

# CALCULATIONS

**Item 448 - Asphalt Concrete Intermediate Course, Type 1, AC-20 (1-3/4")**

Sta 246+75 to 249+18	243 [(36.6+48)/2] + (125 x 45) + 100 [(45 + 33)/2] + (18 x 33)	=	20,398 SF
Sta 249+18 to 251+18	(200 x 81)	=	16,200 SF
Sta 251+18 to 252+18	planimeter	=	10,000 SF
Sta 252+18 to 252+32.07 (14 x 81)		=	1,134 SF
	SUBTOTAL	=	47,732 SF
	(47,732 X 1.75/12 X 1/27)	=	257 CY
Willoughby	= 0 CY		
Eastlake	= 257 CY		

**Item 448 - Asphalt Concrete Intermediate Course, Type I, AC-20 (1")**

Sta 252+32.07 to 256+88	(456 x 25) + (136 x 40) + 320 [(40+25)/2]	=	27,240 SF
Sta 256+88 to 259+69	(281 x 50)	=	14,050 SF
Sta 259+69 to 262+19	(250 x 25) + 250 [(25+36)/2]	=	13,875 SF
Sta 262+19 to 265+33	(314 x 50)	=	15,700 SF
Sta 265+33 to 266+98	planimeter	=	10,275 SF
Sta 266+98 to 270+12	(314 x 25) + (314 x 36)	=	19,154 SF
Sta 270+12 to 272+62	(250 x 25) + 250 [(25+36)/2]	=	13,875 SF
Sta 272+62 to 282+64	(1,002 x 50)	=	50,100 SF
Sta 282+64 to 285+84	320 [(40+25)/2] + (320 x 25)	=	18,400 SF
Sta 285+84 to 289+14	(330 x 40) + (330 x 25)	=	21,450 SF
Sta 289+14 to 290+06	planimeter	=	7,200 SF
Sta 290+06 to 291+56	150 (40+25)	=	9,750 SF
Sta 291+56 to 294+76	(320 x 25) + 320 [(40+25)/2]	=	18,400 SF
Sta 294+76 to 307+66	(1,290 x 50)	=	64,500 SF
Sta 307+66 to 310+13	247 [(36+25)/2] + (247 x 25)	=	13,708 SF
Sta 310+13 to 310+63	(50 x 61)	=	3,050 SF
Sta 310+63 to 311+55	planimeter	=	6,200 SF
Sta 311+55 to 312+05	(50 x 61)	=	3,050 SF
Sta 312+05 to 317+19	(514 x 25) + (514 x 30.5)	=	28,527 SF
Sta 317+19 to 317+69	(50 x 61)	=	3,050 SF
Sta 317+69 to 318+61	(92 x 68)	=	6,256 SF
Sta 318+61 to 319+11	(50 x 61)	=	3,050 SF
Sta 319+11 to 321+61	(250 x 25) + (250 x 30.5)	=	13,875 SF
Sta 321+61 to 323+48	(187 x 50)	=	9,350 SF
Sta 323+48 to 325+98	(250 x 25) + (250 x 30.5)	=	13,875 SF
Sta 325+98 to 326+48	(50 x 61)	=	3,050 SF
Sta 326+48 to 327+41	planimeter	=	6,050 SF
Sta 327+41 to 327+91	(50 x 61)	=	3,050 SF
Sta 327+91 to 330+41	(250 x 25) + (250 x 30.5)	=	13,875 SF
Sta 330+41 to 339+48	(907 x 50)	=	45,350 SF
Sta 339+48 to 340+28	(80 x 51)	=	4,080 SF

Sta 340+28 to 341+00	(72 x 50)	=	3,600 SF
Sta 341+00 to 341+85	planimeter	=	6,250 SF
Feathering at Intersections - Curtis Blvd., Vine St., Stephens Blvd., Glen Dr., and Roberts Rd.	planimeter	=	18,250 SF
	SUBTOTAL	=	511,515 SF
	(511,515 x 1/12 x 1/27)	=	1,579 CY

Willoughby	= 0 CY		
Eastlake	= 1,579 CY		
TOTAL	= 210 + 1,579	=	1,789 CY
Willoughby	= 0		
Eastlake	= 1,789 CY		

**Item 448 - Asphalt Concrete Intermediate Course, Type I, AC-20 (Combined Total)**

TOTAL	= 257 + 1,579	=	1,836 CY
Willoughby	= 0 CY		
Eastlake	= 1,836 CY		

**Item 605 - Aggregate Drain**

Sta 202+50, LT	=	15 LF
Sta 202+25 to 212+00 RT @ 25' C/C	=	585 LF
Sta 212+00 to 223+50 RT @ 50' C/C	=	380 LF
Sta 213+75 to 222+50 LT @ 50' C/C	=	300 LF
Sta 227+50 to 236+25 LT @ 25' C/C	=	520 LF
Sta 243+75 to 252+32.07 LT @ 40' C/C	=	336 LF
Sta 244+25 to 252+32.07 RT @ 40' C/C	=	320 LF
Sta 252+32.07 to 264+75 LT & RT @ 50' C/C	=	800 LF
TOTAL	=	3,256 LF

Willoughby	= 753 LF
Eastlake	= 2,503 LF

**ITEM 617 - COMPACTED AGGREGATE, TYPE A**

Sta 202+34 to 223+22	2088 x 3 x [(3+1)/2]/12 x 1/27	=	.39 CY
Sta 227+80 to 236+53	873 x 3 x [(3+1)/2]/12 x 1/27	=	.16 CY
Sta 238+48 to 240+21	173 x 3 x 1/12 x 1/27	=	.2 CY
Sta 243+66 to 298+25	5459 x 3 x [(3+1)/2]/12 x 1/27	=	101 CY
TOTAL			158 CY

Willoughby	= .38 CY
Eastlake	= 120 CY