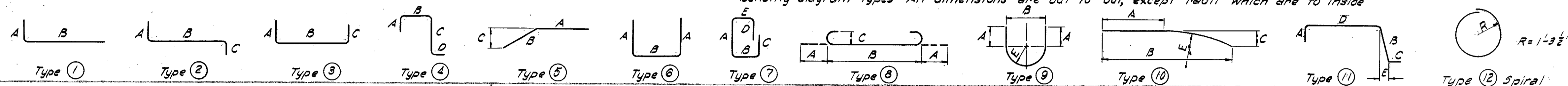


CUYAHOGA & LAKE COUNTIES
CUY-1-15.91
LAK-1-0.00

REINFORCING STEEL BAR SCHEDULE

Bending diagram types - All dimensions are out to out, except radii which are to inside



ABUTMENTS										
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A601	84	6	6'-0"	1	9 1/2"	5'-4"				757
A602	76	6	18'-4"	7	7'-7"	1'-5"	6'-3"	2'-11"	10"	2093
A501	32	5	23'-0"	5tr.						768
A502	168	5	9'-7"	6	2'-1"	5'-8"				1679
A503	10	5	14'-7"	5tr.						152
A504	6	5	14'-8"	5tr.						92
A505	4	5	16'-3"	5tr.						68
A506	60	5	3'-5"	6	7 1/2"	2'-5"				214
A507	84	5	2'-5"	5tr.						212
A508	68	5	21'-10"	5tr.						1549
A509	36	5	10'-5"	6	4'-9"	1'-2"				391
A510	96	5	7'-1"	6	2'-1"	3'-2"				709
A511	26	5	5'-3"	1	7 1/2"	4'-9"				142
A512	18	5	6'-2"	8	7"	5'-0"	5 1/2"			116
A513	12	5	13'-6"	5tr.						169
A514	12	5	13'-0"	5tr.						163
A515	4	5	15'-3"	5	11'-0"	4'-4"	2'-0"			64
A516	8	5	13'-7"	5tr.						113
A517	32	5	18'-11"	5tr.						631
A518	18	5	7'-2"	5tr.						135
A519	6	5	7'-7"	5tr.						47
A520	48	5	4'-3"	5tr.						213
A521	8	5	4'-11"	5tr.						41
A522	8	5	4'-4"	5tr.						36
A523	48	5	3'-6"	5tr.						175
A524	8	5	12'-2"	5tr.						102
A525	40	5	4'-5"	11	7 1/2"	1'-3"	0	2'-9"	3"	184
A526	40	5	3'-4"	1	7 1/2"	2'-10"				139
A527	8	5	4'-3"	11	7 1/2"	1'-3"	0	2'-7"	3"	35
A528	8	5	3'-2"	1	7 1/2"	2'-8"				26
A529	24	5	2'-10" to 4'-11"	11	7 1/2"	1'-3"	0	1'-2" to 2'-9"	3"	87
A530	24	5	1'-0" to 3'-0"	1	7 1/2"	1'-3"	0	10"	3"	59
A531	4	5	2'-6"	11	7 1/2"	1'-3"	0	10"	3"	10
A532	4	5	1'-5"	1	7 1/2"	1'-1"				6
A533	4	5	2'-1"	11	7 1/2"	1'-3"	0	5"	3"	9
A534	4	5	1'-0"	1	7 1/2"	6"				4
A535	4	5	17'-4"	5tr.						72
A536	2	5	14'-0"	5tr.						29
A537	2	5	15'-2"	5tr.						32
A538	4	5	18'-0"	10	6'-1"	17'-9"	2'-5"	29'-9"		75
A539	4	5	20'-3"	10	8'-4"	20'-0"	2'-5"	29'-9"		84
A540	72	5	9'-0"	5tr.						676
A541	24	5	8'-8"	5tr.						217
A542	4	5	14'-11"	5	11'-0"	4'-0"	2'-3"			62
A401	72	4	3'-3"	1	6 3/4"	2'-10"				156
A402	72	4	4'-2"	4	1'-2"	8"	2'-2"	6 3/4"		200
R403	16	4	17'-5"	5tr.	Included with Railing for Payment					
Total Weight										12,993

REPLACEMENT BARS					
MARK	NO.	SIZE	LENGTH	TYPE	WEIGHT
RE 1101	3	11	7'-6"	5tr.	
RE 902	1	9	6'-10"	5tr.	
RE 703	3	7	6'-3"	5tr.	
RE 604	5	6	5'-11"	5tr.	
RE 505	1	5	5'-7"	5tr.	
RE 406	1	4	5'-3"	5tr.	
RE 407	1	3/8"	5'-3"	12	

* 4 sets of 6, each bar varies by 3".

REPLACEMENT BARS

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test sample as provided in section 5-4.02 need not be furnished and replacement bars will not be required.

