# APPROVED

APR 09 2001

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| F.A.I. 74 | (48-26HVB)BY | KNOX | | |
| FED. ROAD DIST. NO. | | ILLINOIS | PROJECT | |

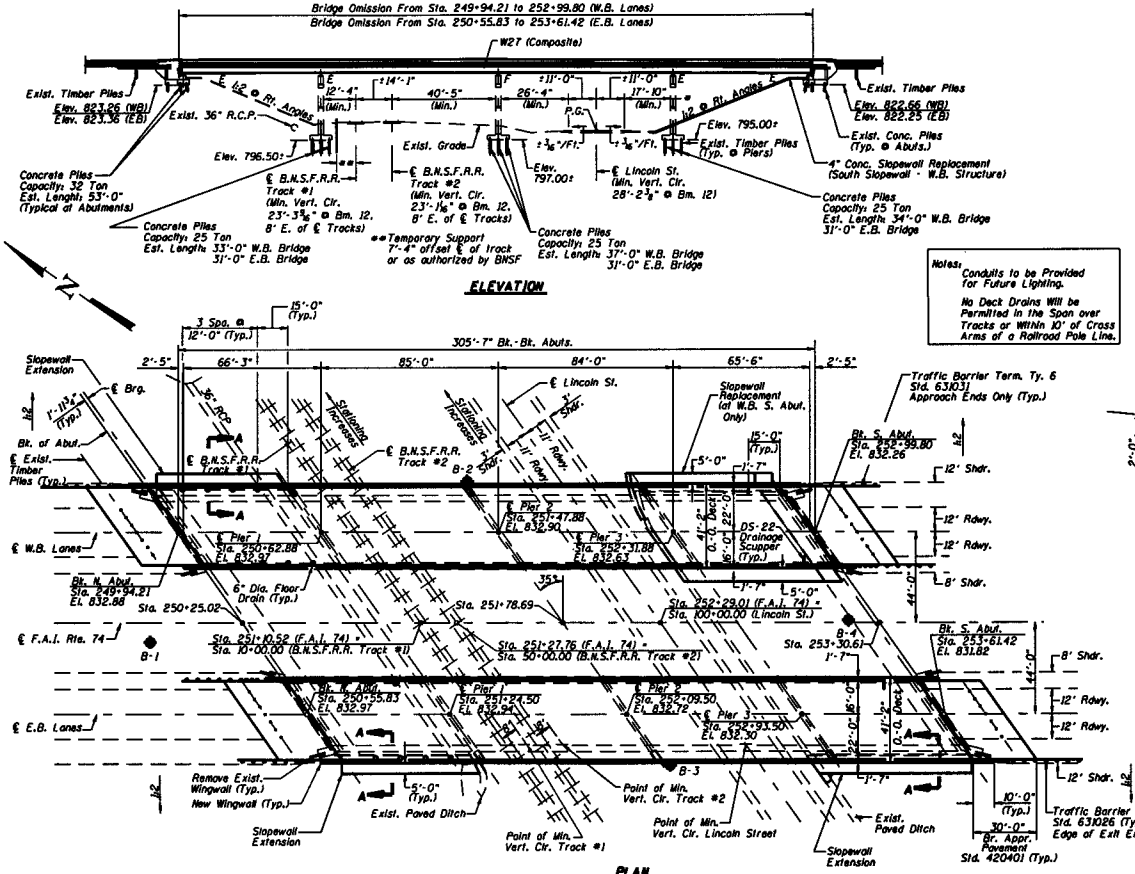
**BENCHMARKS:**

TBM #12:
Brass Disk in Median
Sta. 245+41.88
Elev. = 823.83

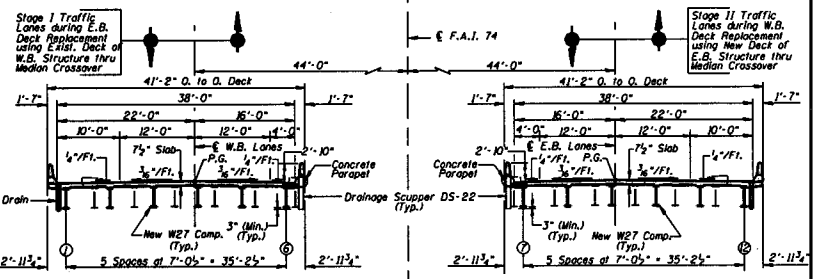
**EXISTING STRUCTURES:**

Existing Str. No. 048-0005 & 048-0006
Built in 1965 as F.A.I. 74, Sec. 48-26HVB
Four Span 36 WF 170 Beams W/ Conc.
Deck and Safety Walks W/ Alum. Handrail on Conc. Parapets
Conc. Pile Bent Abutments and Multiple Column Conc. Piers
Length = 305'-7" Bk.-Bk. Abuts. Width = 36'-0" O. to O. Deck
Superstructure, Abutment Backwalls & Wingwalls to be Removed and Replaced (No Salvage) Abutments and Piers to be Widened.
Traffic Control shall be Maintained during the Deck & Backwall Replacement, by Median Crossovers.

PREPARATION OF DETAILED PLAN

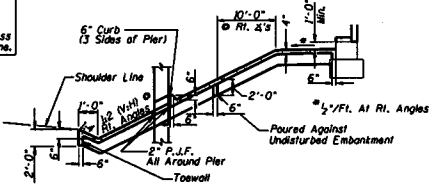


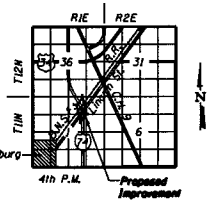

Notes:
Conduits to be Provided for Future Lighting.
