DESIGN DATA

<u>LIVE LOAD:</u>
GREATER OF 90 PSF OR H-10 VEHICLE

<u>ULTIMATE DESIGN STRESSES:</u>
CONCRETE MASONRY ——————— f'c = 3,500 P.S.I

HIGH STRENGTH BAR STEEL
REINFORCEMENT GRADE 60 ——— fy = 60,000 P.S.I.

STRUCTURAL STEEL ——————— fy = 50,000 P.S.I.
(WEATHERING STEEL)

ABUTMENT DESIGN IS BASED ON THE FOLLOWING UNFACTORED
REACTION LOADS PER BASE PLATE (4 PER BRIDGE):

ASSUMED TRUSS BEARING LOADS

TYPE	LOADING	NOTES
DEAD LOAD (DC1)	25.5 KIPS PER BEARING DOWNWARD	INCLUDES TRUSS, DECK AND ALL OTHER TRUSS DEAD LOADS COMPLETE IN PLACE.
PEDESTRIAN LOAD (PL)	22 KIPS PER BEARING DOWNWARD	90 PSF PED. LOADING. H10 VEHICLE DETERMINED NOT TO CONTROL ABUTMENT DESIGN. CONTRACTOR SHALL DETERMINE THE NECESSITY OF USING VEHICLE LOADING FOR THE TRUSS DESIGN. NO LIVE LOAD REDUCTION ALLOWED.

CONTRACTOR TO VERIFY SUPPLIED BRIDGE LOADS.

HYDRAULIC DATA
NONE AVAILABLE

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON 10¾" DIA.
CAST-IN-PLACE CONCRETE PILING (WITH 0.365"
WALL THICKNESS) DRIVEN TO A REQUIRED DRIVING
RESISTANCE OF 48 ‡TONS PER PILE AS DETERMINED
BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 15 FEET LONG AT BOTH ABUTMENTS.

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

INDEX OF SHEETS

S1   GENERAL PLAN
S2   PROFILE, NOTES AND QUANTITES
S3   ABUTMENT DETAILS (1 OF 2)
S4   ABUTMENT DETAILS (2 OF 2)
S5   RAILING AND APPROACH SLAB DETAILS

PLAN

70'-3½" FACE-TO-FACE ABUTMENT BACKWALL
70'-0" PREFABRICATED STRUCTURE
1¾"   1¾"

FACE OF ABUTMENT BACKWALL
FACE OF ABUTMENT BACKWALL
APPROACH SLAB (SEE DETAIL) △

BEGIN BRIDGE STA. 44+06.00
APPROACH SLAB (SEE DETAIL) △
44+00
45+00
Ç BRG. STA. 44+06.60
Ç BRG. STA. 44+75.40
Ç TRAIL
END OF BRIDGE STA. 44+76.00
METAL RAILING (TYP.)

7'-6"   12'-0"   3'-0" (TYP.)
7'-0"   14'-0"   7'-0"
12'-0"
7'-6" (TYP.)   14'-0"   10'-00'-00"   8'-7" (TYP.)

4'-3" 4'-1½" 4'-3" 4'-3"   2'-0"
4'-3" 4'-1½" 4'-3" 4'-1½" 4'-3" 2'-0"

LIMITS OF DELINEATED WETLAND

PROPOSED SUPERSTRUCTURE:
PREFABRICATED STEEL TRUSS
PEDESTRIAN BRIDGE.

PROPOSED CONTOURS (TYP.)
1000

ELEVATION

PROPOSED GRADE
25'-0" (TYP.)
3'-6" (TYP.)
1005

LOW STEEL EL. 1002.50
EL. 1000.00
EL. 1000.00
APPROX. 5'-8"
EXISTING GRADE
1000

2'-0" (TYP.)
RIPRAP HEAVY
EL. 995.50
GEOTEXTILE FABRIC TYPE, HR (TYP.)
EL. 995.50
995

SOUTH ABUTMENT
NORTH ABUTMENT
990

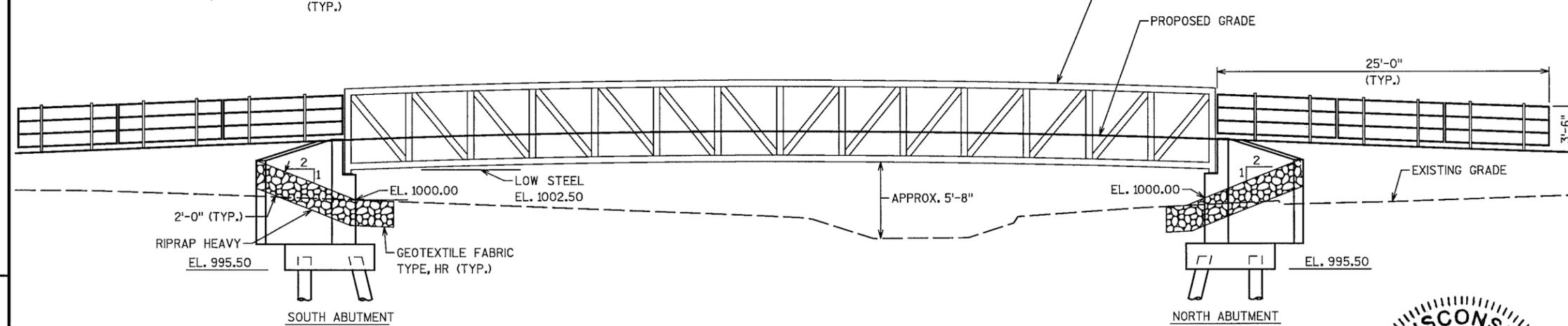## NOTES:

① METAL RAILING POST SPACING.
RAILING DIMENSIONS TYPICAL EACH SIDE.

△ BLOCK OUT APPROACH SLAB AS NEEDED TO
ACCOMMODATE RAIL POST FOOTING.

CONSULTANT CONTACT:
KEVIN SWEHLA
(608) 829-0010

NO.	DATE	REVISION	BY

PLANS PREPARED BY:
SRF Consulting Group, Inc.
ENGINEERS PLANNERS DESIGNERS
901 DEMING WAY, SUITE 302
MADISON, WI 53717

COUNTY	TOWN/CITY/VILLAGE
DANE	MADISON

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ESH	KLS	ARH	KLS

GENERAL PLAN

ICE AGE JUNCTION PATH - 2012 | PROJECT NO 53W1348 | CITY OF MADISON | GENERAL STRUCTURE PLAN | SHEET S1 E

FILE NAME : m:\Projects\7334\BR\Plans\Final\7334_gpe01.dgn   PLOT DATE : 6/26/2012   PLOT BY : SRF Consulting Group   PLOT SCALE : 1.0000 ' / IN.