

GENERAL

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CITY OF CLEVELAND
DIVISION OF WATER
ATTN.: FRED ROBERTS
1201 LAKESIDE AVENUE
CLEVELAND, OH 44114
OFFICE: 216-664-2444 EXT. 5590
FRED.ROBERTS@CLEVELANDWATER.COM

CITY OF CLEVELAND
DIVISION OF WATER POLLUTION CONTROL
ATTN.: ELIE RAMY
12302 KIRBY ROAD
CLEVELAND, OH 44108
OFFICE: 216-664-2756
ERAMY@CLEVELANDWPC.COM

FIRST ENERGY CORP
ATTN.: JOHN ZASSICK
6896 MILLER ROAD
BRECKSVILLE, OH 44141
OFFICE: 440-546-8706
JMZASSICK@FIRSTENERGYCORP.COM

COLUMBIA GAS OF OHIO
ATTN.: DAN SUREN
7080 FRY ROAD
MIDDLEBURG HEIGHTS, OHIO 44130
OFFICE: 440-891-2428
DSUREN@NISOURCE.COM

NORTHEAST OHIO REGIONAL SEWER DISTRICT
ATTN.: MARY MACIEJOWSKI
3900 EUCLID AVENUE
CLEVELAND, OH 44115-2506
OFFICE: 216-881-6600 EXT. 6466
MACIEJOWSKIM@NEORS.DORG

DOMINION ENERGY OHIO
ATTN.: KEVIN BIRT
320 SPRINGSIDE DR., SUITE 320
AKRON, OH 44333
OFFICE: 330-664-2409
KEVIN.J.BIRT@DOMINIONENERGY.COM
RELOCATION@DOMINIONENERGY.COM

VERIZON
ATTN.: JEFF KADUSKY
1150 WEST 3RD STREET
CLEVELAND, OH 44256
OFFICE: 330-253-8267
THOMAS.KADUSKY@VERIZON.COM

BP OIL
ATTN.: KEITH BOYLE
30 SOUTH WACKER DRIVE, SUITE 900
CHICAGO, IL 60606
OFFICE: 312-809-4708
KEITH.BOYLE@BP.COM

AT&T
ATTN.: JAMES JANIS
13630 LORAIN AVE.
CLEVELAND, OH 44111
OFFICE: 216-476-6142
PJ8191@ATT.COM

BUCKEYE PIPELINE
ATTN.: DAVID JONES
9999 HAMILTON BOULEVARD
BREINIGSVILLE, PA 18031
OFFICE: 610-904-4409
DAJONES@BUCKEYE.COM

CHARTER COMMUNICATIONS
ATTN.: GARY NAUMANN
8179 DOW CIRCLE
STRONGSVILLE, OH 44136
OFFICE: 216-575-8016 EXT. 5033
GARY.NAUMANN@CHARTER.COM

COX COMMUNICATIONS
ATTN.: CRAIG SMITH
12221 PLAZA DRIVE
PARMA, OH 44130
OFFICE: 216-535-3356
CRAIG.SMITH@COX.COM

CITY OF CLEVELAND
TRAFFIC ENGINEERING
ATTN.: ANDREW CROSS
601 LAKESIDE AVENUE
ROOM 25
CLEVELAND, OH 44114
OFFICE: 216-664-3197
ACROSS@CITY.CLEVELAND.OH.US

CITY OF PARMA
TRAFFIC DIVISION
ATTN.: JIM MIHELICH
6611 RIDGE ROAD
PARMA, OH 44129
OFFICE: 440-885-8111
JMIHELICH@CITYOFPARMA-OH.GOV
TRAFFICDIVISION@CITYOFPARMA-OH.GOV

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

PAVING PROJECT PID 106394 WITHIN PROJECT LIMITS

THE PAVING PROJECT (PID 106394) WILL BE PERFORMED BEFORE AND WITHIN THE PROJECT LIMITS OF CUY-176-10.13 (PID 101941). THE CONTRACTOR IS EXPECTED TO ENCOUNTER WORK THAT WAS COMPLETED DURING THIS PROJECT. THIS MAY RESULT IN THE REMOVAL OF EXTRA OR VARYING MATERIAL (APPROXIMATE 1.5"± ASPHALT OVERLAY) TO COMPLETE CUY-176-10.13 (PID 101941) AS DETAILED IN THESE PLANS. REFER TO EXISTING TYPICAL SECTIONS FOR APPROXIMATE LIMITS OF OVERLAY. COST FOR REMOVAL OF THE ADDITIONAL MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE APPLICABLE PAVEMENT REMOVED ITEM.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 3 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: STATIC
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (CORS2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO NORTH ZONE (3401)
COMBINED SCALE FACTOR: 0.99992804
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 204 - PROOF ROLLING

PROOF ROLLING HAS BEEN CALCULATED AS PART OF THE PROJECT OFFICE CALCULATIONS AND CARRIED TO THE GENERAL SUMMARY.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

A TYPE C FIELD OFFICE IS REQUIRED FOR THIS PROJECT. THE FOLLOWING REVISIONS TO EQUIPMENT SUPPLIED WITH THE TYPE C FIELD OFFICE, AS SPECIFIED IN TABLE 619.02-1, FIELD OFFICE, SHALL APPLY:

THE BROAD BAND INTERNET CONNECTION MUST MEET A MINIMUM DOWNLOAD SPEED OF 10MB PER SECOND AND A MINIMUM UPLOAD SPEED OF 5MB PER SECOND.

