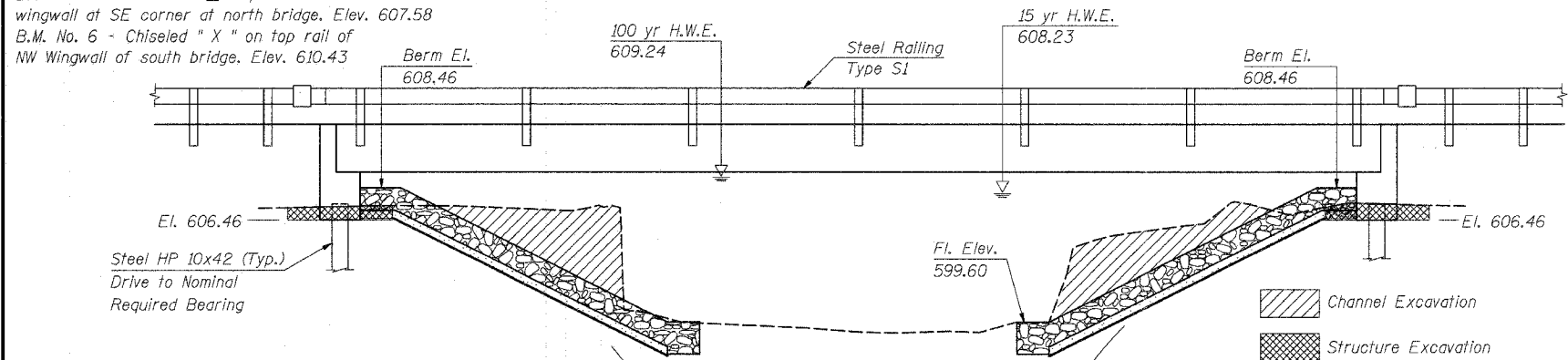


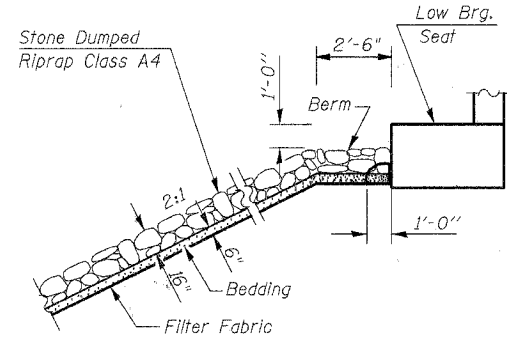
| | | | | |
|---------------------|------------------|------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| T.R. 50 | | CHRISTIAN SHELBY | 20 | 16 |
| FED. ROAD DIST. NO. | ILLINOIS PROJECT | | | |
| * 04-12112-00-BR | | | SHEET 1 OF 5 | |

EXISTING STRUCTURE:
 S.N. 087-3070, Single Span Steel I-beam Bridge
 with Timber Deck on Concrete Abutments.
 Length = 30'-0", Width = 14'-3"

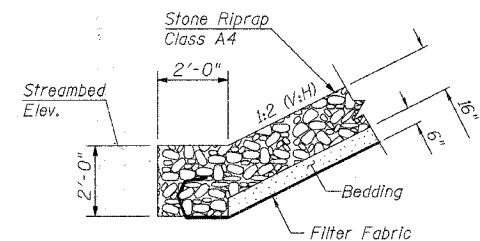
B.M. No. 5 - Chiseled "□" top W. end concrete wingwall at SE corner at north bridge. Elev. 607.58
 B.M. No. 6 - Chiseled "X" on top rail of NW Wingwall of south bridge. Elev. 610.43