No Deck Drains Will be Permitted in the Span over Tracks or Within 10' of Cross Arms of a Railroad Pole Line.



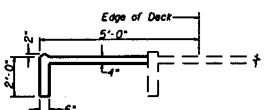

**DESIGN SPECIFICATIONS**
1996 AASHTO W/ 1997, 1998 & 1999 Interims
**LOADING HS20-44/ALTERNATE MILITARY**
Allow 50 p.s.f. for future wearing surface.

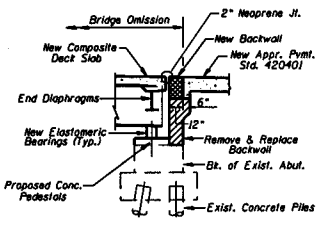
**DESIGN STRESSES**
New Construction:
f'c = 3500 p.s.i.
fy = 60,000 p.s.i. (Reinf.)
fy = 50,000 p.s.i. (Structural)
Existing Construction:
fc = 1,000 p.s.i. (W/ Earth Pressure)
fc = 1,400 p.s.i. (W/O Earth Pressure)
fs = 20,000 p.s.i. (Reinf.)
v = 75 p.s.i. (Shear in Pier Footings)
n = 10



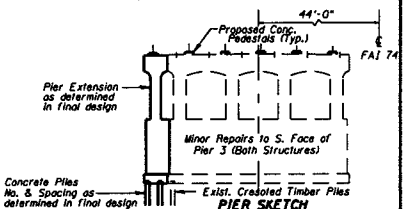



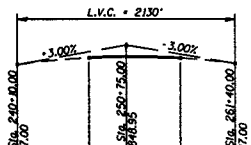

**HIGHWAY CLASSIFICATION**
F.A.I. Rte. 74:
ADT: 6700 (1993) 9000 (2013) (Ea. Dir.)
Functional Class: Interstate F.A.I.
Design Speed: 65 mph
Posted Speed: 65 mph
Lincoln St.:
ADT: 1750 (1992) 1770 (2014)
Functional Class: Minor Arterial (Urban)
B.N.S.F. Railroad:
6 Passenger Trains per Day @ 79 MPH
32 Freight Trains per Day @ 60 MPH