CONTRACTOR SHALL FURNISH AND SET UP A WI-FI ROUTER MEETING THE REQUIREMENTS OF IEEE 802.11ac FOR THE EXCLUSIVE USE OF THE DEPARTMENT.

ALL OTHER FIELD OFFICE ITEMS SUPPLIED SHALL MEET THE REQUIREMENTS OF A TYPE C FIELD OFFICE.

619, FIELD OFFICE, TYPE C, AS PER PLAN 22 MNTH

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS/HER OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THE CONTRACT, SPECIFICALLY PID 108480, THE CUY-480/STATE ROAD AUXILIARY LANE PROJECT. NO WAIVER OF ANY PROVISIONS OF 105.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

ROADWAY

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN

REMOVAL OF EXISTING PRESSURE RELIEF JOINTS, AS IDENTIFIED IN THE PLANS, SHALL BE CONSIDERED INCIDENTAL TO THE PAVEMENT REMOVAL. BACKFILLING OF THE RESULTANT CAVITY SHALL MEET THE REQUIREMENTS OF C&MS 204, GRANULAR MATERIAL, TYPE B (703.16). LOCATIONS THAT REQUIRE SUBGRADE TREATMENT, AS DETAILED ON SHEETS 23 - 24, SHALL STILL RECEIVE THE PRESCRIBED SUBGRADE TREATMENT FOLLOWING REMOVAL OF THE EXISTING PRESSURE RELIEF JOINTS. ADDITIONAL COSTS FOR THE PRESSURE RELIEF JOINT REMOVAL AND BACKFILL SHALL BE CONSIDERED INCIDENTAL TO THE COST OF PAVEMENT REMOVAL. ALL OTHER REQUIREMENTS OF C&MS 202 SHALL STILL APPLY.

ITEM 202 - CONCRETE BARRIER REMOVED, AS PER PLAN (1)

PAYMENT SHALL INCLUDE THE COST TO REMOVE EXISTING RACEWAYS (ITS AND LIGHTING) AS DETAILED IN THE PLANS. ALL OTHER REQUIREMENTS OF C&MS 202 SHALL BE MET.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS THAT MEET MASH REQUIREMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E (MASH), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), (UNDER GUARDRAIL), AS PER PLAN.

ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN SHALL CONSIST OF EXCAVATING TOPSOIL, AND PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS, AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:
1. SET GUARDRAIL POSTS
2. PLACE ITEM 441

METHOD B:
1. PLACE ITEM 441
2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3. SET GUARDRAIL POSTS
4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1(448), UNDER GUARDRAIL, AS PER PLAN.

ITEM 411 - STABILIZED CRUSHED AGGREGATE, AS PER PLAN

THIS ITEM SHALL BE PLACED BETWEEN RAMP OBE-JN AND I.R. 480 PAVEMENT FROM APPROXIMATELY STA. 100+56 TO THE CSX RAILROAD BRIDGE.

ITEM 411 - STABILIZED CRUSHED AGGREGATE, AS PER PLAN SHALL CONSIST OF EXCAVATING TOPSOIL, AGGREGATE OR OLD ASPHALT CONCRETE, PLACEMENT OF AGGREGATE, COMPACTION AND APPLYING HERBICIDE AS SPECIFIED IN THE "PAVING UNDER GUARDRAIL" NOTE.

ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 411 - STABILIZED CRUSHED AGGREGATE, AS PER PLAN.

**ITEM 622 - PORTABLE BARRIER, UNANCHORED, AS PER PLAN
ITEM 622 - PORTABLE BARRIER, "Y" CONNECTOR, AS PER PLAN**

THESE ITEMS SHALL REMAIN IN PLACE AT THE END OF THE PROJECT AND BECOME THE PROPERTY OF THE DEPARTMENT. ALL OTHER REQUIREMENTS OF C&MS 622 SHALL STILL BE MET.

A+B BIDDING WITH MULTIPLE SECTIONS CONTRACT TABLE

THE CONTRACTOR WILL BID THE NUMBER OF CALENDAR DAYS TO COMPLETE EACH SEGMENT AS LISTED IN THE PROPOSAL.

CONTRACT SEGMENT - LOCATION OF CRITICAL WORK	MINIMUM DAYS	MAXIMUM DAYS	INCENTIVE/DISINCENTIVE \$ PER DAY	MAXIMUM INCENTIVE \$
SEGMENT 1 COMPLETE CLOSURE OF RAMP OBW-JN FROM STA 34+60 TO 53+40 DURING PH 1/1A	7	14	\$12,000	\$84,000
SEGMENT 2 COMPLETE CLOSURE OF RAMP JN-OBW FROM STA 43+87 TO 63+50 DURING PH 3A	7	14	\$12,000	\$84,000

