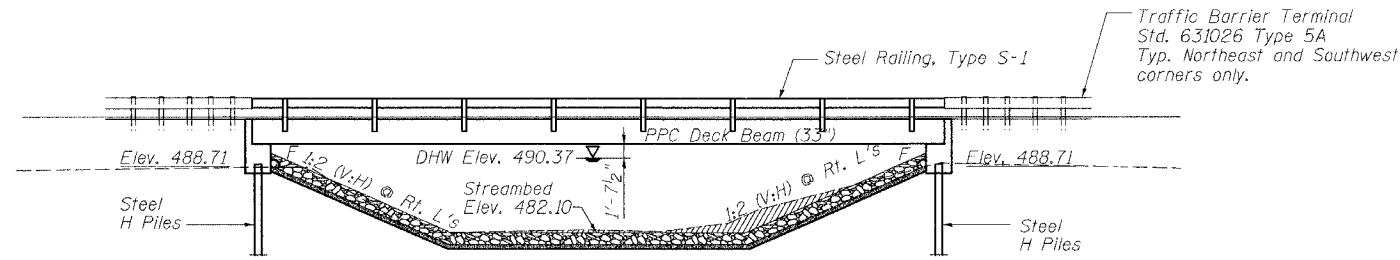


Bench Mark: Chiseled square in SE corner of Existing Bridge, Elev. 489.78.

Existing Structure: Single Span (14' Wide x 30' Long) Timber Plank Superstructure on I-Beam Stringers with Reinforced Concrete Abutments. Built as SN 085-4303. To Be Removed. No Salvage.

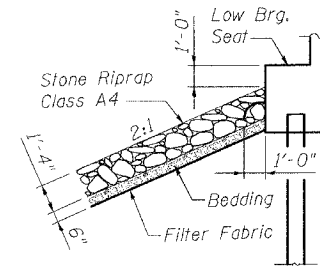
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|---------------------|----------|-------------------|-----------------|--------------|-------------|
| ROUTE NO. | SECTION | COUNTY | LENGTH MILES | SHEET NO. | SHEET NO. 1 |
| TR 110 | * | SCHUYLER | 20 | 7 | 5 SHEETS |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | ** | | |
| | | ** 80-03108-00-BR | | | |
| | | ** BR05-169(35) | | | |



ELEVATION

Note: Hatched area denotes Channel Excavation. See Roadway Plans for quantity.

