

### BILL OF REINFORCING STEEL - ONE ABUTMENT - 0° SKEW

BRIDGE LENGTH		QUANTITY												
LOCATION		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
8r1	ABUTMENT FOOTING LONGITUDINAL	C.Y.	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.5	11.4	11.3
5s1	ABUTMENT FOOTING HOOPS	LBS.	1555	1555	1555	1600	1600	1645	1645	1607	1641			
6+1	FOOTING TO SLAB DOWELS	NO.	8	8	8	9	9	10	10	12	13			
6+2	FOOTING TO SLAB DOWELS	NO.	8	8	8	9	9	10	10	12	13			
#2	PILE SPIRAL	FT.	-	-	-	-	-	-	-	-	-	120	130	
SPIRAL SPACERS - L X X X X 0.70														
REINFORCING STEEL - TOTAL (LBS.)			1555	1555	1555	1600	1600	1645	1645	1607	1641			

### BILL OF REINFORCING STEEL - ONE ABUTMENT - 15° SKEW

BRIDGE LENGTH		QUANTITY												
LOCATION		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
8r2	ABUTMENT FOOTING LONGITUDINAL	C.Y.	11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.9	10.9	10.8	10.7	
5s1	ABUTMENT FOOTING HOOPS	LBS.	1576	1576	1576	1621	1621	1666	1666	1710	1628	1662		
5s2	ABUTMENT FOOTING HOOPS	LBS.	8	8	8	9	9	10	10	11	12	13		
6+1	FOOTING TO SLAB DOWELS	NO.	8	8	8	9	9	10	10	12	13			
6+2	FOOTING TO SLAB DOWELS	NO.	8	8	8	9	9	10	10	12	13			
#2	PILE SPIRAL	FT.	-	-	-	-	-	-	-	-	-	120	130	
SPIRAL SPACERS - L X X X X 0.70														
REINFORCING STEEL - TOTAL (LBS.)			1576	1576	1576	1621	1621	1666	1710	1628	1662			

### BILL OF REINFORCING STEEL - ONE ABUTMENT - 30° SKEW

BRIDGE LENGTH		QUANTITY												
LOCATION		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
8r2	ABUTMENT FOOTING LONGITUDINAL	C.Y.	12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.1	12.0	
5s1	ABUTMENT FOOTING HOOPS	LBS.	1726	1726	1783	1783	1736	1736	1780	1698	1732			
5s2	ABUTMENT FOOTING HOOPS	LBS.	8	8	9	9	10	10	11	12	13			
6+1	FOOTING TO SLAB DOWELS	NO.	9	9	9	10	10	11	11	12	13			
6+2	FOOTING TO SLAB DOWELS	NO.	9	9	9	10	10	11	11	12	13			
#2	PILE SPIRAL	FT.	-	-	-	-	-	-	-	-	-	130	140	
SPIRAL SPACERS - L X X X X 0.70														
REINFORCING STEEL - TOTAL (LBS.)			1726	1726	1783	1783	1736	1736	1780	1698	1732			

### BILL OF REINFORCING STEEL - ONE ABUTMENT - 45° SKEW

BRIDGE LENGTH		QUANTITY												
LOCATION		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
8r2	ABUTMENT FOOTING LONGITUDINAL	C.Y.	15.2	15.2	15.1	15.1	15.1	15.1	15.1	15.1	15.0	15.0	14.9	
5s1	ABUTMENT FOOTING HOOPS	LBS.	2026	2026	2026	1990	1990	2046	1976	2021	2065			
5s2	ABUTMENT FOOTING HOOPS	LBS.	9	9	9	10	10	11	11	12	13			
6+1	FOOTING TO SLAB DOWELS	NO.	9	9	9	10	10	11	11	12	13			
6+2	FOOTING TO SLAB DOWELS	NO.	9	9	9	10	10	11	11	12	13			
#2	PILE SPIRAL	FT.	-	-	-	-	-	-	-	-	-	140	150	
SPIRAL SPACERS - L X X X X 0.70														
REINFORCING STEEL - TOTAL (LBS.)			2026	2026	2026	1990	1990	2046	1976	2021	2065			

NOTE: THE PILE SPIRALS AND SPIRAL SPACERS ARE TO BE NON-COATED REINFORCING BUT MAY BE EPOXY COATED AT THE CONTRACTORS OPTION AND EXPENSE.

### ESTIMATED QUANTITIES - ONE ABUT. - 0° SKEW

LOCATION		UNIT	QUANTITY											
BRIDGE LENGTH		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		11.6	11.6	11.6	11.6	11.6	11.5	11.5	11.4	11.3			
REINFORCING STEEL	LBS.		1555	1555	1555	1600	1600	1645	1645	1607	1641			
WOOD PILES (TREATED)	NO.		8	8	8	9	9	10	10	12	13			
PREBORE HOLES	FT.		-	-	-	-	-	-	-	-	-	120	130	

### ESTIMATED QUANTITIES - ONE ABUT. - 15° SKEW

LOCATION		UNIT	QUANTITY											
BRIDGE LENGTH		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		11.0	11.0	11.0	11.0	11.0	10.9	10.9	10.8	10.7			
REINFORCING STEEL	LBS.		1576	1576	1576	1621	1621	1666	1710	1628	1662			
WOOD PILES (TREATED)	NO.		8	8	8	9	9	10	11	12	13			
PREBORE HOLES	FT.		-	-	-	-	-	-	-	-	-	120	130	

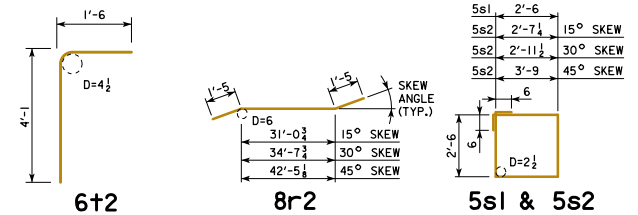
### ESTIMATED QUANTITIES - ONE ABUT. - 30° SKEW

LOCATION		UNIT	QUANTITY											
BRIDGE LENGTH		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.1	12.0			
REINFORCING STEEL	LBS.		1726	1726	1783	1783	1736	1736	1780	1698	1732			
WOOD PILES (TREATED)	NO.		8	8	9	9	10	10	11	12	13			
PREBORE HOLES	FT.		-	-	-	-	-	-	-	-	-	120	130	

### ESTIMATED QUANTITIES - ONE ABUT. - 45° SKEW

LOCATION		UNIT	QUANTITY											
BRIDGE LENGTH		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0			
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		15.2	15.2	15.1	15.1	15.1	15.1	15.1	15.0	14.9			
REINFORCING STEEL	LBS.		2026	2026	2026	1990	1990	2046	1976	2021	2065			
WOOD PILES (TREATED)	NO.		9	9	9	10	10	11	11	12	13			
PREBORE HOLES	FT.		-	-	-	-	-	-	-	-	-	130	140	

### BENT BAR DETAILS



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

REVISED 07-2009; CONCRETE QUANTITIES CHANGED.  
REVISED 09-2020; UPDATED BRIDGE ENGINEER SIGNATURE.

09-2020 LATEST REVISION DATE   APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE SLAB BRIDGES</b> NOVEMBER, 2006
	<b>ABUTMENT DETAILS TIMBER PILING</b>
	<b>J30-33-06</b>