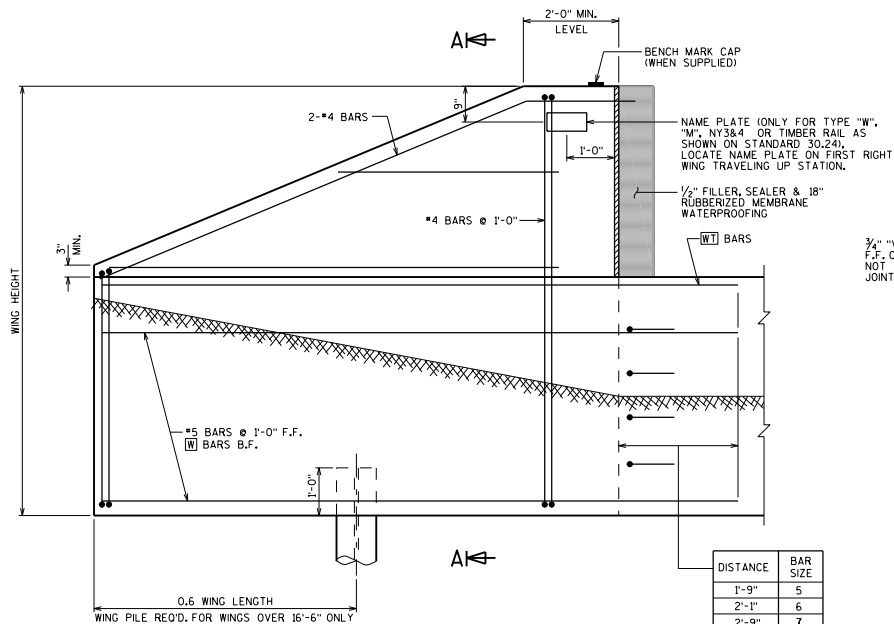
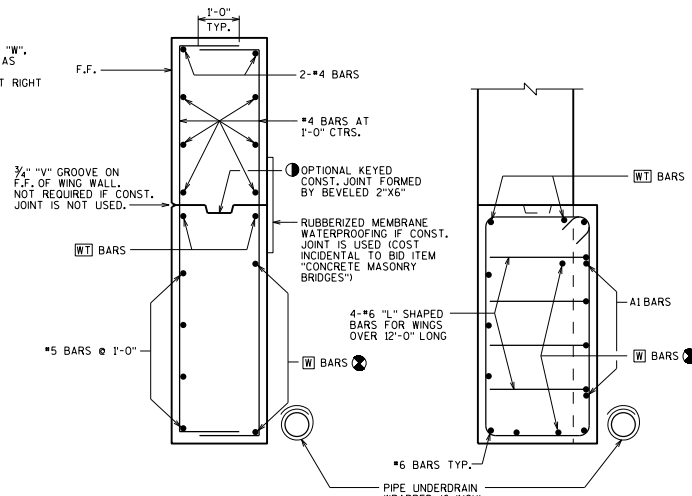


PLAN FOR TYPE A1 ABUTMENT
(SEE STD. 12.01 FOR ABUTMENT BODY DETAILS)



WING ELEVATION
(A1 ABUTMENT)

DISTANCE	BAR SIZE
1'-9"	5
2'-1"	6
2'-9"	7
3'-8"	8
4'-7"	9



SECTION A-A

SECTION B-B
SEE STD. 12.01 & 12.02 FOR NOTES & DETAILS

DESIGNER NOTES

THIS TYPE OF WING SHOULD BE USED WHEN POSSIBLE IN LIEU OF WINGS PARALLEL TO THE ROADWAY. DO NOT USE FOR STREAM CROSSINGS WHERE HIGH WATER ELEVATION IS ABOVE THE BOTTOM OF ABUTMENT.

*USE 2/2.1 FOR THE UNSTABLE CLAYS WHICH ARE SOMETIMES ENCOUNTERED IN NORTHWEST WISC. (SUPERIOR AREA)

1 WHEN TIMBER RAILING IS USED AS PER STANDARD 30.24, AND THE SKEW IS > 0°, THIS CONSTRUCTION JOINT SHALL BE MANDATORY. THE WING CONCRETE SHALL BE PLACED ABOVE CONSTR. JT. AFTER THE TIMBER END POSTS ARE IN PLACE.

ALL WING BARS SHALL BE EPOXY COATED.

2 SHOW ALL LONGITUDINAL BARS FOR CLARITY.

LRFD DESIGN LOADS (WINGS)

LIVE LOAD = 1'-0" SURCHARGE
LOAD FACTORS:
γ_{DC} = 1.25
γ_{IM} = 1.50
γ_W = 1.75
EXPOSURE CLASS 2, γ_E = 0.75
HORIZ. EARTH LOAD BASED DN: 35 P.C.F. EQUIV. FLUID UNIT WEIGHT OF SOIL
FY = 60,000 P.S.I.
FC = 3,500 P.S.I.

TABLE A

WING LENGTH	WING HEIGHT				BARS
	8'-6"	10'-0"	11'-6"	13'-0"	
8'-6"	5-#5's	5-#5's	6-#5's		W
	2-#5's	2-#5's	2-#5's		WT
10'-0"	4-#6's	4-#6's	5-#6's		A1
		5-#6's	5-#7's	6-#7's	W
12'-0"		2-#7's	2-#7's	2-#8's	WT
		5-#6's	6-#6's	6-#7's	A1
16'-0"		5-#8's	6-#8's	5-#9's	W
		2-#8's	2-#8's	2-#9's	WT
20'-0"		5-#8's	6-#8's	7-#8's	A1
			8-#8's	8-#9's	W
		2-#8's	2-#9's		WT
		7-#9's	8-#9's		A1

▲ WING PILE REQUIRED

DETAILS FOR WINGS PARALLEL TO A1 ABUTMENT CENTERLINE

BUREAU OF STRUCTURES

APPROVED: *Laura Shadewald* DATE: 7-21