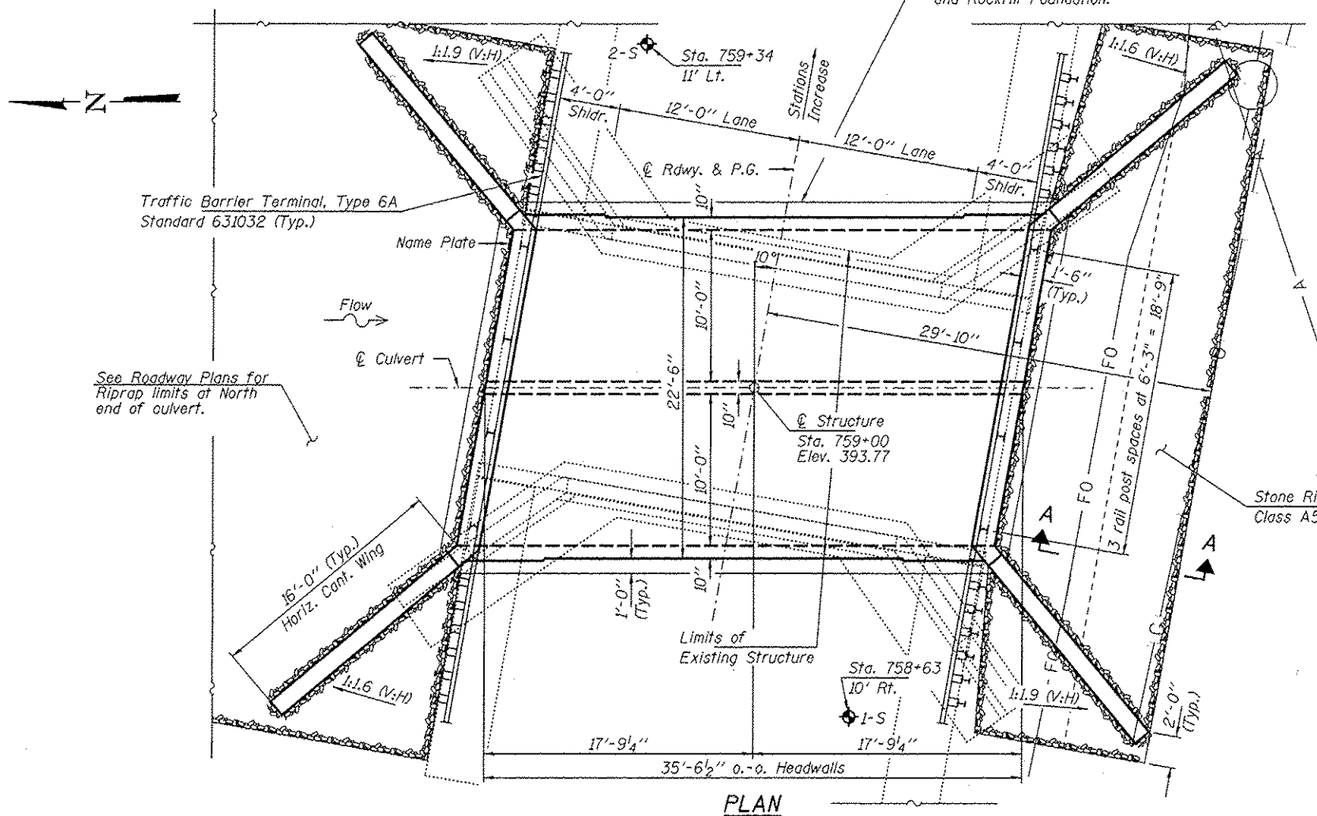
BENCHMARK: RR spike in power pole 32' Lt., Sta. 760+47, Elev. 393.44.

