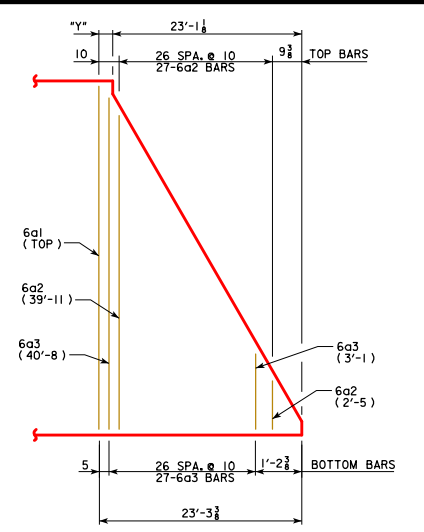
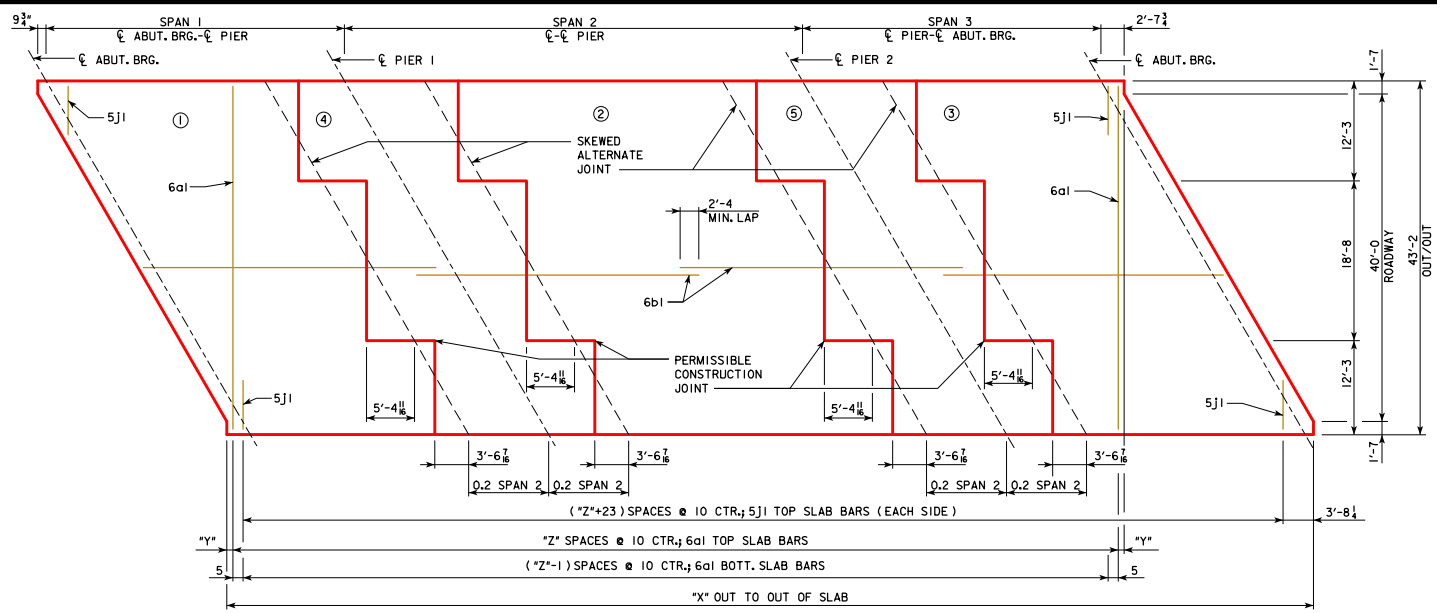


REVISED 07-2015 - CHANGED NOTE 1, CONCRETE PLACEMENT NOTE TO ACCOUNT FOR THE POSSIBLE ADDITION OF A RETARDING ADMIXTURE TO THE CONCRETE.
 REVISED 10-2016 - UPDATED ESTIMATED QUANTITY STRUCTURAL STEEL WEIGHT TO INCLUDE SHEAR STUDS AND DIAPHRAGMS FOR ALL BRIDGE LENGTHS.
 REVISED 08-2018 - UPDATED ESTIMATED QUANTITY STRUCTURAL STEEL WEIGHT FOR DIAPHRAGM UPDATES FOR BRIDGE LENGTHS 200'-0 TO 340'-0. UPDATED BRIDGE ENGINEER SIGNATURE.



