

Bench Mark: Fnd. 60d spike in 1st. power pole N. of U.S. 30, W. side of Dakin Road Sta. 51+36.63  
79.1' L.T., Elev. 588.745.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

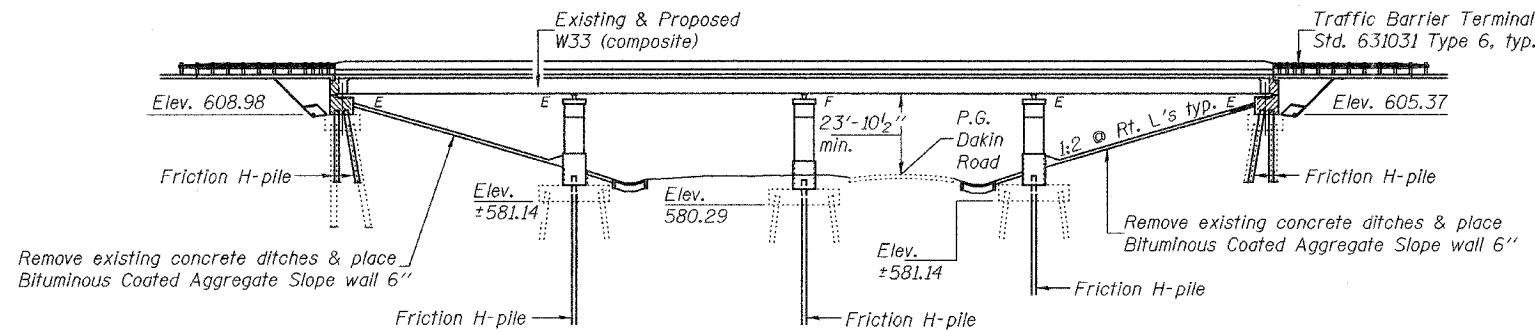
|                       |         |           |              |                   |
|-----------------------|---------|-----------|--------------|-------------------|
| ROUTE NO.             | SECTION | COUNTY    | TOTAL SHEETS | SHEET NO.         |
| F.A.P. 309            | 7HBR-1  | WHITESIDE | 146          | 38                |
| FED. ROAD DIST. NO. 7 |         | ILLINOIS  |              | FED. AID PROJECT- |