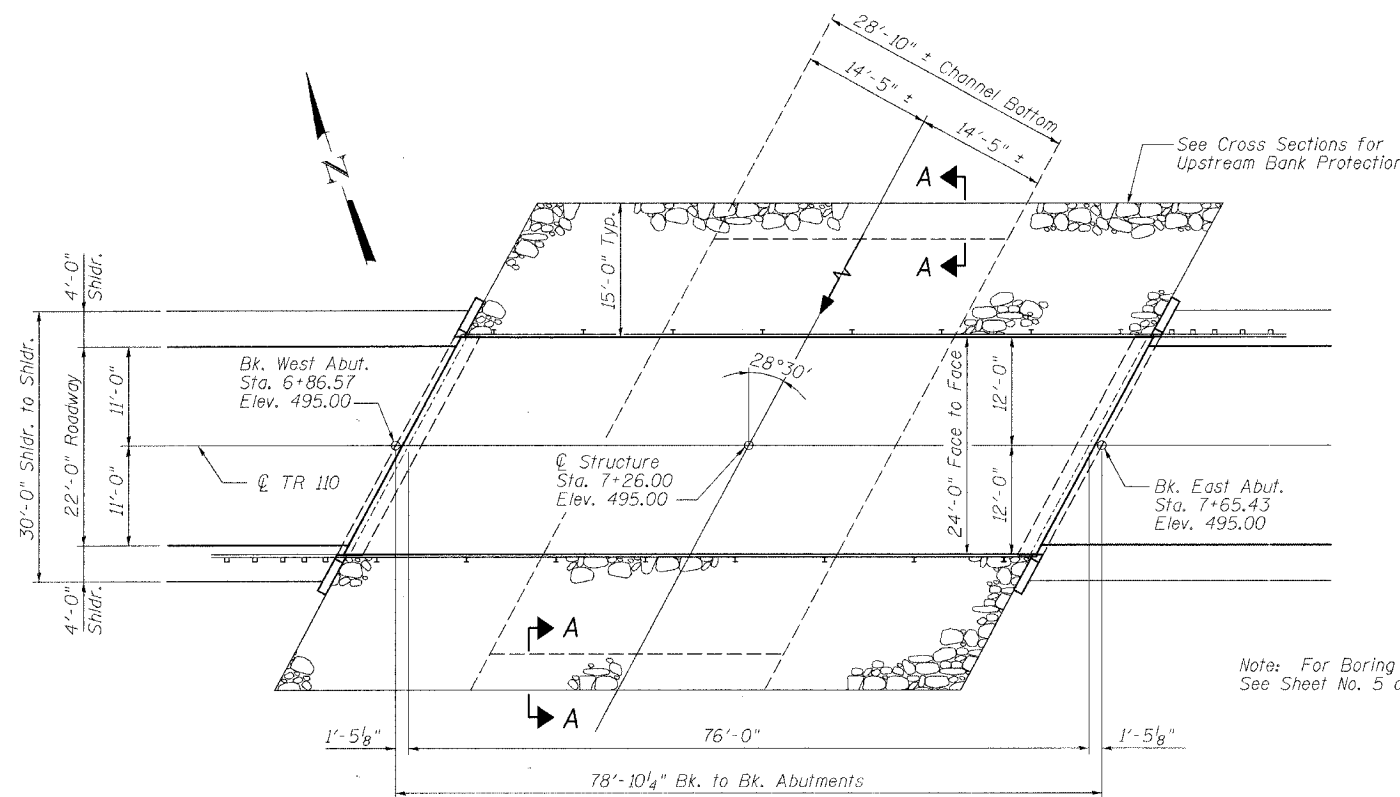


STONE RIPRAP DETAIL

- GENERAL NOTES**
- Reinforcement bars shall conform to the requirements of AASHTO M 31, M322 Grade 60.
 - Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 - The contractor shall drive one steel HP10x42 test pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of piles.
 - See Bridge Sheet No. 5 for Boring Logs.

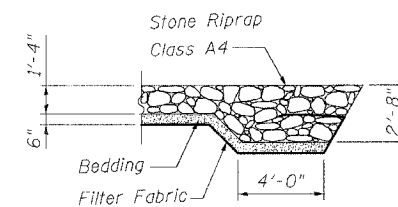
TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---------|-------|------|-------|
| Stone Riprap, Class A4 | Ton | | 265 | 265 |
| Filter Fabric | Sq. Yd. | | 543 | 543 |
| Removal of Existing Structures No. 1 | Each | | | 1 |
| Concrete Structures | Cu. Yd. | | 25.0 | 25.0 |
| Precast Prestressed Concrete Deck Beams (33" Depth) | Sq. Ft. | 1856 | | 1856 |
| Reinforcement Bars, Epoxy Coated | Pound | | 3910 | 3910 |
| Steel Railing, Type S-1 | Foot | 155 | | 155 |
| Furnishing Steel Piles HP 10x42 | Foot | | 225 | 225 |
| Driving Steel Piles | Foot | | 225 | 225 |
| Test Pile Steel HP 10x42 | Each | | 1 | 1 |
| Name Plates | Each | | 1 | 1 |

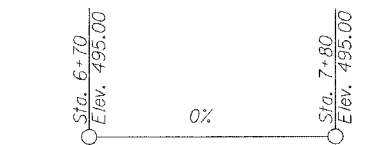


PLAN

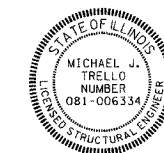
Note: For Boring Location See Sheet No. 5 of 5.



SECTION A-A



PROPOSED PROFILE GRADE



Expires: 11/30/06

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current A.A.S.H.T.O. Standard Specifications for Highway Bridges.

Signed: *[Signature]* Dated: 7/12/06

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS

$f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

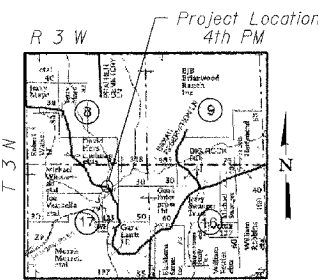
PRECAST PRESTRESSED UNITS

$f_c = 5,000$ psi
 $f_{ci} = 4,000$ psi
 $f_s = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax strands)
 $f_{si} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax strands)

WATERWAY INFORMATION

Drainage Area = 10.50 Sq. Mi. Low Grade Elev. 495.00 @ Sta. 7+26.00

| Flood | Freq. Yr. | Q C.F.S. | Opening Sq. Ft. | | Nat. H.W.E. | Head - Ft. | | Headwater El. | |
|-------------|-----------|----------|-----------------|-------|-------------|------------|-------|---------------|--------|
| | | | Exist. | Prop. | | Exist. | Prop. | Exist. | Prop. |
| Design | 15 | 1830 | 599 | 344 | 490.37 | 0.16 | 0.02 | 490.53 | 490.39 |
| Base | 100 | 3060 | 850 | 463 | 492.15 | 0.16 | 0.98 | 492.31 | 493.13 |
| Overtopping | 2 | 675 | 259 | - | 488.60 | 0.19 | - | 488.79 | - |
| Max. Calc. | 500 | 4120 | - | 463 | 492.69 | - | 1.82 | - | 494.51 |



LOCATION SKETCH

WILLOW CREEK
BUILT BY
SCHUYLER COUNTY
SECTION 80-03108-00 BR
T.R. 110 STA. 7+26
STR. NO. 085-4307
LOADING HS20

NAME PLATE

See Standard 515001
and Abut Detail (Sht. 4 of 5)

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION

TR 110 OVER WILLOW CREEK
STA. 7+26.00
SCHUYLER COUNTY
S.N. 085-4307

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

SCALE: VERT. 1"=10'
HORIZ. 1"=40'
DATE: 9/8/04

DRAWN BY: LANDREY
DESIGNED BY: MATHUR
CHECKED BY: TRELLO

COMPUTER FILE NO.
SN0854307.GPE
PROJECT 02341
5/12/06-MML

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OPERATOR = mjtrello