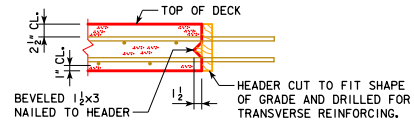
END OF SLAB REINFORCING
(TYPICAL EACH END OF DECK)

REINFORCEMENT DIMENSIONS	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0	320'-0	340'-0
℄-℄ ABUTMENT BEARINGS										
X (FT.-IN.)	163'-5½	183'-5½	203'-5½	223'-5½	243'-5½	263'-5½	283'-5½	303'-5½	323'-5½	343'-5½
Y (IN.)	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼	2¼
Z (SPACES)	168	192	216	240	264	288	312	336	360	384

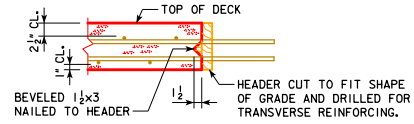
CONCRETE PLACEMENT DIAGRAM SHOWING SLAB REINFORCING
(RIGHT AHEAD SKEW SHOWN, LEFT AHEAD SKEW SIMILAR)

CONCRETE PLACEMENT QTYS. (SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0	320'-0	340'-0
SLAB, AND ABUT DIAPHRAGM, SECTION 1 & 3	CY 119.4	129.5	142.2	154.3	164.3	176.5	186.4	196.5	206.6	219.8
SLAB, SECTION 2	CY 42.1	47.4	52.7	58.0	63.2	68.7	74.0	79.2	84.5	89.8
SLAB, SECTION 4 & 5	CY 56.1	63.2	70.2	77.3	84.3	91.6	98.6	105.7	112.7	119.8
ABUTMENT WINGS	CY 7.2	7.2	7.2	7.6	7.6	7.6	7.6	7.6	7.6	13.9
ABUTMENT FOOTINGS	CY 40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	48.2
TOTAL	CY 265.2	287.7	312.7	337.6	359.8	384.8	407.0	429.4	451.8	491.5

ESTIMATED QTYS. (SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0	320'-0	340'-0
NO. OF STEEL H-PILES FOR TWO ABUTMENTS (HP 10 X 57)	NO. 16	16	18	18	18	20	20	20	20	26
STRUCTURAL CONCRETE, (BRIDGE)	CY 265.2	287.7	312.7	337.6	359.8	384.8	407.0	429.4	451.8	491.5
REINFORCING STEEL EPOXY COATED	LB 74,707	81,930	89,546	96,904	104,427	111,660	119,217	126,448	133,948	144,462
BARRIER RAILS	LF 354.9	394.9	434.9	474.9	514.9	554.9	594.9	634.9	674.9	734.0
STRUCTURAL STEEL	LB 118,890	155,997	191,842	234,313	294,492	337,130	391,056	472,538	523,659	586,058



LONGITUDINAL SLAB CONSTRUCTION JOINT



TRANSVERSE SLAB CONSTRUCTION JOINT

SPAN LENGTHS			
BRIDGE LENGTH	SPAN 1	SPAN 2	SPAN 3
160'-0	48'-0	64'-0	48'-0
180'-0	54'-0	72'-0	54'-0
200'-0	60'-0	80'-0	60'-0
220'-0	66'-0	88'-0	66'-0
240'-0	72'-0	96'-0	72'-0
260'-0	78'-0	104'-0	78'-0
280'-0	84'-0	112'-0	84'-0
300'-0	90'-0	120'-0	90'-0
320'-0	96'-0	128'-0	96'-0
340'-0	102'-0	136'-0	102'-0

NOTES:

1. CONCRETE DECK SHALL BE PLACED IN SECTIONS AND SEQUENCES INDICATED. ALTERNATE PROCEDURES FOR PLACING DECK CONCRETE MAY BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULTS. FOR APPROVED ALTERNATE PROCEDURES THE ENGINEER SHALL DETERMINE IF A RETARDING ADMIXTURE IS REQUIRED TO MAINTAIN PLASTICITY OF THE CONCRETE DECK DURING PLACEMENT.
2. WEIGHT OF STRUCTURAL STEEL SHOWN ON THIS SHEET INCLUDES: BEAMS, DIAPHRAGMS, SPLICES, SHEAR STUDS, BEARINGS, WELDS AND BOLT HARDWARE.
3. QUANTITY OF STRUCTURAL STEEL SHOWN ON THIS SHEET IS TABULATED FOR BENT PLATE DIAPHRAGM OPTION. PAYMENT FOR STRUCTURAL STEEL WILL BE BASED ON THE QUANTITIES SHOWN. THE CONTRACTOR MAY CHOOSE TO PROVIDE ROLLED SHAPE DIAPHRAGMS AT NO ADDITIONAL COST.
4. QUANTITY OF STRUCTURAL STEEL SHOWN ON THIS SHEET IS BASED ON THE USE OF 5" HIGH SHEAR STUDS. CONTRACTOR WILL BE PAID ON AMOUNT SHOWN, BUT IS REQUIRED TO ADJUST HEIGHT OF STUDS AS REQUIRED PER "BEAM PLAN AND ELEVATION" SHEET.

08-2018
 LATEST REVISION DATE
 APPROVED BY BRIDGE ENGINEER

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

JUNE, 2010

SUPERSTRUCTURE QUANTITIES 30° SKEW **RS40-034-10**