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














SHEET NO.	REF. NO.	PHASE	LOCATION		614	614	614	614	614	614	614	614	614	614	614	615	622	622	622	614	614	614	614
					WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)	WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE GORE MARKING, CLASS II	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE ISLAND MARKING, CLASS I	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	PORTABLE BARRIER, UNANCHORED	PORTABLE BARRIER, 50", AS PER PLAN	PORTABLE BARRIER, 4" CONNECTOR	BARRIER REFLECTOR, TYPE I, ONE WAY	WORK ZONE RAISED PAVEMENT MARKER	OBJECT MARKER, ONE WAY	WORK ZONE CROSSOVER LIGHTING SYSTEM
			FROM	TO	EACH	EACH	MILE	MILE	FT	FT	MILE	FT	FT	EACH	SF	SY	FT	FT	EACH	EACH	EACH	EACH	EACH
S.R. 176																							
82,84	PCB-6	1	118+43	134+15													1572			97		32	
82,83	ELW-4	1	118+48	129+47				0.21															
83,84	ELW-4	1	129+47	139+90				0.20													52		
82,83	CH-5	1	118+48	121+83					335												8		
83	LL-1	1	121+83	128+28			0.12														5		
83	CH-7	1	128+29	129+47					118												1		
83,84	CH-7	1	129+47	141+70					1223												61		
84,85	LL-2	1	141+70	151+60			0.19														8		
81-82	DL-2	1	139+90	145+61						571													
85	ELW-6	1	148+00	151+60				0.07															
I.R. 480																							
81,86	CH-8	1	842+71	852+61					2970												149		
81,86	ELY-5, ELW-7	1	845+71	852+61				0.26													69		
81,86	CH-9	1	848+50	858+40					2970												149		
86	ELY-6, ELW-8	1	851+50	858+40				0.26													69		
86-88	LL-3	1	852+61	894+49			2.38														105		
86-88	ELY-5, ELW-7	1	852+61	891+49				1.47															
88	ELY-5, ELW-7	1	891+49	898+39				0.26													69		
88	CH-13	1	891+49	901+39					2970												149		
86-88	PCB-8, IA-4	1	855+00	887+72	1												3272			199		66	
86-88	ELY-6, ELW-8	1	858+40	884+35				0.98															
86-88	LL-4	1	858+40	884+35			1.47														65		
86-88	IA-3, PCB-9	1	862+23	887+35	1												2512			154		51	
88	CH-10	1	884+35	894+25					2970												149		
86	ELY-6, ELW-8	1	884+35	891+25				0.26													69		
RAMP OBE-JN																							
79-81	TP-5	1	111+77	136+79													3202						
82,86-88	ELW-4	1	69+70	118+48				0.92															
82,86-88	ELY-3	1	58+01	118+48				1.15													76		
82,86-88	PCB-4, IA-2	1	72+54	118+48	1												4594			279		93	
82	PCB-5	1	116+69	118+09													140			11		4	
SUBTOTAL (CARRIED TO SHEET 35)					3		4.16	6.04	13556	571						3202	12090			740	1253	246	

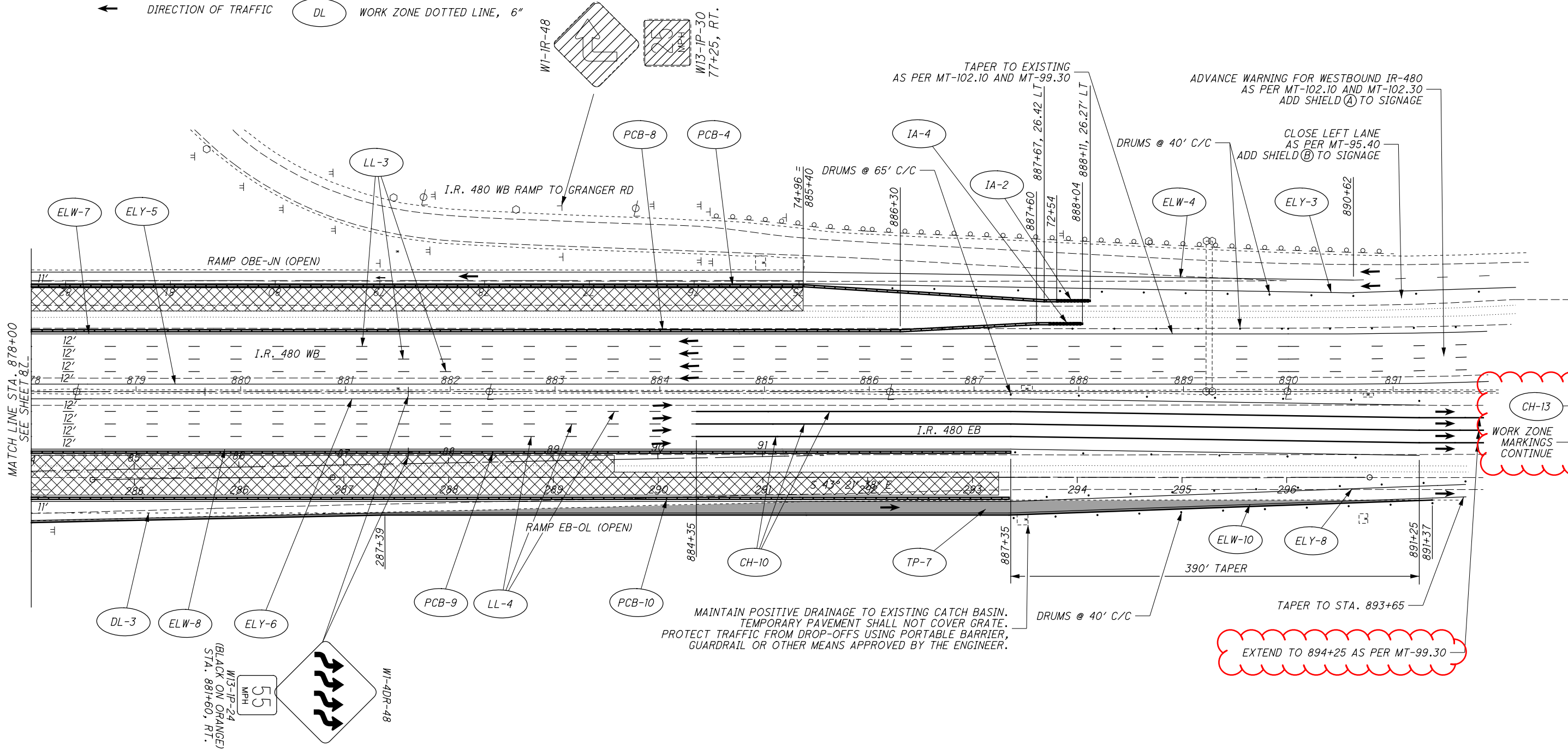
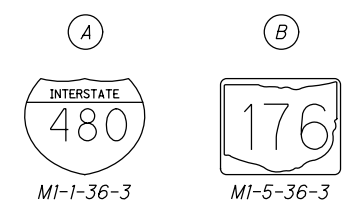
MAINTENANCE OF TRAFFIC SUBSUMMARY	CUY-176-10.13
CALCULATED BNC CHECKED JMS	34 363