SUPERSTRUCTURE										
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT
S701	623	7	36'-0"	5tr.						45,846
S702	46	7	6'-10" to 33'-6"	5tr.	2 sets of 23, Varies by 1'-2 1/2"					1,892
S703	10	7	6'-9"	5tr.						138
S601	623	6	36'-0"	5tr.						33,686
S602	46	6	6'-10" to 33'-6"	5tr.	2 sets of 23, Varies by 1'-2 1/2"					1,390
S603	10	6	6'-9"	5tr.						101
S604	120	6	38'-0"	5tr.						6,849
S605	167	6	39'-3"	5tr.						45,217
S501	978	5	5'-0"	11	7 1/2"	1'-3"	7 1/2"	2'-10"	3"	5,100
S401	978	4	4'-2"	4	1'-4"	8"	2'-0"	6 1/2"		2,722
S402	978	4	3'-1"	1	6 1/2"	2'-8"				2,014
R403	224	4	16'-1"	5tr.						Included with railing for payment
R404	16	4	13'-0"	5tr.						
Total Weight										144,955

PIERS										
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P1101	10	11	43'-5"	6	3'-2"	37'-9"				2307
P1102	10	11	42'-8"	6	3'-2"	37'-0"				2267
P1103	10	11	41'-0"	6	3'-2"	35'-4"				2178
P1104	10	11	20'-0"	5tr.						1063
P1105	35	11	38'-6"	8	1'-7"	35'-4"	1'-1 1/2"			7159
P1106	108	11	18'-0"	5tr.						10,328
P1107	54	11	18'-7"	5tr.						5,331
P1108	54	11	19'-10"	5tr.						5,689
P1109	54	11	17'-0"	5tr.						4,877
P110	270	11	7'-4"	1	1'-6 3/8"	6'-2"				10,520
P901	420	9	12'-2"	8	1'-3"	9'-8"	1'-1 1/2"			17,374
P501	130	5	3'-8"	6	7 1/2"	2'-8"				498
P502	10	5	3'-1"	6	7 1/2"	2'-1"				32
P503	10	5	2'-2"	6	7 1/2"	1'-2"				23
P504	40	5	3'-5"	9	2'-10"	2'-5 1/2"		1'-2"		393
P505	10	5	35'-4"	5tr.						368
P506	200	5	7'-7"	6	2'-7"	2'-8"				1,581
Total Weight										76,320

SPIRAL BARS							
MARK	TOTAL	SIZE	LENGTH	PITCH	NO. OF TURNS	CORE DIA.	WEIGHT
SP401	6	1/2"	15'-1"	4 1/2"	43	32"	1691
SP402	3	1/2"	15'-9"	4 1/2"	45	32"	886
SP403	3	1/2"	17'-0"	4 1/2"	48	32"	945
SP404	3	1/2"	14'-2"	4 1/2"	41	32"	810
Total Weight							76,320

SPIRAL NOTES

The "length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap.
The "No. of Turns" shown in the steel list for the spiral bars is the "length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number.
Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4.
1/2 closed coils shall be provided at ends of each spiral unit.
Four steel channel, tee or angle spacers, weighing approximately 0.68 lbs. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lbs. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

BAR SIZE

Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A401 is a no. 4 size bar and A114 is a no. 11 size bar.

ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR.	ABUTS.	PIERS	GENERAL
E-2	671	Cu.Yds	Unclassified Excavation		271	400	
5-1	633	Cu.Yds	Class "C" Concrete, Superstructure	633			
5-1	139	Cu.Yds	Class "C" Concrete, Pier Caps & Columns			139	
5-1	105	Cu.Yds	Class "E" Concrete, Abutment Above Footing		105		
5-1	242	Cu.Yds	Class "E" Concrete, Footings		76	166	
5-4	234,268	Lbs.	Reinforcing Steel	144,955	12,993	76,320	
5-7	480,200	Lbs.	Structural Steel	480,200			
5-8	480,200	Lbs.	Field Painting of Structural Steel, as per plan	480,200			
5-14	1,048	Lin.Ft.	Railing (Aluminum Rail Support, Concrete Parapet)				1,048
5-16	Lump	Sum	First Test Pile				Lump Sum
5-18	2,787	Lin.Ft.	Steel Piles 12 BP53		1,140	1,647	
5-29	36	Cu.Yds	Porous Backfill		36		
E-10	440	Sq.Yds	Crushed Aggregate Slope Protection				440

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

REINFORCING STEEL LIST & ESTIMATED QUANTITIES

BRIDGE NO. LAK-1-0106
UNDER CHARDON ROAD

LAKE COUNTY STA 55+15.53

Designed	Drawn	Traced	Checked	Reviewed-Date	Revised
Y.G.	A.M.	A.M.	D.F.B. G.M.W.	H.G.H. 10-19-59	4-19-60