

EPOXY COATED REINFORCING BAR LIST CAST-IN-PLACE ABUTMENT BACKWALL (TWO ABUTMENTS)																						BENT BAR DETAILS										
BAR	LOCATION	SPAN	REINFORCED CONCRETE BOX BEAMS									PRETENSIONED PRESTRESSED CONCRETE BOX BEAMS									THREADED END LENGTH 6d1 *											
			30'-0"			40'-0"			50'-0"			30'-0"			40'-0"			50'-0"				60'-0"			70'-0"							
		SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT			
6d1 *	BACKWALL, VERTICAL	—	168	2'-2	547	168	2'-2	547	168	2'-8	673	168	1'-8	421	168	1'-8	421	168	2'-2	547	164	2'-2	534	168	2'-8	673						
5g1	BACKWALL, HORIZONTAL	—	12	31'-8	396	12	31'-8	396	12	31'-8	396	12	31'-8	396	12	31'-8	396	12	31'-8	396	12	31'-8	396	12	31'-8	396	12	31'-8	396			
	1/4" DIA. SMOOTH DOWELS	—	12	2'-9	138	12	2'-9	138	12	3'-3	163	12	2'-3	113	12	2'-3	113	12	2'-9	138	12	2'-9	138	12	3'-3	163						
TOTAL (LBS.)			1,081			1,081			1,232			930			930			1,081			1,068			1,232								

NOTE: ALL DIMENSIONS ARE OUT TO OUT. D= PIN DIAMETER.

\* SEE BENT BAR DETAILS. THE LENGTHS SHOWN DO NOT INCLUDE AN ALLOWANCE FOR THE THREADED END. BAR LENGTHS MAY NEED TO INCREASE DEPENDING ON THE MECHANICAL COUPLER ASSEMBLY USED. THE COST OF THE THREADED PORTION OF THESE BARS IS TO BE INCLUDED IN THE PRICE BID FOR "REINFORCING STEEL EPOXY COATED" AND NO ADDITIONAL PAYMENT WILL BE MADE. THE WEIGHT OF THE THREADED END IS NOT INCLUDED IN THE QUANTITY SHOWN FOR "REINFORCING STEEL EPOXY COATED".

EPOXY COATED REINFORCING BAR LIST PRECAST ABUTMENT FOOTING (ONE FOOTING)																						BENT BAR DETAILS										
BAR	LOCATION	SPAN	REINFORCED CONCRETE BOX BEAMS									PRETENSIONED PRESTRESSED CONCRETE BOX BEAMS									THREADED MECHANICAL COUPLER LENGTH 6d2 **											
			30'-0"			40'-0"			50'-0"			30'-0"			40'-0"			50'-0"				60'-0"			70'-0"							
		SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT			
5c1	FOOTING END, VERTICAL	—	8	3'-9	31	8	3'-9	31	8	3'-9	31	8	3'-9	31	8	3'-9	31	8	3'-9	31	8	3'-9	31	8	3'-9	31	8	3'-9	31			
5c2	FOOTING END, HORIZONTAL	—	8	4'-4	36	8	4'-4	36	8	4'-4	36	8	4'-4	36	8	4'-4	36	8	4'-4	36	8	4'-4	36	8	4'-4	36	8	4'-4	36			
6d2 **	FOOTING, VERTICAL	—	84	2'-2	273	84	2'-2	273	84	2'-2	273	84	2'-2	273	84	2'-2	273	84	2'-2	273	82	2'-2	267	84	2'-2	273						
8f1	FOOTING, LONGITUDINAL	—	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015	12	31'-8	1015			
6f2	FOOTING, LONGITUDINAL, TOP	—	8	4'-9	57	8	4'-9	57	8	4'-9	57	8	4'-9	57	8	4'-9	57	8	4'-9	57	10	3'-4	50	12	2'-6	45						
5p1	FOOTING HOOPS	□	68	11'-8	827	68	11'-8	827	68	11'-8	827	68	11'-8	827	68	11'-8	827	68	11'-8	827	62	11'-8	754	60	11'-8	730						
TOTAL (LBS.)			2,239			2,239			2,239			2,239			2,239			2,239			2,153			2,130								

NOTE: ALL DIMENSIONS ARE OUT TO OUT. D= PIN DIAMETER.