SHEET NO.	REF. NO.	PHASE	LOCATION		614	614	614	614	614	614	614	614	614	614	614	615	622	622	622	614	614	614	614
			FROM	TO	EACH	EACH	MILE	MILE	FT	FT	MILE	FT	FT	EACH	SF	SY	FT	FT	EACH	EACH	EACH	EACH	EACH
RAMP JN-OBW																							
83	CH-1	1	32+50	38+84																			
83	ELW-3	1	32+50	37+25								0.09											
RAMP JN-OBE																							
81,86-87	ELY-8, ELW-9	1	52+25	75+23								0.87											
81,86-88	PCB-10, IA-5	1	54+17	85+00	1												3083			188		63	
86	TP-6	1	50+42	56+91													604						
87	CH-11, ELY-8	1	75+23	80+32								0.10	509									19	
87-88	ELW-10	1	77+67	85+00								0.14											
87-88	CH-12	1	77+67	80+31									264										
87-88	TP-7	1	79+94	85+00													68						
87-88	ELY-8	1	80+32	85+00								0.09										6	
87-88	DL-3	1	80+32	85+00									468										
RAMP EB-OL																							
88	ELY-8	1	285+00	297+71								0.24										16	
88	ELW-10	1	285+00	297+71								0.24											
88	DL-3	1	285+00	287+39									239										
88	PCB-10	1	285+00	293+34													834			53		18	
88	TP-7	1	285+00	297+00													1004						
RAMP GE-1																							
87	ELY-7	1	50+24	51+33								0.02										1	
87	CH-12	1	51+33	54+00									267									7	
87	ELW-10	1	52+49	54+00								0.03											
RAMP OBW-JN																							
81-82	ELY-4	1	47+45	58+36								0.21										14	
81-82	ELW-5	1	48+80	58+36								0.18											
82	PCB-6, IA-6	1	51+88	58+36	1												648			42		14	
82	PCB-7	1	53+29	57+66													437			29		10	
SUBTOTAL (THIS SHEET)					2				2.21	1674	707					1676	5002			312	108	105	
SUBTOTAL (CARRIED FROM SHEET 33)					1				4.45	7767	715			80		535	6337	2580		478	544	251	
SUBTOTAL (CARRIED FROM SHEET 34)					3		4.16	6.04	13556	571						3202	12090			740	1253	246	
PHASE 1 SUBTOTAL					6		4.16	12.70	22997	1993				80		5413	23429	2580		1530	1905	602	

