

**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 \$
<b>SEGMENT 1</b> COMPLETE CLOSURE OF RAMP OBW-JN FROM STA 34+60 TO 53+40 DURING PH 1/1A	7	14	\$12,000	\$84,000
<b>SEGMENT 2</b> 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
<b>S.R. 176</b>																							
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															
<b>I.R. 480</b>																							
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		
<b>RAMP OBE-JN</b>																							
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	
<b>SUBTOTAL (CARRIED TO SHEET 35 )</b>					<b>3</b>		<b>4.16</b>	<b>6.04</b>	<b>13556</b>	<b>571</b>						<b>3202</b>	<b>12090</b>			<b>740</b>	<b>1253</b>	<b>246</b>	

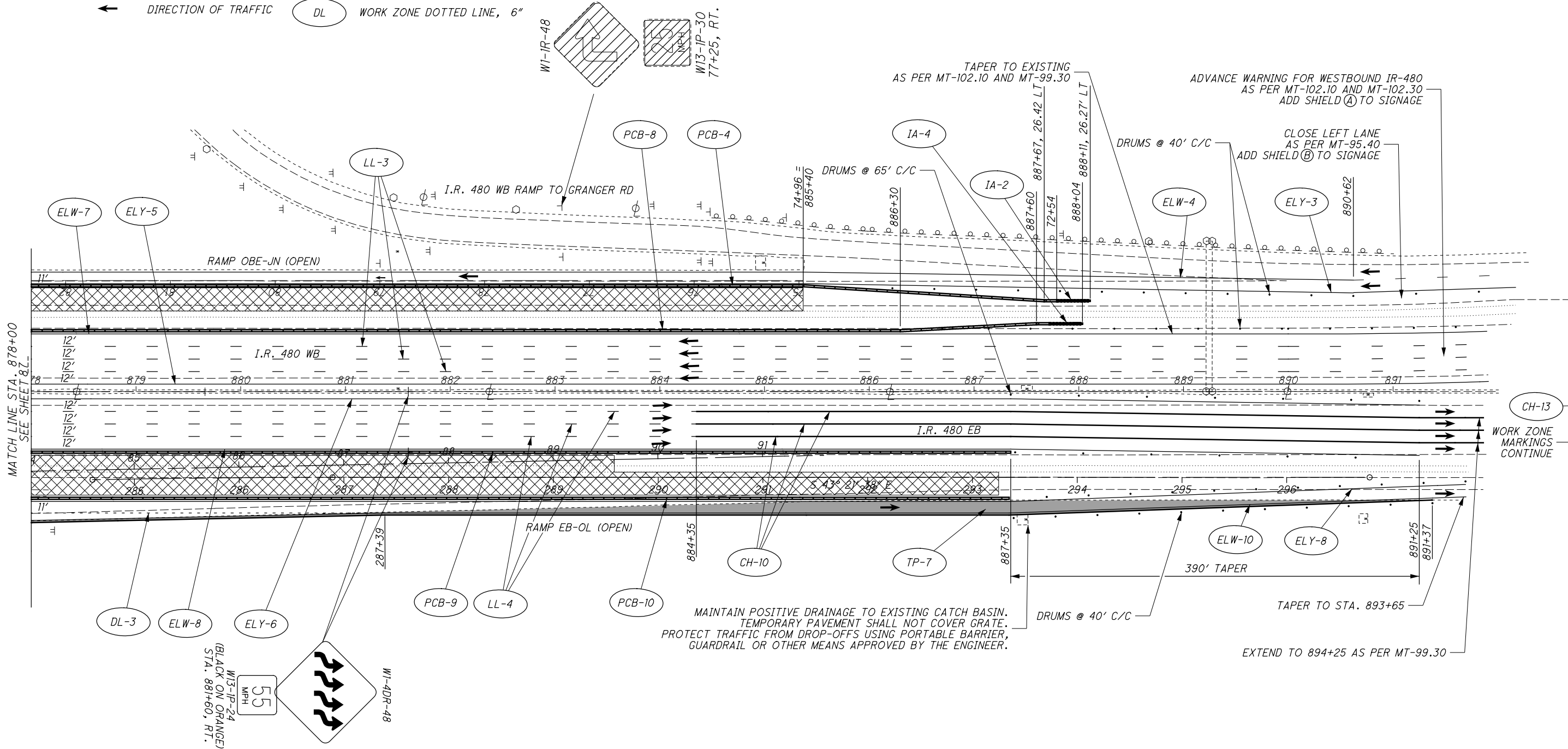
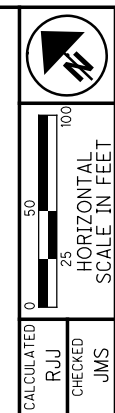
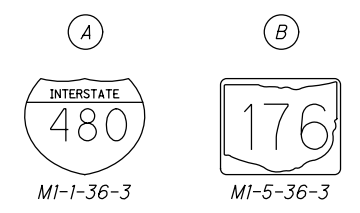
<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	<b>CUY-176-10.13</b>
CALCULATED BNC CHECKED JMS	34 363