\*\* INCLUDES MECHANICAL COUPLERS. SEE BENT BAR DETAILS.

CAST-IN-PLACE CONCRETE PLACEMENT QUANTITIES (TWO ABUTMENTS)									
LOCATION	SPAN	REINFORCED CONCRETE BOX BEAMS			PRETENSIONED PRESTRESSED CONCRETE BOX BEAMS				
		30'-0"	40'-0"	50'-0"	30'-0"	40'-0"	50'-0"	60'-0"	70'-0"
BACKWALLS (C.Y.)		6.2	6.2	7.4	4.9	4.9	6.2	6.2	7.4

PRECAST CONCRETE PLACEMENT QUANTITIES (ONE FOOTING)									
LOCATION	SPAN	REINFORCED CONCRETE BOX BEAMS			PRETENSIONED PRESTRESSED CONCRETE BOX BEAMS				
		30'-0"	40'-0"	50'-0"	30'-0"	40'-0"	50'-0"	60'-0"	70'-0"
FOOTING (C.Y.)		11.7	11.7	11.7	11.7	11.7	11.7	11.4	11.1
CMP PILE POCKETS (C.Y.) **		1.4	1.4	1.4	1.4	1.4	1.4	1.7	2.0
TOTAL (C.Y.)		13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1

\*\* HIGH EARLY STRENGTH SELF-CONSOLIDATING CONCRETE.

**ABUTMENT NOTES:**  
 MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.  
 ABUTMENT PILES SHALL BE DRIVEN TO VALUES SHOWN IN THE DESIGN PLANS.  
 CONSTRUCTION KEYWAYS ARE TO BE FORMED WITH BEVELED 2x6'S.  
 THE BACKWALL SHALL BE PLACED AFTER THE UHPC JOINTS BETWEEN THE BEAMS HAVE BEEN COMPLETED.  
 MECHANICAL COUPLERS SHALL BE EPOXY COATED.  
 THE MECHANICAL COUPLERS SHALL MEET THE REQUIREMENTS OF MATERIALS IN 451 APPENDIX E, EXCEPT THE MECHANICAL SPLICE IS REQUIRED TO BE EMBEDDED ON THE ABUTMENT FOOTING SIDE OF THE CONSTRUCTION JOINT.

**CMP PILE POCKET NOTE:**  
 PILE POCKETS SHALL CONSIST OF GALVANIZED STEEL CORRUGATED METAL PIPE (CMP), TYPE 1, 16 GAGE, IN ACCORDANCE WITH THE PRECAST CONCRETE ELEMENTS NOTES. CMP FOR INDIVIDUAL POCKETS SHALL CONSIST OF A SINGLE LENGTH OF PIPE; SPLICING OF PIPE SECTIONS SHALL NOT BE ALLOWED. NOMINAL CMP SIZE SHALL BE 21", FOLLOWING SETTING OF THE FOOTING, THE PILE POCKETS SHALL BE FILLED WITH THE TOP OF FOOTING USING HIGH EARLY STRENGTH SELF-CONSOLIDATING CONCRETE IN ACCORDANCE WITH THE PRECAST CONCRETE ELEMENTS NOTES.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 24'-0 ROADWAY, SINGLE SPAN <b>CONCRETE BOX BEAM BRIDGES</b>	<b>B24-18-16</b>
		DECEMBER, 2016	
		<b>ABUTMENT DETAILS (PRECAST)          SHEET PILE WINGS          0° SKEW          (SHEET 2 OF 2)</b>	