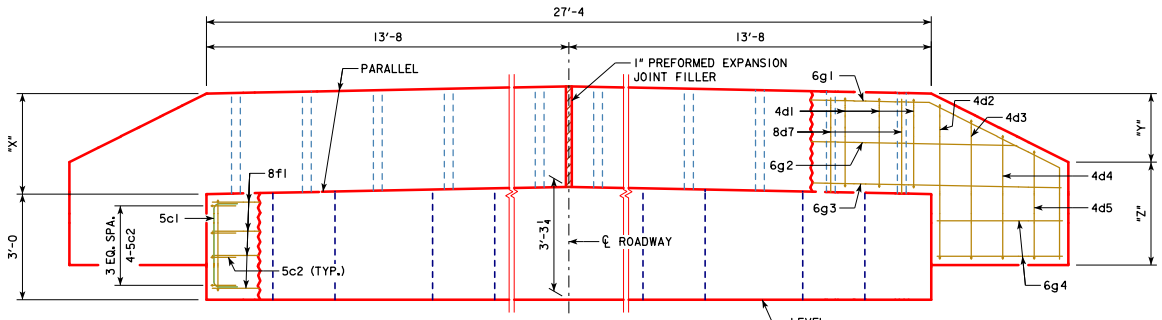
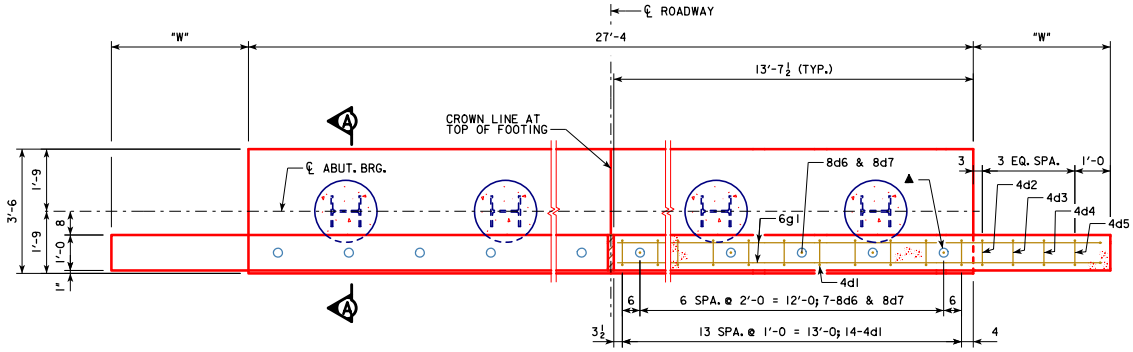


REAR ELEVATION AT ABUTMENT

ABUTMENT DATA (0° SKEW)

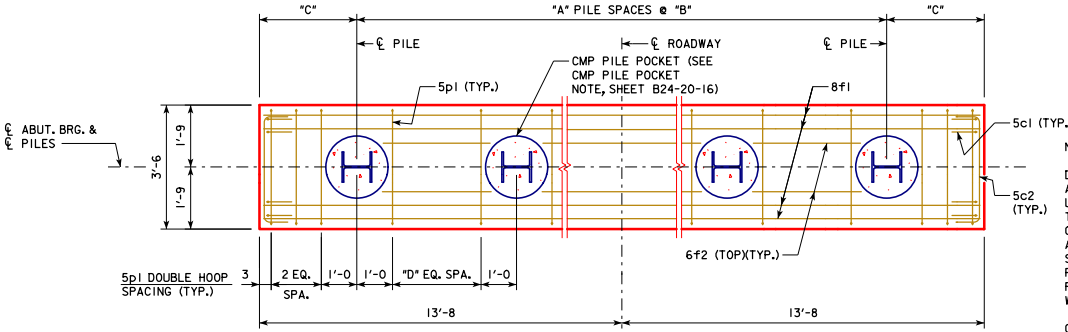
	REINFORCED CONCRETE BOX BEAMS			PRETENSIONED PRESTRESSED CONCRETE BOX BEAMS				
SPAN	30'-0	40'-0	50'-0	30'-0	40'-0	50'-0	60'-0	70'-0
"W" (FT. - IN.)	4'-0	4'-0	4'-0	3'-0	3'-0	4'-0	4'-0	4'-0
"X" (FT. - IN.)	2'-4¾	2'-4¾	2'-10¾	1'-10¾	1'-10¾	2'-4¾	2'-4¾	2'-10¾
"Y" (FT. - IN.)	2'-0	2'-0	2'-0	1'-6	1'-6	2'-0	2'-0	2'-0
"Z" (FT. - IN.)	2'-4	2'-4	2'-10	2'-4	2'-4	2'-4	2'-4	2'-10
"A" PILE SPACES	4	4	4	4	4	4	4	5
"B" (FT. - IN.)	5'-7	5'-7	5'-7	5'-7	5'-7	5'-7	5'-7	4'-5
"C" (FT. - IN.)	2'-6	2'-6	2'-6	2'-6	2'-6	2'-6	2'-6	2'-7½
"D" EQUAL SPACES	4	4	4	4	4	4	4	3
NO. OF PILES PER ABUT.	5	5	5	5	5	5	5	6
Pu, STRENGTH I DESIGN LOAD (KIPS)	97	114	133	94	109	128	141	137

NOTE:
Pu, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



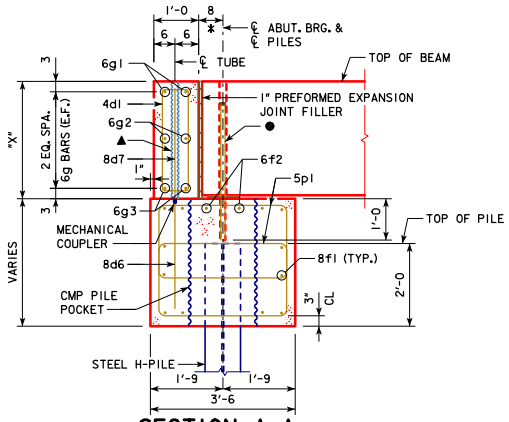
PART PLAN VIEW

PART SECTION THROUGH BACKWALL



ABUTMENT PILE PLAN

NOTES:
● 1¼"Φ SMOOTH DOWELS (A36). DRILL A 1½"Φ HOLE 12" DEEP INTO ABUTMENT AFTER BEAMS ARE IN PLACE. USE LOW IMPACT ROTARY DRILL. PRIOR TO SETTING DOWEL, FILL HOLE TO A DEPTH OF 4" WITH A POLYMER GROUT SYSTEM IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. PLACE 2"Φ x 1" THICK POLYSTYRENE PLUG ON TOP OF DOWEL. FILL REMAINDER OF HOLE ABOVE PLUG WITH NON-SHRINK GROUT.
✱ THIS DIMENSION MAY VARY. TILTING OF THE BACKWALL DURING CONSTRUCTION MAY BE NECESSARY TO ACCOMMODATE BEAM CAMBER AND LONGITUDINAL GRADE.
▲ 3" DIAMETER PLASTIC CORRUGATED TUBE. COVER TOP OF DOWELS WITH 2" OF GROUT.



SECTION A-A

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWA DOT Highway Division

STANDARD DESIGN - 24'-0 ROADWAY, SINGLE SPAN

CONCRETE BOX BEAM BRIDGES

DECEMBER, 2016

ABUTMENT DETAILS (PRECAST) CONCRETE WINGS 0° SKEW

B24-19-16