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
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			FROM	TO	EACH	EACH	MILE	MILE	FT	FT	MILE	FT	FT	EACH	SF	SY	FT	FT	EACH	EACH	EACH	EACH	EACH
<b>RAMP JN-OBW</b>																							
83	CH-1	1	32+50	38+84					634													16	
83	ELW-3	1	32+50	37+25				0.09															
<b>RAMP JN-OBE</b>																							
81,86-87	ELY-8, ELW-9	1	52+25	75+23				0.87														29	
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													
<b>RAMP EB-OL</b>																							
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							
<b>RAMP GE-1</b>																							
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															
<b>RAMP OBW-JN</b>																							
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	
<b>SUBTOTAL (THIS SHEET)</b>					<b>2</b>			<b>2.21</b>	<b>1674</b>	<b>707</b>						<b>1676</b>	<b>5002</b>			<b>312</b>	<b>108</b>	<b>105</b>	
<b>SUBTOTAL (CARRIED FROM SHEET 33 )</b>					<b>1</b>			<b>4.45</b>	<b>7767</b>	<b>715</b>			<b>80</b>			<b>535</b>	<b>6337</b>	<b>2580</b>		<b>478</b>	<b>544</b>	<b>251</b>	
<b>SUBTOTAL (CARRIED FROM SHEET 34 )</b>					<b>3</b>		<b>4.16</b>	<b>6.04</b>	<b>13556</b>	<b>571</b>						<b>3202</b>	<b>12090</b>			<b>740</b>	<b>1253</b>	<b>246</b>	
<b>PHASE 1 SUBTOTAL</b>					<b>6</b>		<b>4.16</b>	<b>12.70</b>	<b>22997</b>	<b>1993</b>			<b>80</b>			<b>5413</b>	<b>23429</b>	<b>2580</b>		<b>1530</b>	<b>1905</b>	<b>602</b>	

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							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

