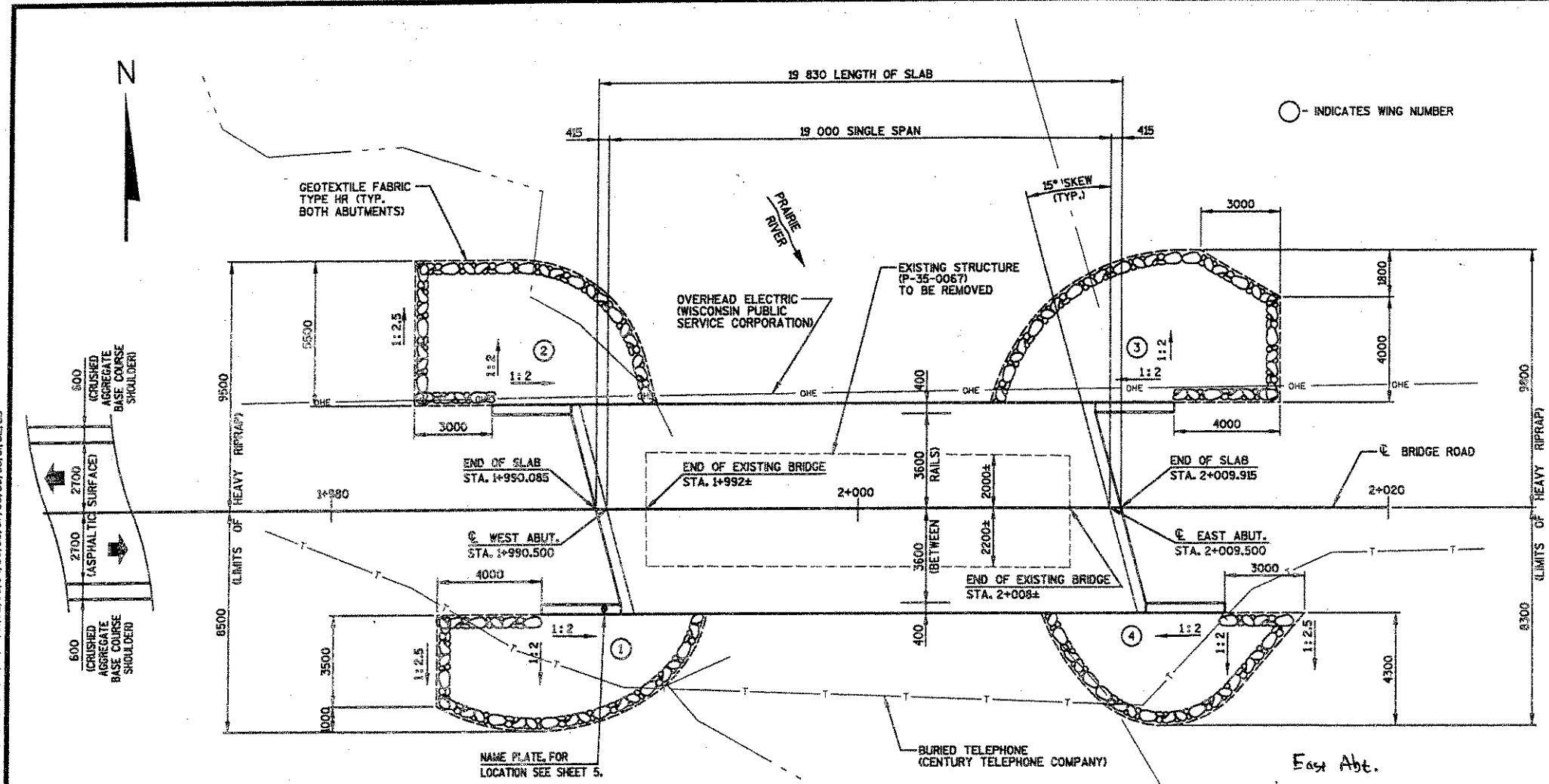


STATE PROJECT NUMBER		SHEET NO.	
9859-07-70		8.0	
BENCHMARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	1+962.85 7.14 m RT.	60d NAIL IN 750 mm φ WHITE PINE	460.150
2	2+031.28 8.55 m RT.	60d NAIL IN 750 mm φ WHITE PINE	459.278
C.A.P. South West			459.97



