Drawing Num
RCB-012

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OLIAN	TITIES					1																			DE	INEO	RCIN	10 81	EEL																		$\neg$ $\mid$	
PER FOOT OF BARREL			SECTION DIMENSIONS								Т	A2 BARS				A3 BARS				B1 BARS							B2 BARS		16 5	EEL	C1 BAR		Τ	C2 BARS			C3 BARS				C4 BARS				RS		BARS	
								ATBARS				AZ BARS				AJ BARS			BIBARS					DZ DARO							CIDARS				OZ BARO			C3 BARS							AX.	AT 12	2" MAX.	
CONC. (C.Y.)	REINF. (LB.)	s	н	Т	U	N Z	SIZE	SPA.	LENGTH	WEIGH PER FT.		SPA.	LENGTH	WEIGH PER FT.	SIZE	SPA.	LENGTH	WEIGHT PER FT.	SIZE	TX" (HORIZ.	"Y" (VERT.)	LENGTH	WEIGHT PER FT.	SIZE	SPA.	"X" (HORIZ.)	"Y" (VERT.)	LENGTH	WEIGHT PER FT.	SIZE	LENGT	WEIGH H PER FT.	SIZE	SPA.	NGTH PE	R 🛛	SPA.	LENGTH	WEIGHT PER FT.	SIZE	LENG	WEIGH TH PER FT.		1 111 1 11	VEIGHT PER N FT.	NO. SIZE	WEIG PEI FT	≣R
1.75	248.8	6'	3'	10"	11"   1	0" 10"	#5	12"	21'-0"	43.8	#6	6 12"	12'-6"	37.6	#4	12"	6'-9"	18.0	#5 1:	2" 2'-8"	2'-8"	5'-4"	11.1	#5	12"	2'-8"	3'-8"	6'-4"	13.2	#4 6	" 2'-3"	12.0	#4	6" ;	3'-8" 19	6 #4	12"	2'-3"	3.0	#4 12	." 3'-8'	4.9	104	#4	69.5	24 #4	4 16.	.0
1.88	262.9	6'	4'	10"	11"   1	0" 10"	#5	12"	21'-0"	43.8	#6	6 12"	12'-6"	37.6	#4	12"	6'-9"	18.0	#5 1:	2" 2'-8"	2'-8"	5'-4"	11.1	#5	12"	2'-8"	4'-8"	7'-4"	15.3	#4 6	" 2'-3"	12.0	#4	6" 4	1'-8" 24	9 #4	12"	2'-3"	3.0	#4 12	" 4'-8'	6.2	104	#4	69.5	32 #4	4 21.	.4
2.00	277.0	6'	5'	10"	11"   1	0" 10"	#5	12"	21'-0"	43.8	#6	6 12"	12'-6"	37.6	#4	12"	6'-9"	18.0	#5 1:	2" 2'-8"	2'-8"	5'-4"	11.1	#5	12"	2'-8"	5'-8"	8'-4"	17.4	#4 6	" 2'-3"	12.0	#4	6"	5'-8" 30	3 #4	12"	2'-3"	3.0	#4 12	" 5'-8'	7.6	104	#4	69.5	40 #4	4 26.	.7
2.12	291.1	6'	6'	10"	11"   1	0" 10"	#5	12"	21'-0"	43.8	#6	6 12"	12'-6"	37.6	#4	12"	6'-9"	18.0	#5 1:	2" 2'-8"	2'-8"	5'-4"	11.1	#5	12"	2'-8"	6'-8"	9'-4"	19.5	#4 6	" 2'-3"	12.0	#4	6" (	8'-8" 35	6 #4	12"	2'-3"	3.0	#4 12	." 6'-8'	8.9	104	#4	69.5	48 #4	4 32.	1
1.95	290.7	7'	3'	10"	11"   1	0" 10"	#5	12"	24'-0"	50.1	#7	7 12"	14'-8"	60.0	#4	12"	7'-5"	19.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	3'-8"	5'-11"	15.8	#4 6	" 2'-3"	12.0	#4	6" :	3'-8" 19	6 #4	12"	2'-3"	3.0	#4 12	." 3'-8'	4.9	116	#4	77.5	24 #4	4 16.	.0
2.07	306.1	7'	4'	10"	11"   1	0" 10"	#5	12"	24'-0"	50.1	#7	7 12"	14'-10"	60.6	#4	12"	7'-5"	19.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	4'-8"	6'-11"	18.5	#4 6	" 2'-3"	12.0	#4	6" 4	1'-8" 24	9 #4	12"	2'-3"	3.0	#4 12	" 4'-8'	6.2	116	#4	77.5	32 #4	4 21.	.4