SHEET NO.	REF. NO.	PHASE	LOCATION		614	614	614	614	614	614	614	614	614	614	614	615	622	622	622	614	614	614	614
			FROM	TO	EACH	EACH	MILE	MILE	FT	FT	MILE	FT	FT	EACH	SF	SY	FT	FT	EACH	EACH	EACH	EACH	EACH
S.R. 176																							
123	ELY-1	4A	93+70	117+69				0.45														30	
123	ELW-1	4A	93+70	113+44				0.37															
123	CH-1	4A	113+44	117+69								425										11	
123	CH-2	4A	113+58	117+69								411										10	
123-124	CH-3	4A	114+70	124+35								965										24	
123-124	LL-1, ELY-1	4A	117+69	121+50			0.07	0.07														3	
123-124	CH-6	4A	117+77	124+35								658										16	
123	PCB-1, IA-1	4A	120+14	136+99	1												1685			104		35	
124-125	CH-4, ELY-1	4A	121+50	139+88				0.35	1838													184	
124-125	ELW-2	4A	122+35	139+88				0.33														88	
124-125	CH-5	4A	124+35	139+88					1553													78	
PHASE 4A SUBTOTAL					1		0.07	1.57	5850								1685			104	444	35	
PRE-PHASE 1 SUBTOTAL (CARRIED FROM SHEET 33)					1			1.10								847		689		95	36	31	1
PHASE 1 SUBTOTAL (CARRIED FROM SHEET 35)					6		4.16	12.70	22997	1993			80		5413	23429	2580		1530	1905	602		
PHASE 1A SUBTOTAL (CARRIED FROM SHEET 36)					1		0.19	1.37	3529							1754				118	290	39	
PHASE 2 SUBTOTAL (CARRIED FROM SHEET 39)					4		2.30	10.09	7153	1780		60		2	14	109	17167	4505	2	1616	802	540	
PHASE 3 SUBTOTAL (CARRIED FROM SHEET 41)					2	1	0.01	7.43	4526	3980	0.01	44			7		6269	2649	1	729	563	242	
PHASE 3A SUBTOTAL (CARRIED FROM SHEET 42)					1			1.40	2195								868			58	55	19	
PHASE 4 SUBTOTAL (CARRIED FROM SHEET 43)					2		0.76	2.11	3496	860				789			4170	92		273	238	91	
PHASE 4A SUBTOTAL (THIS SHEET)					1		0.07	1.57	5850							1685				104	444	35	
TOTAL CARRIED TO GENERAL SUMMARY					18	1	7.49	37.77	49746	8613	0.01	104	869	2	21	6369	55342	10515	3	4523	4333	1599	1

MOT LEGEND

- | | | |
|---|--|--|
|  WORK AREA |  LL WORK ZONE LANE LINE, 6" |  SL WORK ZONE STOP LINE |
|  TP TEMPORARY PAVEMENT |  DY WORK ZONE CENTER LINE |  GM WORK ZONE GORE MARKING |
|  PCB PORTABLE BARRIER |  ELW WORK ZONE EDGE LINE (WHITE), 6" |  A WORK ZONE ARROW |
|  IA IMPACT ATTENUATOR |  ELY WORK ZONE EDGE LINE (YELLOW), 6" |  IM WORK ZONE ISLAND MARKING (YELLOW) |
|  TYPE III BARRICADE |  CH WORK ZONE CHANNELIZING LINE, 12" | |
|  DRUM |  DL WORK ZONE DOTTED LINE, 6" | |
|  DIRECTION OF TRAFFIC | | |

