Bench Mark: Chiseled "□" on S.W. parapet of E.B.L. I-74 bridge over U.S. Route 150 (S.N. 090-0018). Elevation 749.62.

Existing Structures: S.N. 090-0017 (WB) and S.N. 090-0018 (EB). Built in 1961 as F.A.I. Route 74 over U.S. 150 & I.T.P.R., Section 90-14-HVB. Structures consist of dual 5 span WF superstructures, continuous from the West Abutment to Pier 4 and simple between Pier 4 and East Abutment. Substructures are reinforced concrete frame piers on piles and pile bent abutments. The existing total bridge lengths are 312'-2¼" (WB) and 313'-1¾" (EB) back to back of abutments measured along the profile grade lines. The superstructure widths are 36'-0" out-to-out measured radially. The Contractor shall remove and replace these bridges with a two-span steel plate girder structure under stage construction. One lane in each direction on U.S. 150 and Bike Path shall be maintained during construction. I-74 traffic to be maintained with two lanes in each direction utilizing crossovers. Jefferson Street shall be detoured during construction.

No salvage.

**APPROVED**
For Structural Adequacy Only
Engineer of Bridges & Structures

STATION 569+13.88
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. 74
SEC. 90-[14P;(14HB-4,14,14HVB)BR]
LOADING HL-93
STRUCTURE NO. 090-0169

**NAME PLATE**
(See Std. 515001)

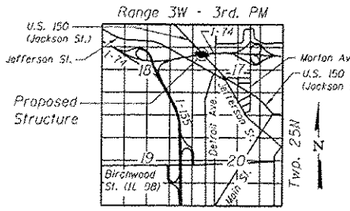
## LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

## DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

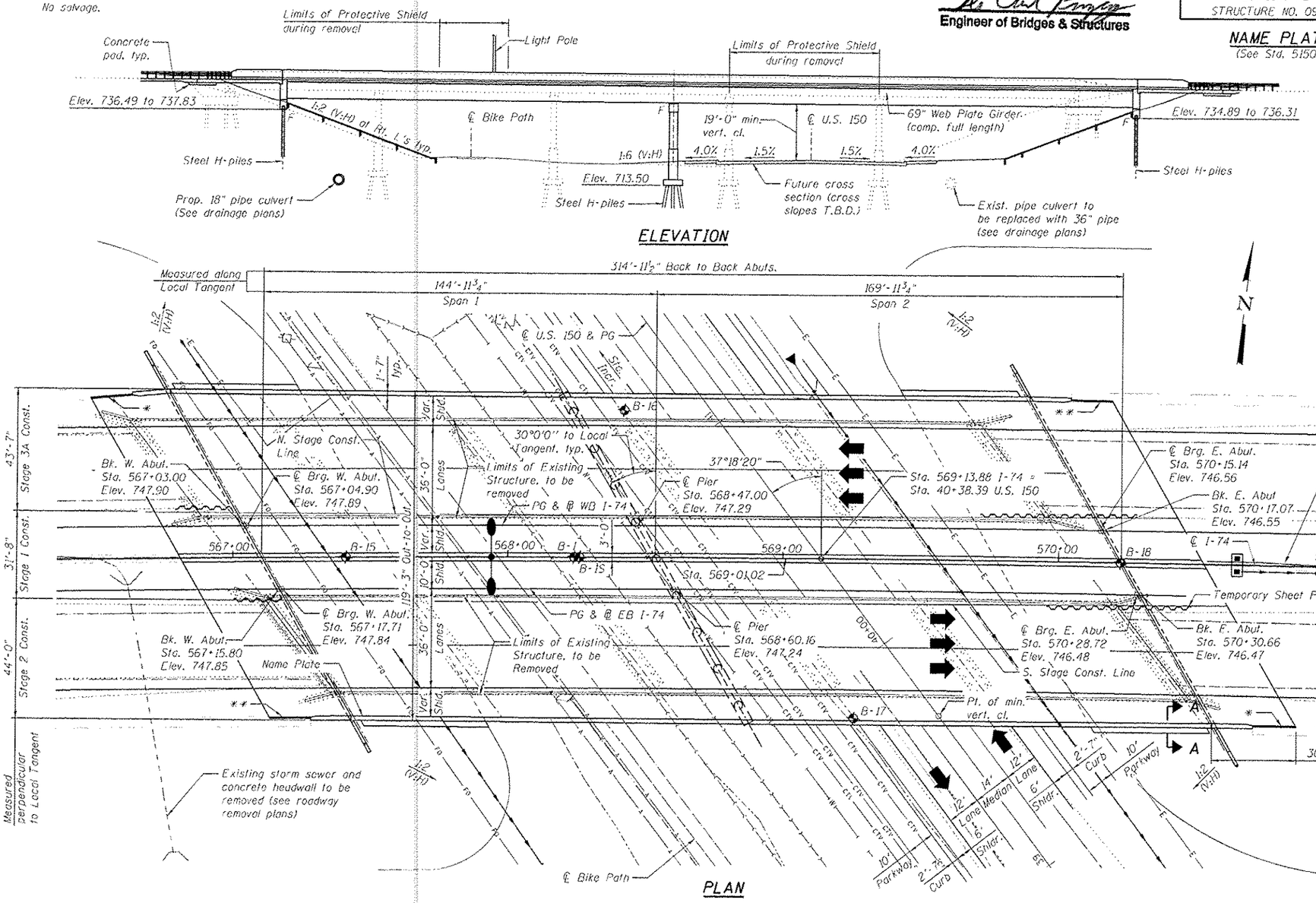
## DESIGN STRESSES
FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

## SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. ($S_{D1}$) = 0.115g
Design Spectral Acceleration at 0.2 sec. ($S_{DS}$) = 0.183g
Soil Site Class = D




## LOCATION SKETCH




B-15 Indicates Soil Boring Location and Number

**NOTE:**
All existing utilities that interfere with proposed work shall be relocated.

MARK R. BENDIK
081-006516
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

EXPIRATION DATE 11-30-2012
DATE: 8/17/12

# GENERAL PLAN AND ELEVATION
# I-74 OVER U.S. 150 (JACKSON ST.)
# F.A.I. RTE. 74
# SEC. 90-[14R;(14HB-4,14,14HVB)BR]
# TAZEWELL COUNTY
# STATION 569+13.88
# STRUCTURE NO. 090-0169


benesch engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10056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|---|---|---|---|
| FILE NAME = 0900169_68620_01_gpe.dgn | USER NAME = ebecker | DESIGNED - MFB/DTS | REVISED - |
| | | CHECKED - MRB/AAY | REVISED - |
| | PLOT SCALE = | DRAWN - PRT | REVISED - |
| | PLOT DATE = 8/17/2012 | CHECKED - MRB | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION**
**STRUCTURE NO. 090-0169**
SHEET NO. SC1 OF SC63 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 74 | 90-[14R;(14HB-4,14,14HVB)BR] | TAZEWELL | 2433 | 1977 |
| | | CONTRACT NO. 68620 | | |
| | ILLINOIS FED. AID PROJECT | | | |

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