2.19	320.8	7'	5'	10"	11"   1	0" 10"	#5	12"	24'-0"	50.1	#7	7 12"	14'-10"	60.6	#4	12"	7'-5"	19.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	5'-8"	7'-11"	21.2	#4 6	" 2'-3"	12.0	#4	6"	5'-8" 30	3 #4	12"	2'-3"	3.0	#4 12	5'-8'	7.6	116	#4	77.5	40 #4	4 26.	.7
2.32	335.5	7'	6'	10"	11"   1	0" 10"	#5	12"	24'-0"	50.1	#7	7 12"	14'-10"	60.6	#4	12"	7'-5"	19.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	6'-8"	8'-11"	23.8	#4 6	" 2'-3"	12.0	#4	6" (	8'-8" 35	6 #4	12"	2'-3"	3.0	#4 12	." 6'-8'	8.9	116	#4	77.5	48 #4	4 32.	1
2.44	350.2	7'	7'	10"	11"   1	0" 10"	#5	12"	24'-0"	50.1	#7	7 12"	14'-10"	60.6	#4	12"	7'-5"	19.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	7'-8"	9'-11"	26.5	#4 6	" 2'-3"	12.0	#4	6"	7'-8" 41	0 #4	12"	2'-3"	3.0	#4 12	'' 7'-8'	10.2	116	#4	77.5	56 #4	4 37.	.4
2.14	324.7	8'	3'	10"	11"   1	0" 10"	#4	6"	27'-0"	72.1	#5	5 6"	14'-10"	61.9	#4	12"	8'-2"	21.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	3'-8"	5'-11"	15.8	#4 6	" 2'-3"	12.0	#4	6" ;	3'-8" 19	6 #4	12"	2'-3"	3.0	#4 12	." 3'-8'	4.9	128	#4	85.5	24 #4	4 16.	.0
2.27	339.4	8'	4'	10"	11"   1	0" 10"	#4	6"	27'-0"	72.1	#5	5 6"	14'-10"	61.9	#4	12"	8'-2"	21.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	4'-8"	6'-11"	18.5	#4 6	" 2'-3"	12.0	#4	6" 4	l'-8" 24	9 #4	12"	2'-3"	3.0	#4 12	" 4'-8'	6.2	128	#4	85.5	32 #4	4 21.	.4
2.39	354.1	8'	5'	10"	11" 1	0" 10"	#4	6"	27'-0"	72.1	#5	5 6"	14'-10"	61.9	#4	12"	8'-2"	21.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	5'-8"	7'-11"	21.2	#4 6	" 2'-3"	12.0	#4	6"	5'-8" 30	3 #4	12"	2'-3"	3.0	#4 12	." 5'-8'	7.6	128	#4	85.5	40 #4	4 26.	.7
2.51	368.8	8'	6'	10"	11"   1	0" 10"	#4	6"	27'-0"	72.1	#5	5 6"	14'-10"	61.9	#4	12"	8'-2"	21.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	6'-8"	8'-11"	23.8	#4 6	" 2'-3"	12.0	#4	6" (	8'-8" 35	6 #4	12"	2'-3"	3.0	#4 12	." 6'-8'	8.9	128	#4	85.5	48 #4	4 32.	1
2.64	383.5	8'	7'	10"	11" 1	0" 10"	#4	6"	27'-0"	72.1	#5	5 6"	14'-10"	61.9	#4	12"	8'-2"	21.8	#4 6	" 2'-3"	2'-3"	4'-6"	12.0	#4	6"	2'-3"	7'-8"	9'-11"	26.5	#4 6	" 2'-3"	12.0	#4	6"	7'-8" 41	0 #4	12"	2'-3"	3.0	#4 12	." 7'-8'	10.2	2 128	#4	85.5	56 #4	4 37.	.4
2.88	400.5	8'	8'	10"	11" 1	1" 11"	#4	6"	27'-4"	73.0	#5	5 6"	15'-0"	62.6	#4	12"	8'-3"	22.0	#4 6	" 2'-4"	2'-3"	4'-7"	12.2	#4	6"	2'-4"	8'-8"	11'-0"	29.4	#4 6	" 2'-3"	12.0	#4	6" 8	3'-8" 46	3 #4	12"	2'-3"	3.0	#4 12	." 8'-8'	11.6	128	#4	85.5	64 #4	4 42.	8

