

DESIGNER NOTES

LAP LENGTHS FOR HORIZONTAL BARS SHALL BE BASED ON A "CLASS C" TOP TENSION LAP SPLICE.

PILING SPACING IN ABUTMENT BODY SHALL BE 8'-0" MAX. FOR ALL TYPES OF PILING. THE MAX. PILE SPACING FROM THE END OF THE ABUT. BODY TO THE FIRST PILE SHALL BE THE MINIMUM OF ONE-HALF PILE SPACE OR 2'-6".

★ WHEN BODY SECTION IS $> \pm 50'-0"$ LONG PROVIDE VERTICAL CONSTRUCTION JOINT. RUN BAR STEEL THRU JOINT, SEAL JOINT WITH 18" RUBBERIZED MEMBRANE WATERPROOFING. SEE STD. 12.09 FOR ALTERNATE CONSTRUCTION JOINT.

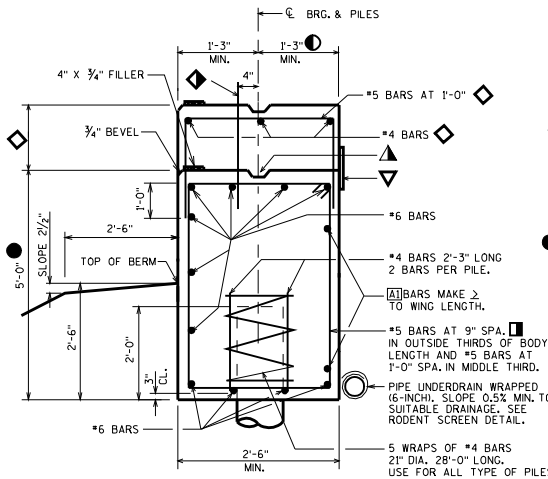
CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 STANDARD SPECIFICATIONS.

THE SEMI-EXPANSION SEAT SHALL BE USED WHEN REQUIRED AS STATED IN CHAPTER 12, FIGURE 12.7-1 OF THE BRIDGE MANUAL OR WHENEVER A WING PILE IS REQUIRED.

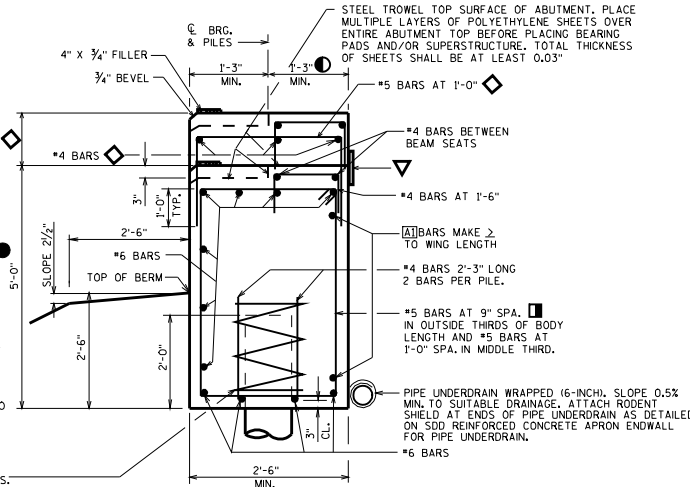
THE FIXED SEAT CANNOT BE USED WHEN A WING PILE IS REQUIRED.