SHEET NO. 1  
23 SHEETS

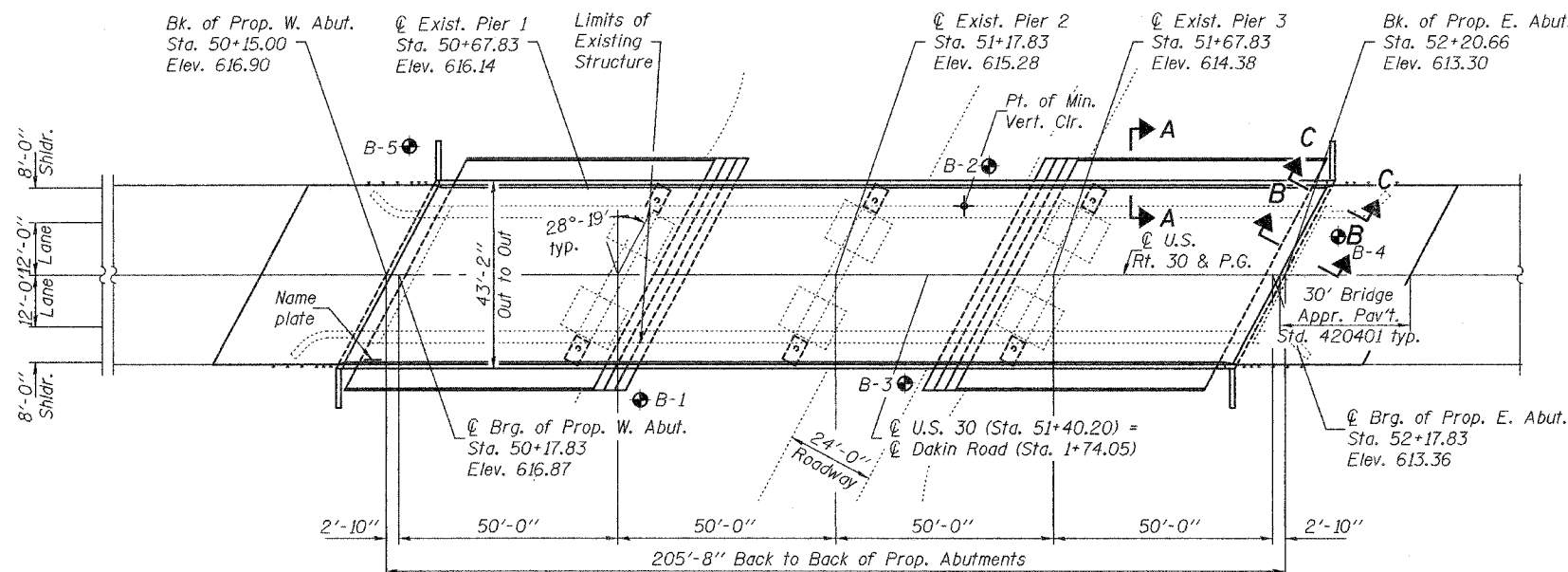
Contract #84883

Existing Structure: S.N. 098-6000 was built in 1954-56 under the City of Clinton Bridge Commission Contract No. 7, Illinois Federal Aid Route 7. The structure is a four span continuous non-composite WF superstructure supported on spill through pile bent abutments and dual column piers. The deck is to be removed and widened. Traffic will be detoured during construction.

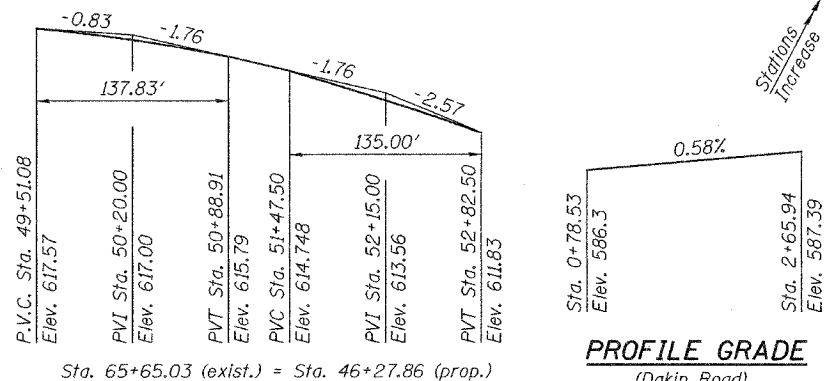
No Salvage



ELEVATION



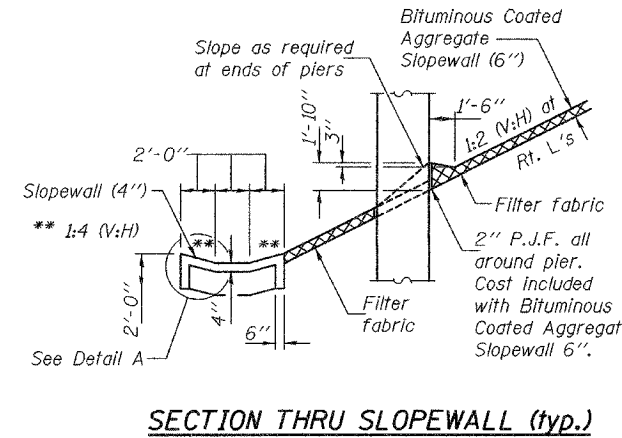
PLAN



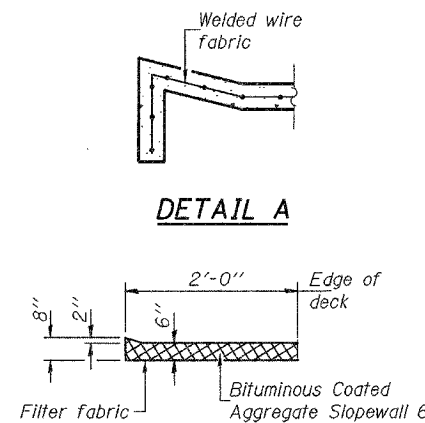
PROFILE GRADE  
(U.S. Rte. 30)

PROFILE GRADE  
(Dakin Road)

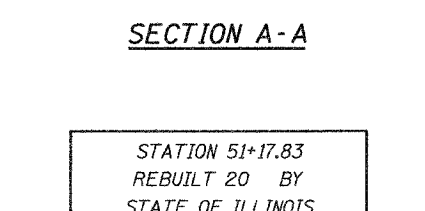
Notes: The cost of Removing Existing Concrete Ditches shall be included with slope wall 4\"/>



SECTION THRU SLOPEWALL (typ.)



