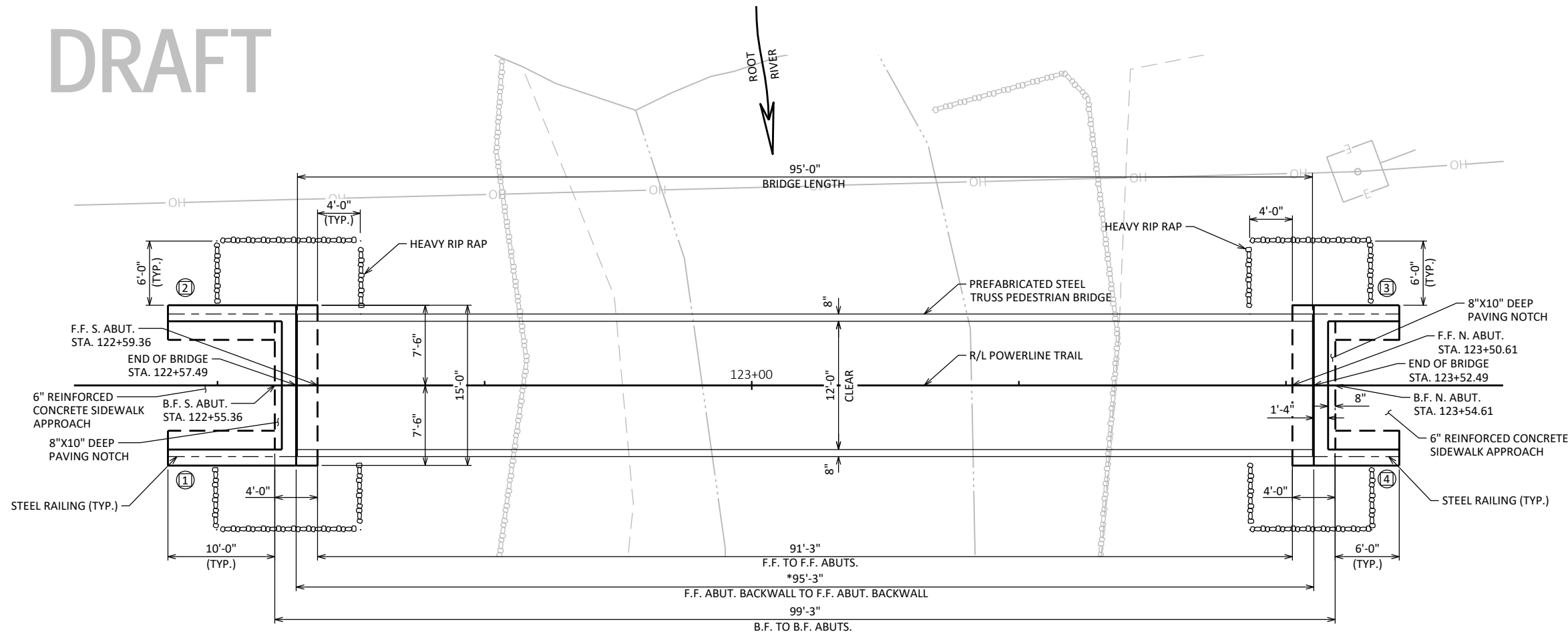
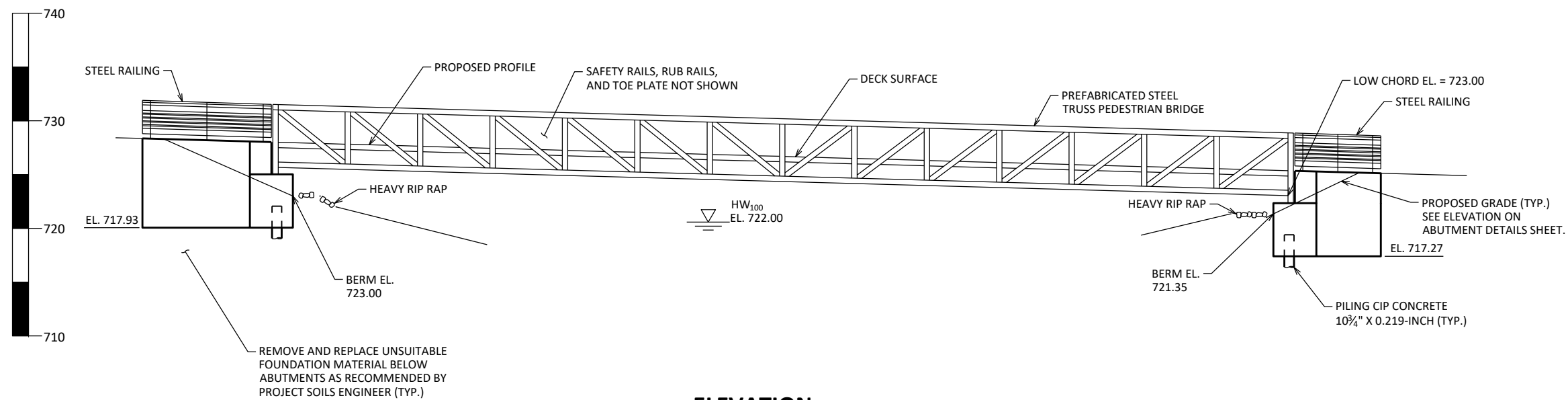
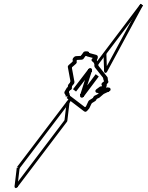