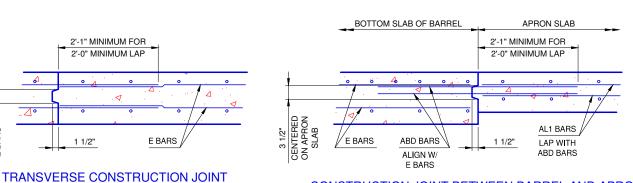
A, B AND C BARS ARE CENTERED PER L.F. OF BARREL LENGTH. FOR 0 SKEW END SECTIONS, ADJUST BAR QUANTITIES AS SHOWN ON END SECTION DETAILS, SHEET 2 OF 2. NO ADJUSTMENT IS REQUIRED FOR 30 DEGREE SKEW END SECTIONS.

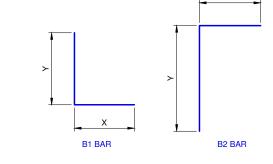
E BARS

2'-1" MINIMUM FOR

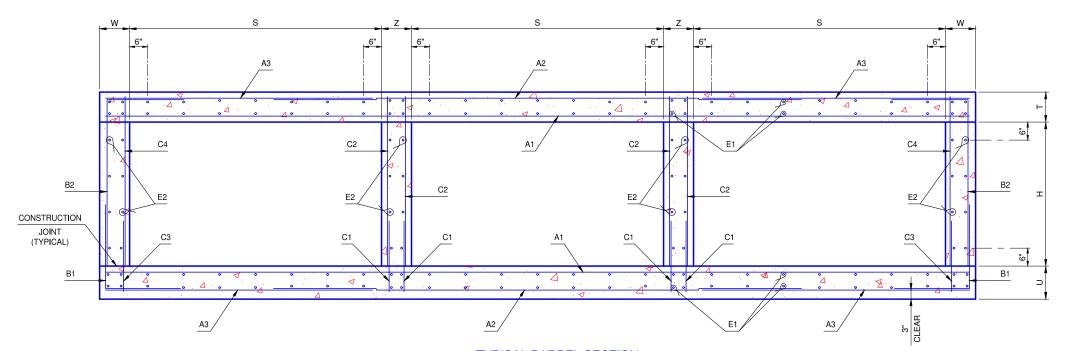
2'-0" MINIMUM LAP

1 1/2"





## CONSTRUCTION JOINT BETWEEN BARREL AND APRON



## TYPICAL BARREL SECTION

SEE SCHEDULE ON THIS SHEET FOR ACTUAL NUMBER AND SPACING OF E1 AND E2 BARS.

## R.C.B. GENERAL NOTES

**DESIGN DATA** 

H-20 TRUCK

HS-20 TRUCK

CLASS AA CONCRETE f'c = 4 K.S.I. REINFORCING STEEL fy = 60 K.S.I.

TYPE 3-3 (SPECIAL HAULING VEHICLE) EV3 (TANDEM REAR AXLE EMERGENCY VEHICLE)

COMPLY WITH THE REQUIREMENTS OF THE CURRENT THE CITY OF OKLAHOMA CITY STANDARD SPECIFICATIONS.

HL-93 LOADING OR OKLAHOMA DEPARTMENT OF TRANSPORTATION OVERLOAD TRUCK

SHV NRL (SPECIAL HAULING VEHICLE NOTIONAL RATING LOAD) ALL LOAD VEHICLES LISTED, EXCEPT HL-93 AND OKLAHOMA DEPARTMENT OF TRANSPORTATION OVERLOAD TRUCK, WERE ANALYZED USING LOAD FACTOR DESIGN (LFD).

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION AASHTO MANUAL FOR BRIDGE EVALUATION, 3RD EDITION, 2018, WITH 2019 INTERIM REVISIONS

PROVIDE A 1 1/2" CHAMFER ON ALL EXPOSED CONCRETE EDGES. USE SIZED LUMBER FOR ALL CHAMFER STRIPS.

**BASIS OF PAYMENT** 

DESCRIPTION

LBS. L.F.

404-00 STRUCTURAL CONCRETE C.Y.

411-00 REINFORCING STEEL

982 PIPE RAILING

PROVIDE 2" MINIMUM CLEAR COVER FOR ALL REINFORCING STEEL UNLESS NOTED OTHERWISE.

PLACE TRANSVERSE CONSTRUCTION JOINTS IN ALL CULVERTS 100 FT. OR MORE IN LENGTH AT A MAXIMUM SPACING OF 60 FT. SUBMIT LOCATIONS TO THE CITY ENGINEER FOR APPROVAL. SEE TRANSVERSE CONSTRUCTION JOINT DETAIL ON THIS SHEET.

THE QUANTITY FOR REINFORCING STEEL OF E1 AND E2 BARS DOES NOT INCLUDE LAP SPLICES IN THE LENGTH OF THE BARREL OR AT TRANSVERSE CONSTRUCTION JOINTS WITHIN THE BARREL. COSTS FOR SPLICES WILL NOT BE MEASURED FOR PAYMENT AND WILL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REINFORCING STEEL.

PIPE RAILING REQUIRED ON TOP OF HEADWALL AND WINGWALLS. SEE STD. RCB-015 PipeRailing.

PLACE WD AND ABD BARS FOR WINGWALLS AND APRON TIED TO BARREL REINFORCING BEFORE PLACING BARREL CONCRETE

REVISION NO.

DATE