DETAIL A



SECTION A-A

STATION 51+17.83  
REBUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RT. 309 SEC. 7HBR-1  
LOADING HS20  
STRUCTURE NO. 098-6000

NAME PLATE

See Std. 515001

Existing name plate shall be cleaned and placed next to new name plate. Cost included in Name Plates.

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

| FIELD UNITS                           | NEW CONSTRUCTION                      |
|---------------------------------------|---------------------------------------|
| $f_c = 3,500$ psi                     | $f_c = 3,500$ psi                     |
| $f_y = 40,000$ psi (reinforcement)    | $f_y = 60,000$ psi                    |
| $f_y = 33,000$ psi (structural steel) | $f_y = 36,000$ psi (structural steel) |
| (1949 AASHTO Specifications)          | (M270 Gr. 36)                         |

SEISMIC DATA

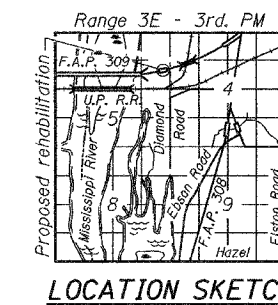
Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 3.2%  
Site Coefficient (S) = 1.0

INDEX OF SHEETS

|       |                                   |
|-------|-----------------------------------|
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| 5     | Superstructure                    |
| 6     | Superstructure Details            |
| 7     | Diaphragm Details                 |
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| 9     | Structural Steel                  |
| 10    | Structural Steel Details          |
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| 15    | Abutment Concrete Removal Details |
| 16    | West Abutment                     |
| 17    | East Abutment                     |
| 18-19 | Piers                             |
| 20    | Bar Splicer Assembly Details      |
| 21-23 | Boring Logs                       |

TOTAL BILL OF MATERIAL

| ITEM  | UNIT    | SUPER  | SUB    | TOTAL  |
|---|---------|--------|--------|--------|
| Porous Granular Embankment, Special         | Cu. Yd. |        | 234.7  | 234.7  |
| Removal of Existing Concrete Deck           | Each    | 1      |        | 1      |
| Structure Excavation                        | Cu. Yd. |        | 493.5  | 493.5  |
| Protective Coat                             | Sq. Yd. | 1086.0 |        | 1086.0 |
| Concrete Structures                         | Cu. Yd. |        | 174.0  | 174.0  |
| Concrete Superstructure                     | Cu. Yd. | 318.5  |        | 318.5  |
| Furnishing and Erecting Structural Steel    | L. Sum  | 0.55   |        | 0.55   |
| Reinforcement Bars, Epoxy Coated            | Pound   | 71360  | 13620  | 84980  |
| Name Plates                                 | Each    | 1      |        | 1      |
| Bridge Deck Grooving                        | Sq. Yd. | 863.0  |        | 863.0  |
| Bar Splicers                                | Each    | 80     |        | 80     |
| Furnishing Steel Piles HPI2x53              | Foot    |        | 1338.0 | 1338.0 |
| Driving Steel Piles                         | Foot    |        | 1338.0 | 1338.0 |
| Stud Shear Connectors                       | Each    | 4224   |        | 4224   |
| Bituminous Coated Aggregate Slopewall 6\"/> |         |        |        |        |



LOCATION SKETCH

GENERAL PLAN  
U.S. RTE. 30 OVER DAKIN RD.  
F.A.P. RTE. 309 - SEC. 7HBR-1  
WHITESIDE COUNTY  
STATION 51+17.83  
STRUCTURE NO. 098-6000

|          |                    |
|----------|--------------------|
| DESIGNED | <i>[Signature]</i> |
| CHECKED  | <i>[Signature]</i> |
| DRAWN    | h.f. duong         |
| CHECKED  | CCC/DPN            |

|          |  |
|----------|--|
| EXAMINED | <i>[Signature]</i><br>ENGINEER OF BRIDGE DESIGN          |
| PASSED   | <i>[Signature]</i><br>ENGINEER OF BRIDGES AND STRUCTURES |



EXPIRES 11-30-2006