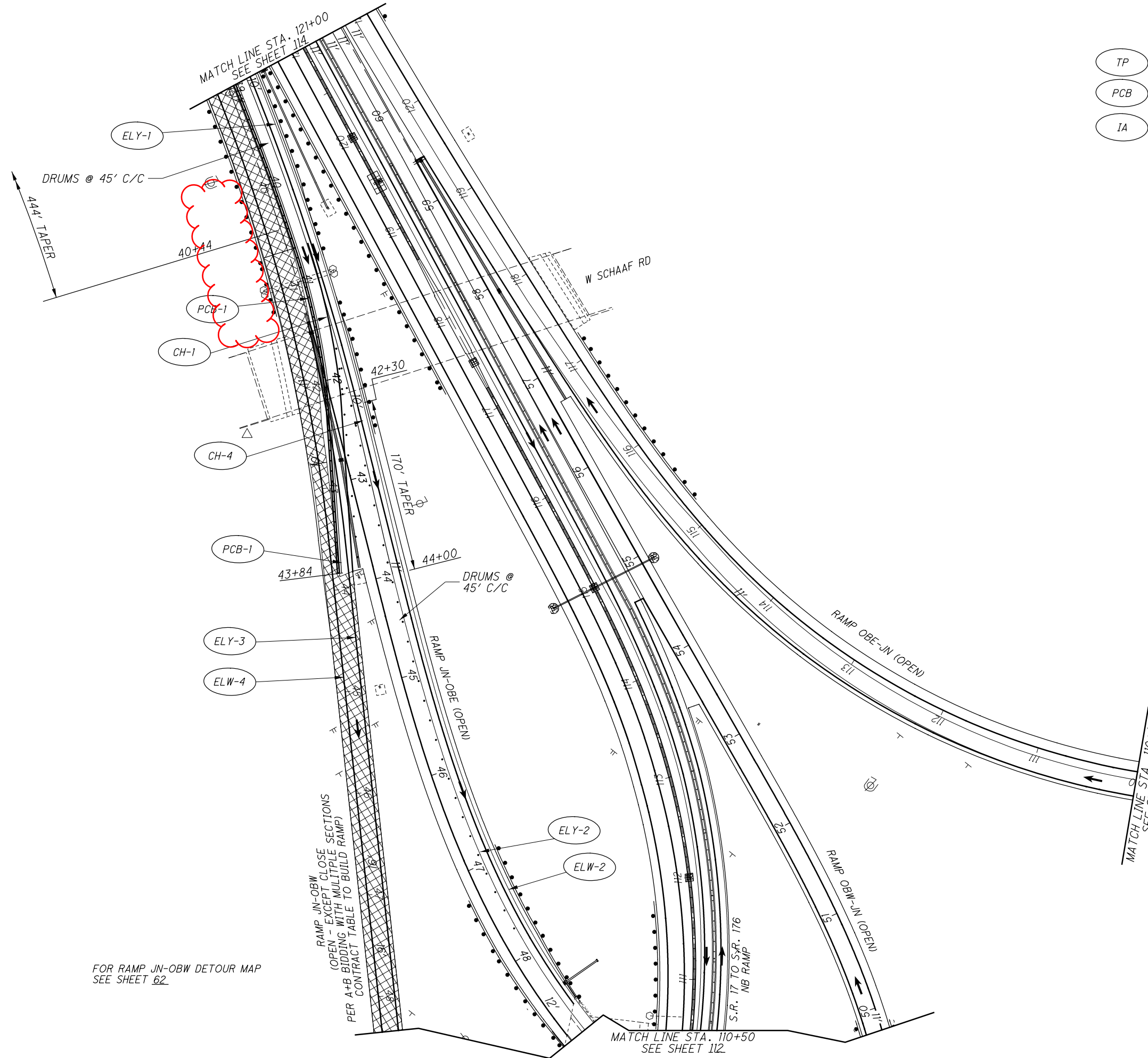


CH-13
WORK ZONE MARKINGS CONTINUE

EXTEND TO 894+25 AS PER MT-99.30

MAINTENANCE OF TRAFFIC PHASE 1

CUY-176-10.13



FOR RAMP JN-OBW DETOUR MAP
SEE SHEET 62

MOT LEGEND

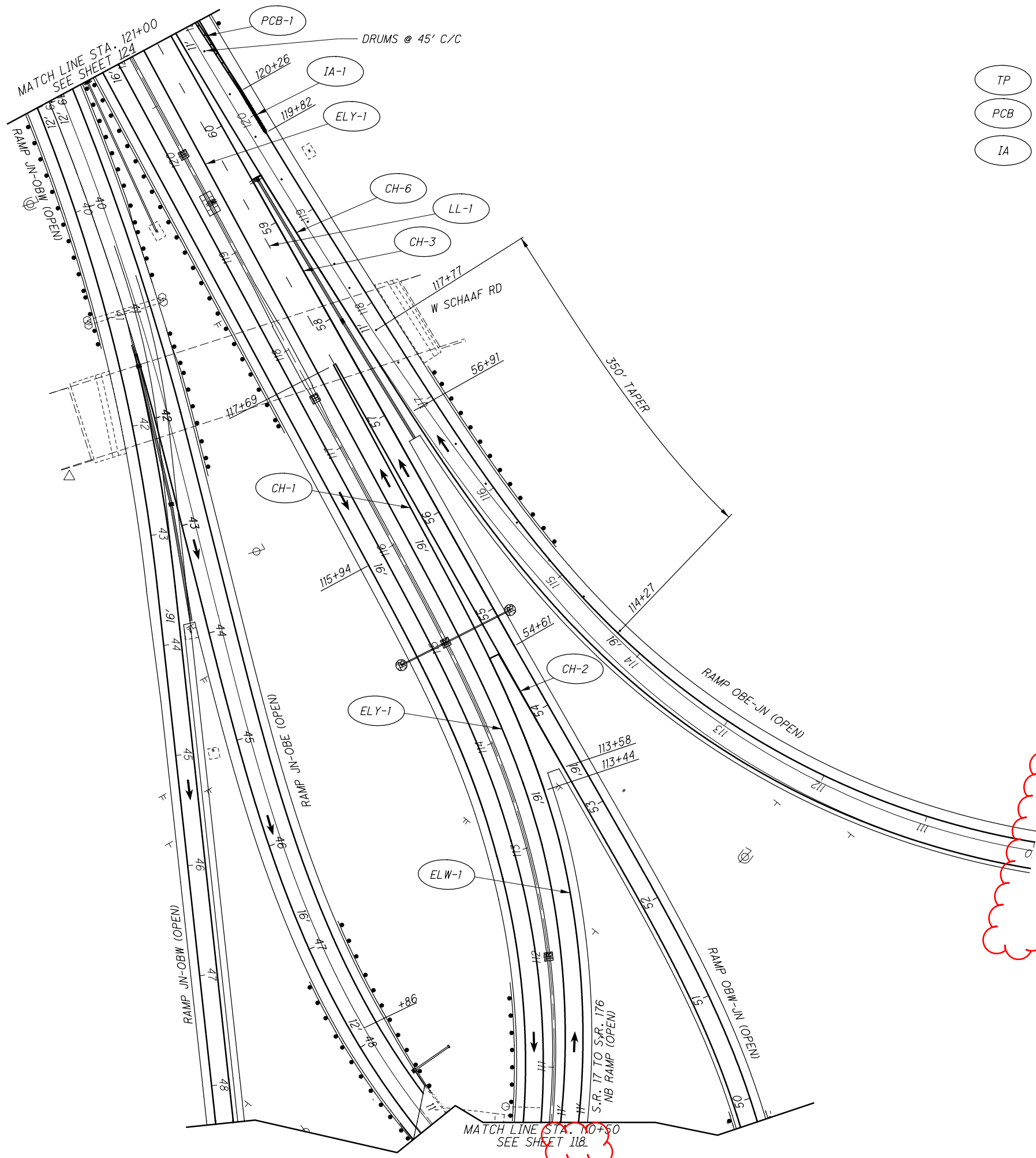
- WORK AREA
- TEMPORARY PAVEMENT
- PORTABLE BARRIER
- IMPACT ATTENUATOR
- TYPE III BARRICADE
- DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE CENTER LINE
- WORK ZONE EDGE LINE (WHITE), 6"
- WORK ZONE EDGE LINE (YELLOW), 6"
- WORK ZONE CHANNELIZING LINE, 12"
- WORK ZONE DOTTED LINE, 6"
- WORK ZONE STOP LINE
- WORK ZONE GORE MARKING
- WORK ZONE ARROW
- WORK ZONE ISLAND MARKING (YELLOW)