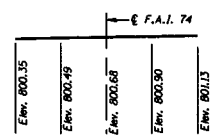


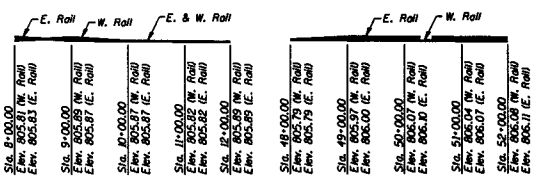




**SEISMIC DATA**
Seismic Performance Category (S.P.C.) = A
Bedrock Acceleration Coefficient (A) = 0.038 g
Site Coefficient (S) = 1.2




# GENERAL PLAN AND ELEVATION

| Date | 1-31-01 | Designed | GAC |
|---|---|---|---|
| Revisions | | Drawn | SRS |
| -DS-12 to DS-22 | | Checked | KWB |
| -Added Vert. CL | | Approved | KWB |
| -Removed Pier Ext. Dimensions | | | |

F.A.I. ROUTE 74 OVER
LINCOLN ST. AND B.N.S.F.R.R.
F.A.I. RTE. 74 SECTION (48-26HVB)BY
KNOX COUNTY
STA. 251+78.69
STRUCTURES NO. 048-0005 (WB) & 048-0006 (EB)

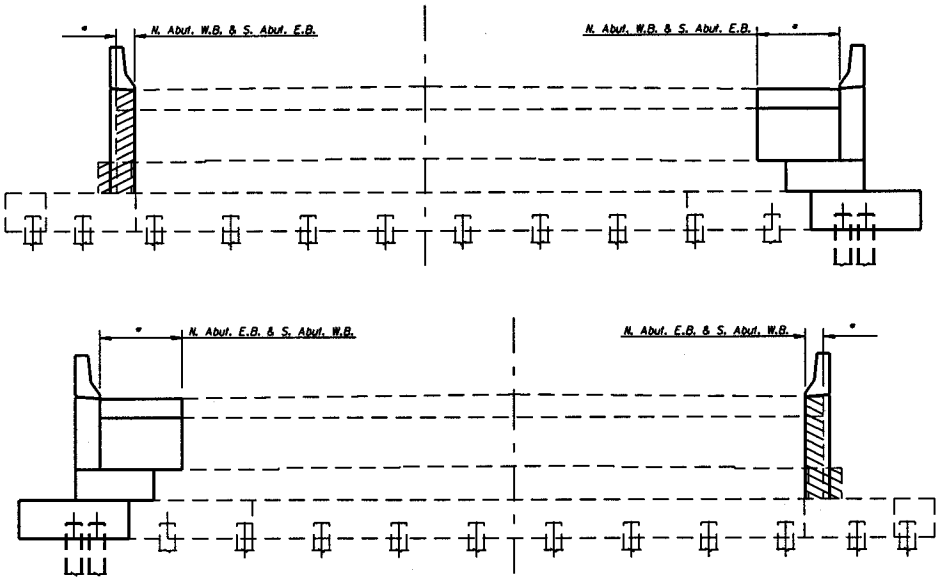
Exhibit A

I

WVP Job No. 210000116I.01

...\Widened Struct\tsl.dgn 04/05/01 01:32:14 PM

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| F.A.I. 74 | (48-26HVB)BY | KNOX | | |
| FED. ROAD DIST. NO. | | ILLINOIS | PROJECT | |




**ELEVATION - ABUTMENTS**
(E.B. & W.B. Structures)

* - As determined in final design

# GENERAL ABUTMENT

| | | | |
|---|---|---|---|
| Date 1-31-01 | Designed GAC | F.A.I. ROUTE 74 OVER<br>LINCOLN ST. AND B.N.S.F.R.R.<br>F.A.I. RTE. 74 SECTION (48-26HVB)BY<br>KNOX COUNTY<br>STA. 251+78.69<br>STRUCTURES NO. 48-0005 (WB) & 48-0006 (EB) | Exhibit A |
| Revisions | Drawn GAC | | 2 |
| *Removed Abut. Ext. Dimensions | Checked KWB | | |
| | Approved KWB | | WVP Job No. 210000#61.01 |

\pier&abut GAC.dgn 04/05/01 01:40:57 PM