EXISTING STRUCTURE: SN 083-0049 was originally built in 1922 as SBI Route 13, Section 8B. It was reconstructed in 1970 as SBI Route 13, Section 6B-(DR,DR-1,DR-2); 7B-(DR,DR-1); 8(BR,B-DR). The bridge has a one span precast concrete nelson beam superstructure with bituminous wearing surface on closed RC abutments. It is 18'-0" bk.-bk. and 34'-3" o.-o. deck. The bridge will be removed and replaced using road closure. Traffic will be detoured during construction.

Salvage: None




LONGITUDINAL SECTION




PLAN

## INDEX OF SHEETS


1. General Plan
2. General Data
3. - 4. Culvert Details
5. Steel Railing, Type 2399
6. Boring Logs


## DESIGN SPECIFICATIONS

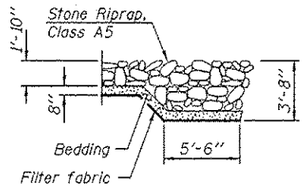
2012 AASHTO LRFD Bridge Design Specifications

## LOADING HL-93

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

## DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)




SECTION A-A

STATION 759+00
BUILT 20 BY
STATE OF ILLINOIS
F.A.S. RT. 899 SEC. 8B-1
LOADING HL-93
STRUCTURE NO. 083-2022

NAME PLATE
See Std. 515001

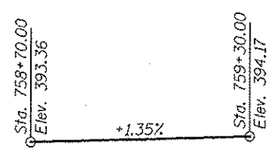
## WATERWAY INFORMATION

Drainage Area = 0.91 Sq. Mi. Proposed Low Grade Elev. 391.6 @ Sta. 756+00

| Flood | Freq. Yr. | Q C.F.S. | Opening Sq. Ft. Exist. | Opening Sq. Ft. Prop. | Natural H.W.E. | Head - Ft. Exist. | Head - Ft. Prop. | Headwater El. Exist. | Headwater El. Prop. |
|---|---|---|---|---|---|---|---|---|---|
| | 10 | 543 | 120 | 140 | 387.98 | 0.59 | 0.20 | 388.57 | 388.18 |
| Design | 50 | 908 | 120 | 150 | 388.39 | 1.41 | 0.59 | 389.80 | 388.98 |
| Base | 100 | 1070 | 130 | 150 | 388.54 | 1.86 | 0.83 | 390.40 | 389.37 |
| Max. Calc. | 500 | 1510 | 130 | 150 | 388.60 | 3.44 | 1.62 | 392.04 | 390.22 |

## DESIGN SCOUR ELEVATION TABLE

| Design Scour Elevation (ft.) | Upstream | Downstream |
|---|---|---|
| | 378.10 | 377.90 |

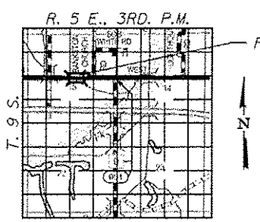



PROFILE GRADE
(along ℄ roadway)

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

LICENSED STRUCTURAL ENGINEER
MARY COOMBE BLOXDORF
4859
SPRINGFIELD
STATE OF ILLINOIS

ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/14
DATE: 01/22/14




LOCATION SKETCH

# GENERAL PLAN
# OLD IL ROUTE 13
# OVER UNNAMED STREAM
# FAS ROUTE 899 - SECTION 8B-1
# SALINE COUNTY
# STATION 759+00
# STRUCTURE NUMBER 083-2022

FILE NAME = c:\BSD\22-78268-02L-GPE.dgn
DESIGN FILE
PROJECT NO. 88952-24

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-003703

| | | | |
|---|---|---|---|
| USER NAME = _MML_ | DESIGNED - CME | REVISED - | |
| | CHECKED - MCB | REVISED - | |
| PLOT SCALE = 2.0000 ' / IN. | DRAWN - MML | REVISED - | |
| PLOT DATE = 1/22/2014 | CHECKED - MCB | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 6 SHEETS

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 899 | 8B-1 | SALINE | 33 | 18 |
| | | CONTRACT NO. 78268 | | |
| | | ILLINOIS FED. AID PROJECT | | |