CALCULATED RJJ
CHECKED JMS

HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC
PHASE 3A**

CUY-176-10.13



MOT LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- PORTABLE BARRIER
- IMPACT ATTENUATOR
- TYPE III BARRICADE
- DRUM
- DIRECTION OF TRAFFIC
- LL WORK ZONE LANE LINE, 6"
- DY WORK ZONE CENTER LINE
- ELW WORK ZONE EDGE LINE (WHITE), 6"
- ELY WORK ZONE EDGE LINE (YELLOW), 6"
- CH WORK ZONE CHANNELIZING LINE, 12"
- DL WORK ZONE DOTTED LINE, 6"
- SL WORK ZONE STOP LINE
- GM WORK ZONE GORE MARKING
- A WORK ZONE ARROW
- IM WORK ZONE ISLAND MARKING (YELLOW)

CALCULATED
RJJ
CHECKED
JMS

0 50 100
HORIZONTAL
SCALE IN FEET

**MAINTENANCE OF TRAFFIC
PHASE 4A**

CUY-176-10.13

OFFICE CALCS	20 - 22	25 - 31	44	136	137	138	139	140	143	144	145	147	148	149	322	326	327	330	344	355	360	362	01/NHS/PV	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.			
																								LS	201	11000	LS		ROADWAY	20		
													90382											90382	202	23001	90382	SY	CLEARING AND GRUBBING	20		
													1121											1121	202	30000	1121	SF	PAVEMENT REMOVED, AS PER PLAN	20		
						237																		237	202	30700	237	FT	WALK REMOVED			
						3606																		3606	202	30701	3606	FT	CONCRETE BARRIER REMOVED			
															475									475	202	30701	475	FT	CONCRETE BARRIER REMOVED, AS PER PLAN (1)	20		
																																322
														1589										1589	202	30800	1589	SY	CONCRETE BARRIER REMOVED, AS PER PLAN (2)			
													1552											1552	202	32000	1552	FT	TRAFFIC ISLAND REMOVED			
																								466	202	32800	466	SY	CURB REMOVED			
				668																				668	202	35100	668	FT	CONCRETE SLOPE PROTECTION REMOVED			
						8095																		8095	202	38000	8095	FT	PIPE REMOVED, 24" AND UNDER			
						12																		12	202	42010	12	EACH	GUARDRAIL REMOVED			
						18																		18	202	42040	18	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E			
						16																		16	202	47000	16	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T			
						2																		2	202	47800	2	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED			
																								6	202	58100	6	EACH	IMPACT ATTENUATOR REMOVED			
																								6	202	58200	6	EACH	CATCH BASIN REMOVED			
																								14	202	62000	14	EACH	INLET REMOVED			
																								110	SPECIAL	20270000	110	FT	JUNCTION BOX REMOVED			
																								625	SPECIAL	20270110	625	FT	FILL AND PLUG EXISTING CONDUIT	21		
																								625	SPECIAL	20270110	625	FT	PIPE CLEANOUT, 24" AND UNDER	21		
																								70	SPECIAL	20270120	70	FT	PIPE CLEANOUT, 27" TO 48"	21		
																								19075	203	10000	19075	CY	EXCAVATION			
																								3275	203	20000	3275	CY	EMBANKMENT			
																								119912	204	10000	119912	SY	SUBGRADE COMPACTION	23		
																								46461	204	13000	46461	CY	EXCAVATION OF SUBGRADE			
																								34901	204	20000	34901	CY	EMBANKMENT			
																								9348	204	30020	9348	CY	GRANULAR MATERIAL, TYPE C (703.16)			
																								60	204	45000	60	HOUR	PROOF ROLLING	23		
																								24074	204	51000	24074	SY	PROOF ROLLING			
																								24074	204	51000	24074	SY	GEOGRID			
																								173	209	15001	173	STA	RESHAPING UNDER GUARDRAIL, AS PER PLAN	20		
																								466	601	21001	466	SY	CONCRETE SLOPE PROTECTION, AS PER PLAN	327		
																								8794	606	15050	8794	FT	GUARDRAIL, TYPE MGS			
																								37.5	606	15150	37.5	FT	GUARDRAIL, TYPE MGS HALF POST SPACING			
																								412.5	606	15550	412.5	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS			
																								14	606	26150	14	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH)	20		
																								15	606	26550	15	EACH	ANCHOR ASSEMBLY, MGS TYPE T			
																								11	606	35002	11	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1			
																								8	606	35102	8	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2			
																								1	606	60002	1	EACH	IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL)	21		
																								1058	608	10000	1058	SF	4" CONCRETE WALK			
																								281	608	52000	281	SF	CURB RAMP			
																								819	622	10060	819	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B			
																								154	622	10061	154	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B, AS PER PLAN	323		
																								1428	622	10100	1428	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1			
																								327	622	10120	327	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C			
																								590	622	10121	590	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN	21		
																								1928	622	10140	1928	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1			
																								216	622	10160	216	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D			
																								447	622	10161	447	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	322		
																								3	622	25000	3	EACH	CONCRETE BARRIER END SECTION, TYPE D			
																								2	622	25001	2	EACH	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN (1)	324		
																								2	622	25001	2	EACH	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN (2)	322		
																								11	622	25004	11	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B			
																								2	622	25005	2	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B, AS PER PLAN	323		
																								8	622	25006	8	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1			
																								10	622	25008	10	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C			