**DESIGN DATA**

**LIVELOAD**  
 DESIGN RATING : MS-18  
 INVENTORY RATING : MS-20  
 OPERATIONAL RATING : MS-34  
 MAX. STD. PERMIT VEHICLE LOAD = 110 KN  
 STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 1.0 KN PER SQUARE METER.

**TRAFFIC DATA:**  
 A.D.T. (1998) = 5  
 A.D.T. (2018) = 10

**ULTIMATE DESIGN STRESSES:**  
 CONCRETE MASONRY - SLAB  $f_c' = 28$  MPa  
 - ALL OTHER  $f_c' = 24$  MPa  
 HIGH STRENGTH AND COATED HIGH STRENGTH  
 BAR STEEL REINFORCEMENT, GRADE 420  $f_y = 420$  MPa  
 915 mm PRESTRESSED GIRDER CONCRETE MASONRY  $f_c' = 42$  MPa  
 13 mm DIA. STRANDS WITH ULTIMATE TENSILE  
 STRENGTH OF  
 GLULAM RAIL (DRY CONDITION) = 16.5 MPa

**FOUNDATION DATA:**  
 ABUTMENTS SHALL BE SUPPORTED ON HP 250 x 62 STEEL PILING WITH PILE POINTS DRIVEN TO A MINIMUM BEARING VALUE OF 490 kN PER PILE. ESTIMATED PILE LENGTHS ARE 7 m AT BOTH ABUTMENTS.

**HYDRAULIC DATA:**  
**100 YEAR FREQUENCY**  
 DRAINAGE AREA = 158 km<sup>2</sup>  
 $Q_{100}$  = 52.7 m<sup>3</sup>/s  
 VELOCITY = 3.26 m/s  
 WATERWAY AREA = 15.1 m<sup>2</sup>  
 HIGH WATER<sub>100</sub> ELEVATION = 458.39±  
 SCOUR CRITICAL CODE = 8  
 ROADWAY OVERFLOW DESIGN FREQUENCY = N/A

**TEMPORARY STRUCTURE**  
 $Q_5$  = 26.1 m<sup>3</sup>/s  
 HIGH WATER<sub>5</sub> ELEVATION = 457.72±  
 MINIMUM REQUIRED WATERWAY AREA = 9.6 m<sup>2</sup>

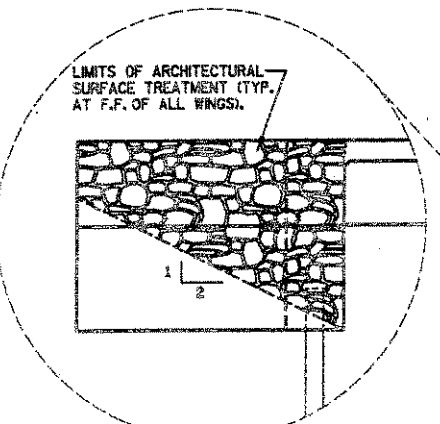
- LIST OF DRAWINGS**
1. GENERAL PLAN
  2. CROSS SECTION & QUANTITIES
  3. SUBSURFACE EXPLORATION
  4. ABUTMENTS
  5. ABUTMENT DETAILS
  6. 915 mm PRESTRESSED GIRDER DETAILS
  7. SUPERSTRUCTURE
  8. SUPERSTRUCTURE DETAILS
  9. GLULAM ELEMENT RAILING

