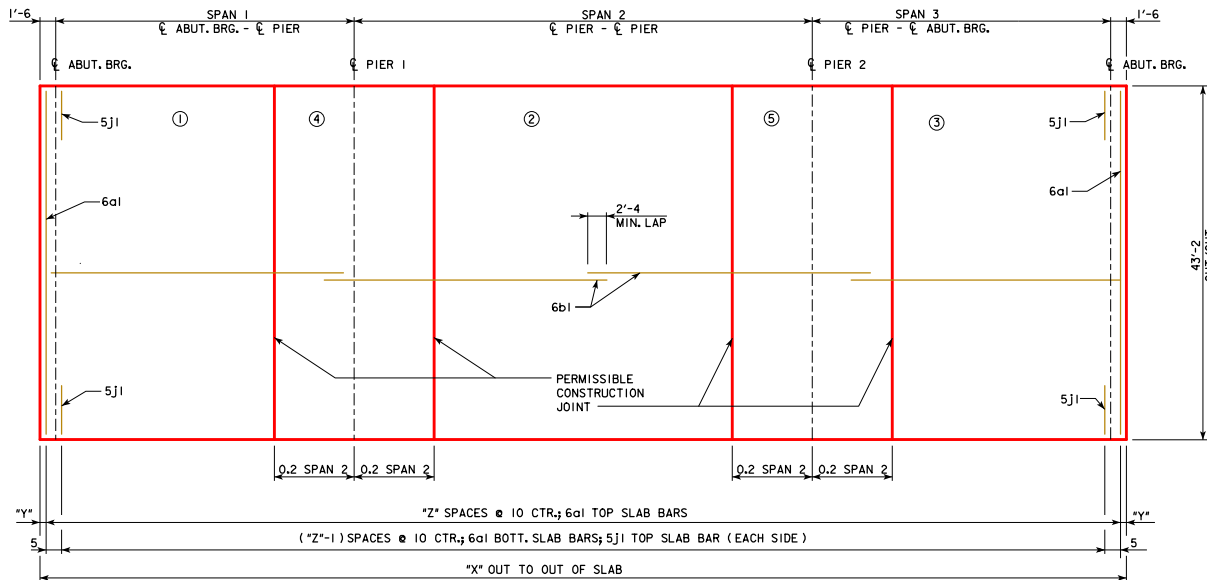
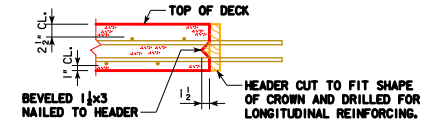


REVISED 07-2015 - CHANGED NOTE 1. CONCRETE PLACEMENT NOTE TO ACCOUNT FOR THE POSSIBLE ADDITION OF A RETARDING ADMIXTURE TO THE CONCRETE.  
REVISED 10-2016 - UPDATED ESTIMATED QUANTITY STRUCTURAL STEEL WEIGHT TO INCLUDE SHEAR STUDS AND DIAPHRAGMS FOR BRIDGE LENGTHS 240'-0" TO 340'-0".



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"



### TRANSVERSE SLAB CONSTRUCTION JOINT

**NOTES:**

- 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.
- WEIGHT OF STRUCTURAL STEEL SHOWN ON THIS SHEET INCLUDES: BEAMS, DIAPHRAGMS, SPLICES, SHEAR STUDS, BEARINGS, WELDS AND BOLT HARDWARE.
- 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 CHANNEL DIAPHRAGMS AT NO ADDITIONAL COST.
- 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.

REINFORCEMENT DIMENSIONS ℄-℄ ABUTMENT BEARINGS	160'-0"	180'-0"	200'-0"	220'-0"	240'-0"	260'-0"	280'-0"	300'-0"	320'-0"	340'-0"
X (F.T-IN.)	163'-0"	183'-0"	203'-0"	223'-0"	243'-0"	263'-0"	283'-0"	303'-0"	323'-0"	343'-0"
Y (IN.)	3	3	3	3	3	3	3	3	3	3
Z (SPACES)	195	219	243	267	291	315	339	363	387	411

### CONCRETE PLACEMENT DIAGRAM SHOWING SLAB REINFORCING

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	113.8	123.8	136.0	147.9	157.8	169.7	179.6	189.6	199.7	212.4
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	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	42.8
<b>TOTAL</b>	<b>CY</b>	<b>254.2</b>	<b>276.6</b>	<b>301.1</b>	<b>325.8</b>	<b>347.9</b>	<b>372.6</b>	<b>394.8</b>	<b>417.1</b>	<b>439.5</b>	<b>478.7</b>

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	16	18	18	18	20	20	20	24
STRUCTURAL CONCRETE, (BRIDGE)	CY	254.2	276.6	301.1	325.8	347.9	372.6	394.8	417.1	439.5	478.7
REINFORCING STEEL EPOXY COATED	LB	74,006	81,229	88,872	96,160	103,682	111,030	118,822	126,054	133,553	143,824
BARRIER RAILS	LF	354.0	394.0	434.0	474.0	514.0	554.0	594.0	634.0	674.0	734.0
STRUCTURAL STEEL	LB	117,817	154,924	189,366	232,911	293,612	334,605	388,387	469,714	521,144	573,803

10-2016 LATEST REVISION DATE  <i>Thomas E. McQuinn</i> APPROVED BY BRIDGE ENGINEER	
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES <b>ROLLED STEEL BEAM BRIDGES</b> JUNE, 2010
	<b>SUPERSTRUCTURE QUANTITIES 0° SKEW</b>
<b>RS40-031-10</b>	