DRAFT



PLAN
(SINGLE SPAN PREFABRICATED STEEL TRUSS BRIDGE)



ELEVATION
(LOOKING NORTHWEST)

LEGEND

* DIMENSION TO BE VERIFIED BY BRIDGE MANUFACTURER.

STRUCTURE DESIGN CONTACT:
KEITH BEHREND (608) 251-4843

DESIGN DATA

LIVE LOAD:
90 PSF PEDESTRIAN LOAD
20,000 LB. VEHICLE LOAD (H-10)
35 PSF WIND LOAD (AS IF ENCLOSED)
20 PSF WIND UPLIFT

HORIZONTAL EARTH PRESSURE:
40 P.S.F. EQUIVALENT FLUID PRESSURE.
SURCHARGE PRESSURE = 2'-0" OF EARTH.

ULTIMATE DESIGN STRESSES:
CONCRETE DECK $f'_c = 4,000$ psi
CONCRETE SUBSTRUCTURE $f'_c = 3,500$ psi
HIGH STRENGTH BAR
STEEL REINFORCEMENT $f_y = 60,000$ psi
HIGH STRENGTH STRUCTURAL STEEL
ASTM A847, ASTM A588, ASTM A606,
ASTM A709 OR ASTM A242 $f_y = 50,000$ psi

FOUNDATION DATA:
ABUTMENT TO BE SUPPORTED ON PILING CAST-IN-PLACE CONCRETE 10 3/4-INCH, WITH 0.219-INCH MINIMUM SHELL THICKNESS, DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. PROVIDE 1 1/4-INCH MINIMUM THICKNESS END PLATES WELDED TO BASES OF PILES. ESTIMATED 85' LONG AT SOUTH ABUTMENT AND 85' LONG AT NORTH ABUTMENT.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

ESTIMATED BRIDGE REACTIONS

LOAD TYPE	P (LBS.)	H (LBS.)	L (LBS.)
DEAD LOAD			
UNIFORM LIVE LOAD, 90 PSF			
VEHICLE LIVE LOAD			
WIND UPLIFT, 20 PSF WINDWARD/LEEWARD			
WIND			
SEISMIC			
THERMAL			

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H = HORIZONTAL LOAD AT EACH SPAN END (2 PER BRIDGE)
L = LONGITUDINAL LOAD AT FIXED BEARING (4 PER BRIDGE)

NOTES:
1. VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
2. "+" INDICATES DOWNWARD LOAD.
"-" INDICATES UPWARD LOAD.
3. ESTIMATED BRIDGE LIFTING WEIGHT = 52,800 LBS (TO BE VERIFIED BY BRIDGE MANUFACTURER).

NO.	DATE	REVISION	BY

STRAND ASSOCIATES
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ DATE _____
CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE B-40-1103

POWERLINE TRAIL OVER ROOT RIVER

COUNTY MILWAUKEE CITY GREENFIELD

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION
DESIGNED BY JFG DESIGN CK'D KRB DRAWN BY JFG PLANS CK'D KRB

GENERAL PLAN SHEET 1 OF 3

LIST OF DRAWINGS:

1. GENERAL PLAN
2. CROSS SECTION, NOTES, & QUANTITIES
3. SUBSURFACE EXPLORATION
- 4.
- 5.