LEGEND

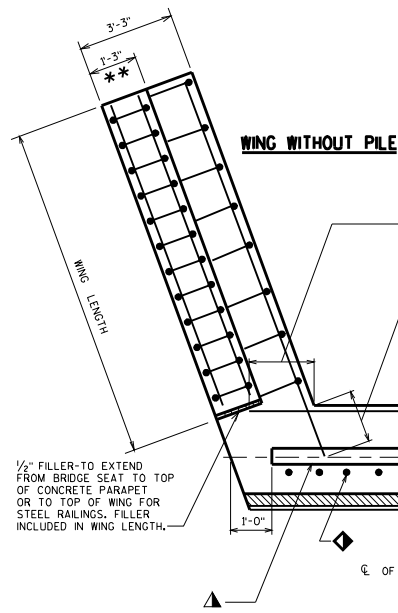
- ◆ #5 BARS AT 1'-0" (2'-0" LONG). THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- ◇ WHEN THIS DIMENSION $> 4"$ THIS ADDITIONAL REINFORCEMENT SHALL BE ADDED. MAX. SPA. OF HORIZ. #4 BARS = 1'-0".
- USE 1'-3" FOR ALL SLAB SPANS AND FOR GIRDER SPANS WITH NO PAVING NOTCH EXCEPT 45W, 54, 54W, 70, 72W & 82W GIRDERS WITH SKEWS $> 25^\circ$ - USE 1'-6". USE 1'-3" FOR GIRDER SPANS WITH PAVING NOTCH.
- DIMENSION IS FROM BOTTOM OF ABUTMENT TO LOW BEAM SEAT OR LOW SIDE OF SLAB TYPE SUPERSTRUCTURE.
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- ▲ KEYED CONST. JOINT FORMED BY BEVELED 2" x 6".
- ** WINGWALL WIDTH SHALL BE 1'-6" WHEN TYPE "M" RAILING OR VERTICAL FACE PARAPET, TYPE "TX" IS USED.
- USE #5 BARS AT 6" SPA. IN OUTSIDE THIRDS OF BODY LENGTH WHEN THE WING LENGTH $> 20'-0"$ AND WING HEIGHT $> 10'-0"$.



TYPE A1 WITH FIXED SEAT



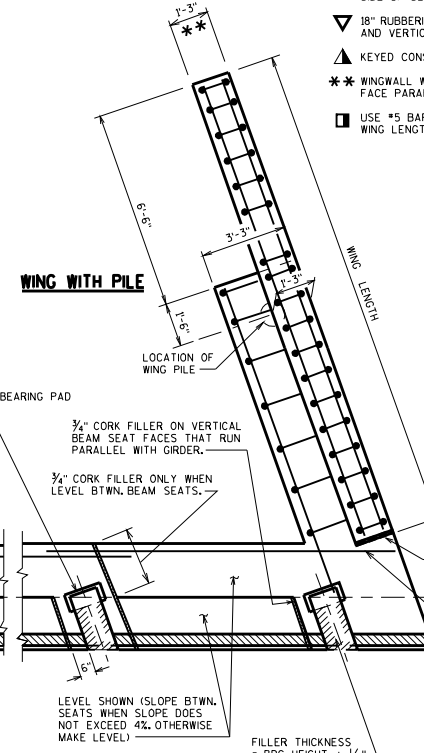
TYPE A1 WITH SEMI-EXPANSION SEAT



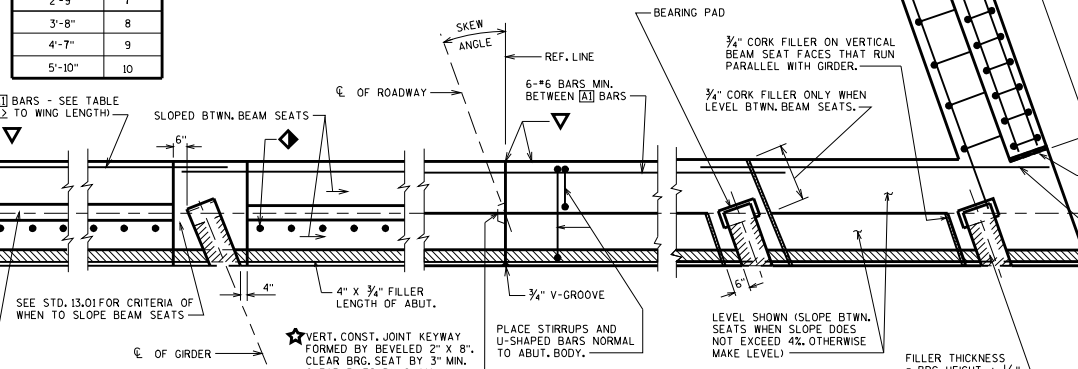
WING WITHOUT PILE

DISTANCE OR EQUIVALENT STD. HOOK	BAR SIZE
1'-9"	5
2'-1"	6
2'-9"	7
3'-8"	8
4'-7"	9
5'-10"	10

▲ BARS - SEE TABLE (> TO WING LENGTH)



WING WITH PILE



SLAB SPAN WITH FIXED SEAT

GIRDER SPAN WITH FIXED SEAT

SLAB SPAN WITH SEMI-EXPANSION SEAT

GIRDER SPAN WITH SEMI-EXPANSION SEAT

ABUTMENT TYPE A1 (INTEGRAL ABUTMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: Scot Becker

DATE:
7-09