FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-71-5(15)233	

172
302

CUYAHOGA COUNTY
MED-42-26.17
CUY-42-0.00

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-1 Class 8-1 Pipe 6" Lin. Ft.	I-1 Class 8-1 Pipe 15" Lin. Ft.	I-1 Class 1-3 Pipe 6" Shallow Lin. Ft.	I-1 Class 1-3 Pipe Sec. M-6.4(h) Shallow 6" Lin. Ft.	I-1 Class F-4 Pipe 6" Lin. Ft.	I-1 Class F-4 Pipe 8" Lin. Ft.	I-1 Class F-4 Pipe 15" Lin. Ft.	I-2 Masonry Headwall Type E Cu. Yd.	I-5 Pipe Specials 6"-60° Bend Each	I-5 Pipe Specials 6" Tee Each	I-5 Pipe Specials 15"-30° Bend Each	I-5 Pipe Specials 6"-60° Wye Each	I-8 Std. N°2-2B C.B. Each	I-10 Dumped Rock Cu. Yd.	I-15 Guard Rail Lin. Ft.	L-10 Sodding Sq. Yd.	I-12 Concrete Curb Type 2-A Std. Lin. Ft.	I-12 Concrete Curb Type 6 Std. Lin. Ft.	I-12 Concrete Curb Type 7 Std. Lin. Ft.	I-12 Concrete Curb Type 8 Std. Lin. Ft.	I-21 Conc. Med Type 2 Std. Sq. Yd.	I-21 4" Conc. Med Pavement Type 1 Std. Sq. Yd.	I-125 Curb & Island Marking Lump	I-125 Channelizing Lines Miles	I-125 Diagonal Striping Lump	L-G Roadside Cleanup Unit	SEE SHEET NO.
1-D	110+00 to 120+00 Ramp D	Lt.	28		300	700		10			1	1																	
2-D	119+00 to 121+00 Ramp D	Rt.	20			200						1																	
3-D	124+44 to 125+02 Ramp D	Rt.			58		10				1																		
4-D	125+14 to 126+46 Ramp D	Rt.			132		10				1																		
5-D	115+56 Ramp C to 48+14 S. R. 82	Rt.			478	844	10							1															
6-D	110+00 to 112+00 Ramp D	Lt.														44		49											
7-D	112+65 to 123+60 Ramp D	Lt.																											
8-D	124+00 to 125+50 Ramp D	Lt.														146													
9-D	125+08 Ramp D	—		44					58	0.26			2		1	2		3											201
1-R	110+00 to 112+00 Ramp D	Lt.															200												
2-R	124+00 Ramp D to 43+00 S.R.82	Lt.															437.5												
3-R	47+10 to 48+10 S. R. 82	Rt.															100												
1-P	109+46	Rt.																								0.11			
2-P	109+46.65 to 115+50 Ramp D	Rt.																				129	475						
3-P	119+60 Ramp D to 125+34 Ramp C																		122.5					151					
4-P	126+20 to 127+35 Ramp C	Lt.																			47	75							
5-P	46+68 S.R.82 to 47+16 S.R.82	Rt.																								0.02			
6-P	116+60 to 115+60 Ramp C	Lt.																	105.5	100				31	Lump		Lump		
7-P	621+08 to 624+45 I-71	Lt.																								0.11			
	Ramp C																											34	
	TOTALS		48	44	968	1,744	30	10	58	0.26	3	2	2	1	1	192	737.5	52	228	100	176	550	151	31	LUMP	0.24	LUMP	34	

CURVE #D-1
Δ = 53° 53' 23"
Δc = 33° 53' 23"
Dc = 10° 00' 00"
Rc = 572.96'
Lc = 338.90'
Tc = 174.57'
Ec = 26.00'
Ls1=Ls2 = 200.00'
θs = 10° 00' 00"
p = 2.91'
k = 99.90'
Xc = 199.39'
Yc = 11.61'
LT = 133.55'
ST = 66.86'
Ts1=Ts2 = 392.62'

CURVE #D-2
Δ = 68° 44' 04"
Δc = 47° 16' 31"
Dc = 21° 27' 33"
Rc = 267.00'
Lc = 220.30'
Tc = 116.86'
Ec = 24.45'
Ls1 = 200.00'
Ls2 = 0
θs = 21° 27' 33"
p = 6.21'
k = 99.53'
Xc = 197.21'
Yc = 24.72'
LT = 134.33'
ST = 67.57'
Ts1 = 279.71'
Ts2 = 189.26'

CURVE #C-1
Δ = 6° 50' 00"
Dc = 1° 30' 00"
Rc = 3819.72'
Lc = 455.56'
Tc = 228.05'
Ec = 6.80'

CURVE #C-2
Δ = 26° 24' 40"
La = 200.00'
θa = 23° 24' 40"
Pa = 6.77'
T1 = 131.66'
T2 = 71.95'
Δ1 = 1° 30' 00"
D1 = 1° 30' 00"
R1 = 3819.72'
Δ2 = 24° 54' 40"
D2 = 24° 54' 40"
R2 = 230.00'

CURVE #C-3
Δ = 250° 24' 24"
Δc = 225° 29' 24"
Dc = 24° 54' 40"
Rc = 230.00'
Lc = 905.20'
Ls1 = 0
Ls2 = 200.00'
θs = 24° 54' 40"
p = 7.20'
k = 99.37'
Xc = 196.25'
Yc = 28.60'
LT = 134.68'
ST = 67.89'
Ts1 = -333.65' *
Ts2 = -229.19' *

* Note that P.I. #C-3 is in reverse position due to Δ greater than 180°.

For details of concentric Ramps C and D, see Sheet No. 184.

For details of Ramp D connection to I-71, see Sheet No. 183.

For details of Ramp C and D intersections with S.R. 82, see Sheet No. 159.

For continuation see Sheet No. 153.

For pipe culvert quantities, see Sheet No. 174.

For continuation of Ramp D details, see Sheet No. 48.

For continuation of Ramp C details, see Sheet No. 174.

CFN 180710263
SLM 2.63, 60"

SLM 2.57, 15"
SEE SHEET 201

SLM 2.36, 15"

8" Sanitary Sewer Line. For Details, see Sheet N° 153.

& Temporary Runaround 24' Wide-3' Shoulders For Details, see Sheet No. 169.

Reloc. 12" Water Main
Temp. 12" Water Main
For Details, see Sheets N° 236-238.

S.R. 82 INTERCHANGE - PLAN - RAMPS C & D