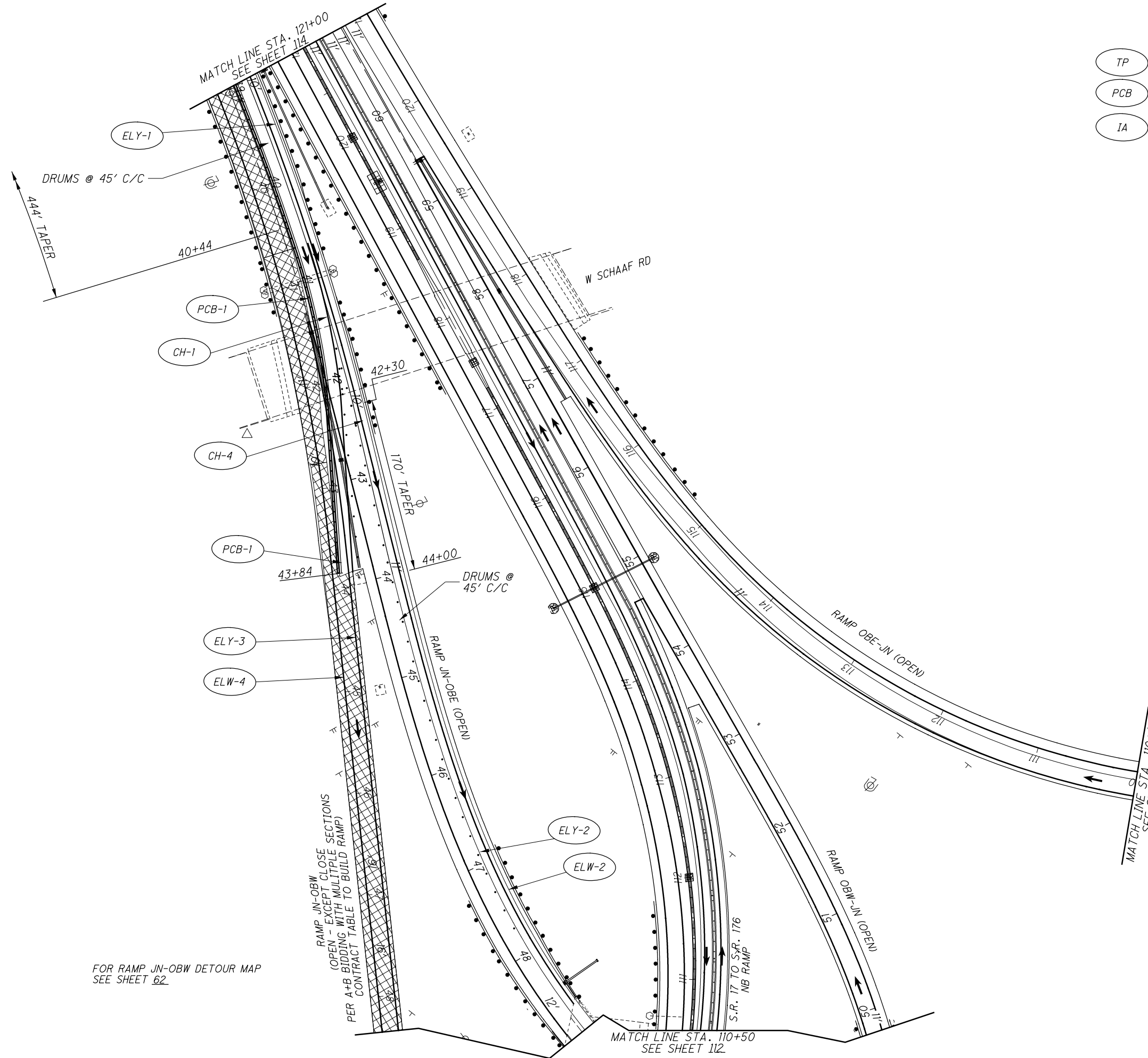
- |   |  |  |
|---|--|--|
|  WORK AREA             |  LL WORK ZONE LANE LINE, 6"           |  SL WORK ZONE STOP LINE               |
|  TP TEMPORARY PAVEMENT |  DY WORK ZONE CENTER LINE             |  GM WORK ZONE GORE MARKING            |
|  PCB PORTABLE BARRIER  |  ELW WORK ZONE EDGE LINE (WHITE), 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  |  |  |



MAINTAIN POSITIVE DRAINAGE TO EXISTING CATCH BASIN.  
 TEMPORARY PAVEMENT SHALL NOT COVER GRATE.  
 PROTECT TRAFFIC FROM DROP-OFFS USING PORTABLE BARRIER,  
 GUARDRAIL OR OTHER MEANS APPROVED BY THE ENGINEER.