CALCULATED	MJT	CHECKED	NSP

GENERAL SUMMARY

CUY - 176 - 10.13

PLAN SHEET NO.	REFERENCE NO.	STATION		SIDE	PARTICIPATION	202	202	202	SPECIAL	602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	839	611							
		FROM	TO			FT	EACH	EACH	FT	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH			
S.R. 176																																					
150	D-1	91+11.31	91+27.00	LT.	01/NHS/PV							18																									
150	D-2	91+27.00		LT.	01/NHS/PV	5	1						5																								
152	D-3	103+33.60		RT.	01/NHS/PV																																
152	D-4	103+50.00		LT.	01/NHS/PV	5		1					5																								
153	D-5	110+00.30		RT.	01/NHS/PV	10		1					10																								
155	D-6	116+75.78	117+99.68	RT.	01/NHS/PV	100																													124		
155	D-7	119+50.00		RT.	01/NHS/PV	10		1																													
155	D-8	117+99.68	119+49.00	RT.	01/NHS/PV	150	1																												150		
156	D-9	119+50.67	121+00.00	LT.	01/NHS/PV								150																								
RAMP JN-OBE																																					
218	D-10	48+45.00		LT.	01/NHS/PV					0.27																											
218	D-11	48+45.00		LT.	01/NHS/PV						4																										
220	D-12	56+58.91		LT.	01/NHS/PV					0.27																											
220	D-13	56+57.97		LT.	01/NHS/PV						5																										
	D-14	INTENTIONALLY OMITTED																																			
223	D-15	69+00.00	69+50.00	RT.	01/NHS/PV								50																							1	
223	D-16	69+50.00	70+11.00	RT.	01/NHS/PV								61																							1	
223	D-17	69+75.00	70+23.00	LT.	01/NHS/PV								48																								
223	D-18	INTENTIONALLY OMITTED		0	01/NHS/PV																																
	D-19	INTENTIONALLY OMITTED																																			
223	D-20	70+11.00		RT.	01/NHS/PV								64																							1	
223	D-21	70+23.00	70+75.00	LT.	01/NHS/PV	15	1						15																								
223	D-22	70+75.00	71+03.72	RT.	01/NHS/PV								29																								
223	D-23	71+00.00		LT.	01/NHS/PV	10								10																							
223	D-24	71+02.30		RT.	01/NHS/PV	15							10																								
223	D-25	71+03.72		RT.	01/NHS/PV																																1
223	D-26	71+99.44	72+06.25	RT.	01/NHS/PV								37																								
224	D-27	74+04.00	75+98.70	LT.	01/NHS/PV								21																								
224	D-28	74+04.44	75+05.77	RT.	01/NHS/PV								101																								
224	D-29	75+05.77	76+02.70	RT.	01/NHS/PV								97																								
224	D-30	76+03.00	78+05.50	LT.		42		2					42																								
224	D-31	76+02.70	76+79.44	RT.	01/NHS/PV								77																								
224	D-32	76+79.44	77+69.44	RT.	01/NHS/PV								90																								
224	D-33	77+69.44	78+59.44	RT.	01/NHS/PV								90																								
225	D-34	78+59.44	79+49.44	RT.	01/NHS/PV								90																								
225	D-35	79+49.44	80+49.44	RT.	01/NHS/PV								100																								
225	D-36	80+49.44		RT.	01/NHS/PV																																
221	D-38	59+99.77	60+27.00	RT.	01/NHS/PV	31	1						28																								
221	D-39	60+27.00	60+31.92	RT.	01/NHS/PV																																
222	D-46	64+46.72	64+48.54	RT.	01/NHS/PV						5																										
222	D-48	64+46.72	64+48.54	LT./RT.	01/NHS/PV				110				55																								
224	D-47	50+90.59		LT.	01/NHS/PV	35	1																														
RAMP JN-OBW																																					
279	D-40	41+50.00	42+75.00	LT.	01/NHS/PV																																
279	D-41	42+75.00	43+85.29	LT.	01/NHS/PV																																
279	D-42	41+30.40	43+47.94	LT.	01/NHS/PV	220																															
	D-43	INTENTIONALLY OMITTED																																			
	D-44	INTENTIONALLY OMITTED																																			
279	D-45	41+28.80	41+50.00	LT.	01/NHS/PV								21																								
RAMP EB-OL																																					
249	D-37	287+48.46		LT.	01/NHS/PV	10																															
TOTALS CARRIED TO THE GENERAL SUMMARY						668	6	6	110	0.54	5	1021	196	121	10	114	15	15	1	3	1	6	2	3	1	4	1	6	4	2	2	902	1				

DRAINAGE SUBSUMMARY
CUY - 176 - 10.13
CALCULATED _____ MJT _____ CHECKED _____ JEL _____