





90° BEND SECTION QUANTITIES							
ONE BEND SECTION SHOWN, TWO REQUIRED							
DESCRIPTION	UNIT	TOTAL					
CLASS AA CONCRETE	C.Y.	7.90					
REINFORCING STEEL	LB.	2,760.00					

ONE BEND SECTION SHOWN, TWO REQUIRED							
MARK	NO.	SIZE	FORM	LENGTH	REMARKS		
PLAIN REINFORCING BARS							
A2	52	#6	STR.	10'-8"			
A3	68	#6	STR.	8'-6"			
A4	24	#6	STR.	7'-4"			
B3	45	#6	BNT.	3'-0"			
B4	25	#6	BNT.	5'-5"			
B5	20	#6	BNT.	5'-8"			
C1	2	#4	STR.	5'-9"			
C2	2	#4	STR.	7'-9"			
D1	28	#4	BNT.	5'-7"			
E3	8	#4	STR.	10'-8"			
E4	4	#4	BNT.	4'-0"			
E5	4	#4	BNT.	8'-0"			

90° BEND SECTION BAR LIST

STRUCTURE 16 QUANTITIES								
DESCRIPTION	UNIT	TOTAL						
UNCLASSIFIED EXCAVATION	C.Y.	1,430.00						
STRUCTURAL EXCAVATION UNCLASSIFIED	C.Y.	128.00						
CLASS AA CONCRETE	C.Y.	359.50						
REINFORCING STEEL	LB.	54,480.00						

GENERAL NOTES (90° AND 5° BEND SECTIONS ONLY)

DESIGN DATA
RCB STANDARD BARRELS AND STANDARD END SECTIONS DESIGNED IN
ACCORDANCE WITH 2007 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

90° AND 5° BEND SECTIONS DESIGNED IN ACCORDANCE WITH 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND 2016 INTERIMS.

SPECIFICATIONS
COMPLY WITH THE REQUIREMENTS OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

ALL STATIONS AND OFFSETS REFER TO C N.W. 178TH.

ALL CONCRETE SHALL BE CLASS AA CONCRETE. ALL CONCRETE EDGES SHALL HAVE A 1 1/2" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS SHALL BE SIZED LUMBER. OPENINGS IN THE WALLS OF RCB FOR R.C. PIPES HAVE BEEN DEDUCTED FROM THE CLASS AA CONCRETE QUANTITIES.

ALL REINFORCING STEEL SHALL BE GRADE 60 AND HAVE A 2" MINIMUM CLEARANCE UNLESS OTHERWISE SHOWN ON THE PLANS. CONTRACTOR SHALL FIELD BEND AND FIELD CUT REINFORCING STEEL AROUND PIPE OPENINGS TO MAINTAIN A 2" MINIMUM CLEARANCE. OPENINGS IN THE WALLS OF RCB FOR R.C. PIPES HAVE NOT BEEN DEDUCTED FROM THE REINFORCING STEEL QUANTITIES. REINFORCING STEEL IN BOTTOM SLAB SHALL BE SUPPORTED ON BAR CHAIRS. CHAIRS SHALL BE SEPARATED ON TIMBER PLANKS OR CLASS C CONCRETE STRIPS SPACED AT 4'-0" CENTERS. THE TOP CHAIR SUPPORTS SHALL BE AT THE ELEVATION OF THE BOTTOM OF FOOTING, REINFORCING STEEL IN THE TOP SLAB SHALL BE SUPPORTED ON SLAB SPACERS. REINFORCING STEEL IN THE WALLS SHALL BE HELD IN PLACE BY METAL CHAIRS. MAXIMUM SPACING OF CHAIRS SHALL BE ON 6'-0" CENTERS. COST OF METAL CHAIRS, WOOD PLANKS, OR CONCRETE STRIPS SHALL BE INCLUDED IN OTHER ITEMS OF WORK. SOME REINFORCING STEEL BAR MARKS ARE REPEATED BETWEEN AND WITHIN STRUCTURES. TO ENSURE THAT ALL BARS ARE PLACED WITH THE CORRECT STRUCTURE OR COMPONENT, THE STRUCTURE NUMBER AND COMPONENT SHOULD ACCOMPANY THE BAR MARK.

STRUCTURE 16 DETAILS

(90° AND 5° BEND DETAILS) (DETAIL 1 OF 4)

14964(08) ___Sheet No._