MAINTENANCE OF TRAFFIC  
PHASE 1

CUY-176-10.13



FOR RAMP JN-OBW DETOUR MAP  
SEE SHEET 62

MOT LEGEND

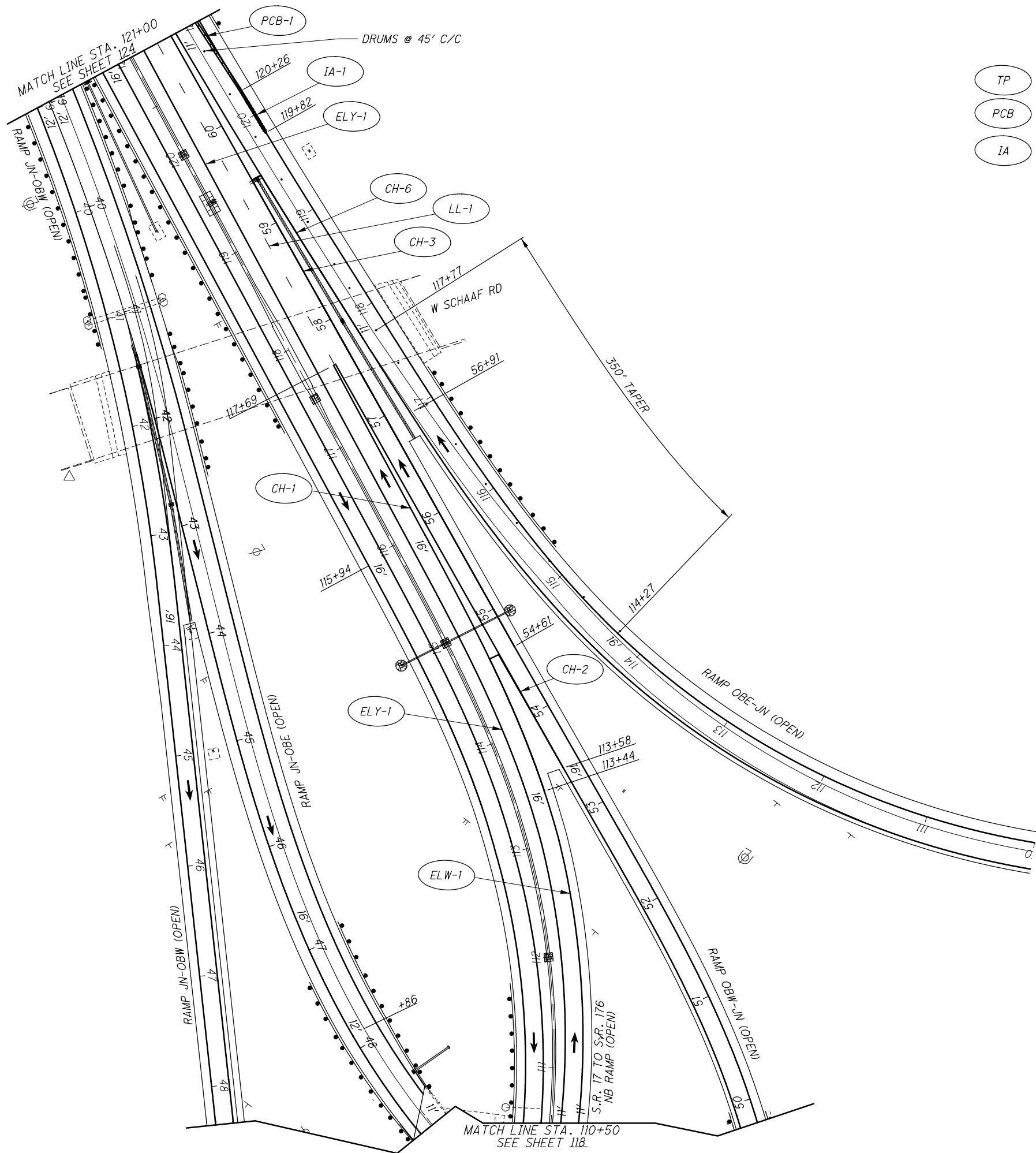
	WORK AREA
	TEMPORARY PAVEMENT
	PORTABLE BARRIER
	IMPACT ATTENUATOR
	TYPE III BARRICADE
	DRUM
	DIRECTION OF TRAFFIC
	WORK ZONE LANE LINE, 6"
	WORK ZONE CENTER LINE
	WORK ZONE EDGE LINE (WHITE), 6"
	WORK ZONE EDGE LINE (YELLOW), 6"
	WORK ZONE CHANNELIZING LINE, 12"
	WORK ZONE DOTTED LINE, 6"
	WORK ZONE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

CALCULATED RJJ  
CHECKED JMS



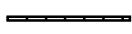





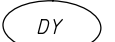

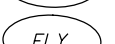
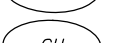

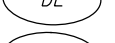
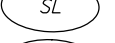