West Abt. Cutoff Length

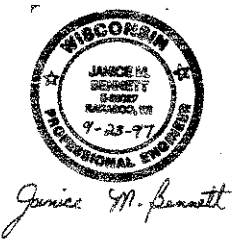
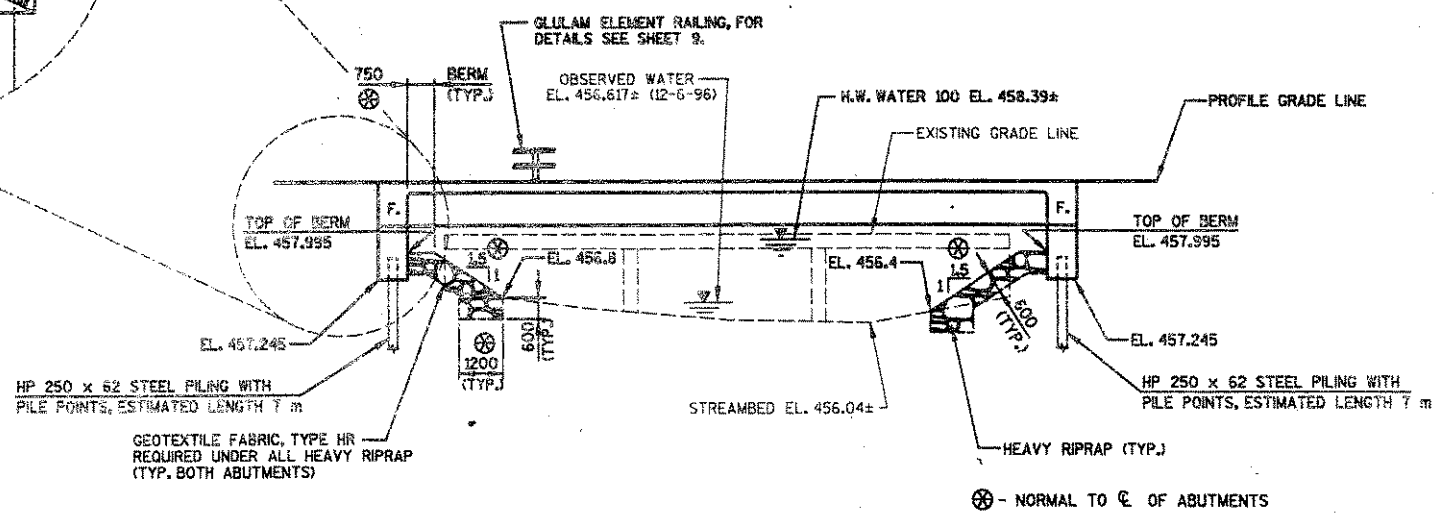
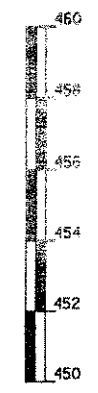
Pile #	West Abt. Cutoff Length
1	5.58
2	5.87
3	6.10
4	5.12
5	4.51

East Abt. Cutoff Length

Pile #	East Abt. Cutoff Length
1	5.49
2	4.78
3	5.11
4	4.42
5	4.36



#1 pile is S.W. most pile



No.	Date	Revision	By
TRANSPORTATION • MUNICIPAL • RECREATION DEVELOPMENT • ENVIRONMENTAL 1300 South Eastwood • Wausau, WI 54981 608-856-8771 • 1-800-363-0275 • Fax: 608-856-8770			
STATE OF WISCONSIN			
DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-136			
BRIDGE ROAD OVER PRAIRIE RIVER			
County	LINCOLN	Town/City/Village	RUSSELL
Design Spec.	AASHTO 1995	Load	MS-18
Design	JMB	Checked	LRK
Drawn	By	RLR	Plan
Checked	JMB	Date	11-21-97
Approved: <i>Donald H. Anderson</i> Chief Structural Design Engineer			Date
GENERAL PLAN			SHEET 1 OF 9

ORIGINATOR: RLR  
 LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63  
 MSA #1: 93966101  
 REV. DATE: 9-22-97  
 PLOT SCALE: 250