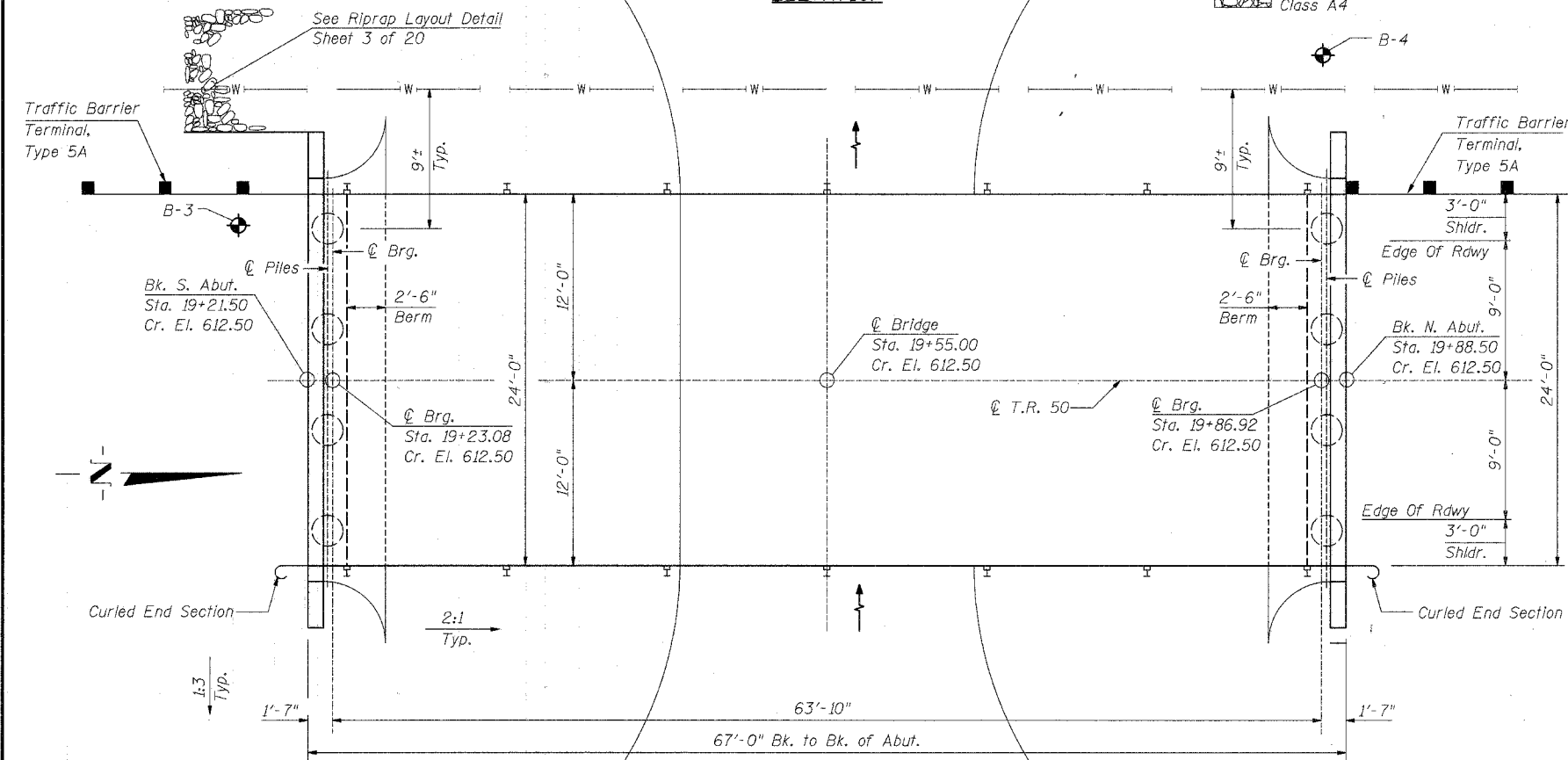
ELEVATION



STONE RIPRAP EMBANKMENT DETAIL



TOE OF STONE RIPRAP TREATMENT



PLAN

NOTE:
 Location of watermain is approximate. Contractor shall dig test pits to locate prior to driving piles. See Special Provisions

LONG GROVE CREEK
 BUILT 200 BY
 CHRISTIAN COUNTY
 SEC. 04-12112-00-BR
 TR 50 STA. 19+55.00
 STR. NO. 011-3403 LOADING HS 20

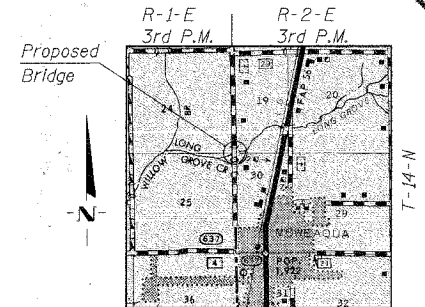
NAME PLATE
 (See Std. 515001)

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 AASHTO Standard Specifications for Highway Bridges.



David Bocher, Illinois S.E. 081-004775
 Expires 11-30-2008

GENERAL PLAN & ELEVATION
T.R.50 OVER LONG GROVE CREEK TRIB.
SECTION 04-12112-00-BR
CHRISTIAN COUNTY
S.N. 087-3404
STA. 19+55.00



LOCATION MAP

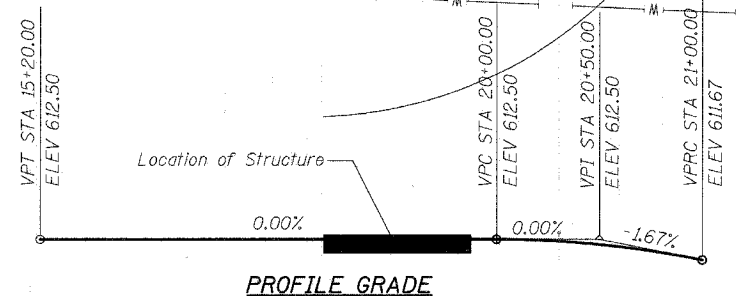
WATERWAY INFORMATION

| | | |
|--------------------------------------|-------|--------|
| Drainage Area | 16.76 | Sq.Mi. |
| Required Opening (15yr.) | 322 | Sq.Ft. |
| Provided Opening | 322 | Sq.Ft. |
| Present Opening | 188 | Sq.Ft. |
| 15yr. Discharge | 1921 | cfs |
| 100yr. Discharge | 3150 | cfs |
| Created Head at Bridge (100yr.) | <1.0 | Ft. |
| Created Head 1000' Upstream (100yr.) | <0.5 | Ft. |

DESIGN STRESSES

| | |
|--------------------|--------------------|
| Precast Unit | Cast-in-Place Unit |
| f'c = 5,000 psi | f'c = 3500 psi |
| f'ci = 4000 psi | f's = 60,000 psi |
| f's = 270,000 psi | n = 9 |
| f'si = 189,000 psi | |

LOADING HS 20
 DESIGN SPECIFICATION:
 AASHTO 2002 Standard Specifications for Highway Bridges.
 FUTURE WEARING SURFACE: 50 lb/Sq. Ft.



PROFILE GRADE

9FILES\$

ie consultants

| | |
|---------------|-----------------|
| DESIGNED: SCB | CHECKED: DRB |
| DRAWN: TRF | DATE: FEB. 2008 |