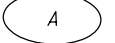
0 50 100  
HORIZONTAL SCALE IN FEET

**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)



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.		
<b>TRAFFIC SIGNALS (CONT.)</b>																															
																								1	632	80602	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 12		
																								3	632	89600	3	EACH	PEDESTAL, 8'		
																								2	632	90008	2	EACH	PEDESTAL, 15', TRANSFORMER BASE		
																								1	632	90101	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	329	
																								1	809	69123	1	EACH	ATC V6.24 CONTROLLER, AS PER PLAN	329	
																								1	633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	330	
																								1	633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	330	
																								1	633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	330	
																								3	809	69100	3	EACH	STOP LINE RADAR DETECTION	330	
<b>STRUCTURE REPAIR (BRIDGE NO. CUY-480-1557)</b>																															
																15								15	SPECIAL	51912510	15	SY	PATCHING CONCRETE BRIDGE DECK	326	
<b>STRUCTURE MODIFICATIONS (RAMP JN-OBE RETAINING WALL BARRIER)</b>																															
															145									145	512	10100	145	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
															30									30	516	13600	30	SF	1" PREFORMED EXPANSION JOINT FILLER		
<b>MAINTENANCE OF TRAFFIC</b>																															
	600																							600	614	11110	600	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
	500																							500	614	11630	500	FT	INCREASED BARRIER DELINEATION		
							2																	2	614	12381	2	EACH	WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL), AS PER PLAN	21	
		18																						18	614	12380	18	EACH	WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)		
		1																						1	614	12384	1	EACH	WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)		
																								14	614	12460	14	EACH	WORK ZONE MARKING SIGN		
		6																						6	614	12484	6	EACH	WORK ZONE INCREASED PENALTIES SIGN		
		20																						20	614	12500	20	EACH	REPLACEMENT SIGN		
			1																					1	614	12756	1	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM		
	1000	4333																						5333	614	12800	5333	EACH	WORK ZONE RAISED PAVEMENT MARKER		
	2000																							2000	614	12801	2000	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	29	
	115																							115	614	13000	115	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		
	50	4523																						4573	614	13310	4573	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY		
	50																							50	614	13314	50	EACH	BARRIER REFLECTOR, TYPE 3, ONE WAY		
	100	1599																						1699	614	13350	1699	EACH	OBJECT MARKER, ONE WAY		
	105																							105	614	18601	105	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	27	
	0.50	7.49																						7.99	614	20110	7.99	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT		
		0.01																						0.01	614	21100	0.01	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT		
	1.00	37.77																						38.77	614	22110	38.77	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT		
	3000	49746																						52746	614	23210	52746	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT		
	1000	8613																						9613	614	24200	9613	FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT		
		104																						104	614	26200	104	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT		
		869																						869	614	28000	869	FT	WORK ZONE GORE MARKING, CLASS II		
		2																						2	614	30200	2	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT		
		21																						21	614	32700	21	SF	WORK ZONE ISLAND MARKING, CLASS I		
																								LS	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC		
			6369																					6369	615	20000	6369	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		
			60																					60.00	616	10000	60.00	MGAL	WATER		
				55342																					55342	622	41100	55342	FT	PORTABLE BARRIER, UNANCHORED	
				10515																					10515	622	41011	10515	FT	PORTABLE BARRIER, 50", AS PER PLAN	26
				3																					3	622	41050	3	EACH	PORTABLE BARRIER, "Y" CONNECTOR	
				90																					90	808	18700	90	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
				60																					60	829	00100	60	SNMT	WORK ZONE EGRESS WARNING SYSTEM	
				225																					225	896	00012	225	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS II	
				90																					90	896	00021	90	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	30
<b>INCIDENTALS</b>																															
																								LS	100	50200	LS		DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION ADVISOR		
																								LS	108	10000	LS		CPM PROGRESS SCHEDULE		
																								LS	614	11000	LS		MAINTAINING TRAFFIC	328	
																								22	619	16021	22	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN	20	
	22																							LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
																								LS	624	10000	LS		MOBILIZATION		

GENERAL SUMMARY

CUY-176-10.13

PLAN SHEET NO.	REFERENCE NO.	STATION		SIDE	PARTICIPATION	202		SPECIAL	602	611	611	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
<b>S.R. 176</b>																																	
150	D-1	91+11.31	91+27.00	LT.	01/NHS/PV							18							1														
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																											
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																										
156	D-9	119+50.67	121+00.00	LT.	01/NHS/PV							150																					
<b>RAMP JN-OBE</b>																																	
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																						
223	D-16	69+50.00	70+11.00	RT.	01/NHS/PV						61																						
223	D-17	69+75.00	70+23.00	LT.	01/NHS/PV						48																						
223	D-18	INTENTIONALLY OMITTED			0																												
	D-19	INTENTIONALLY OMITTED																															
223	D-20	70+11.00		RT.	01/NHS/PV						64																						
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																												
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	10	1			5																							
222	D-48	64+46.72	64+48.54	LT./RT.	01/NHS/PV							55																					
224	D-47	50+90.59		LT.	01/NHS/PV	35	1																										
<b>RAMP JN-OBW</b>																																	
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																						
<b>RAMP EB-OL</b>																																	
249	D-37	287+48.46		LT.	01/NHS/PV	10																											
<b>TOTALS CARRIED TO THE GENERAL SUMMARY</b>						<b>668</b>	<b>6</b>	<b>6</b>	<b>110</b>	<b>0.54</b>	<b>5</b>	<b>1021</b>	<b>196</b>	<b>121</b>	<b>10</b>	<b>114</b>	<b>15</b>	<b>15</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>902</b>	<b>1</b>

CALCULATED  
MJT  
CHECKED  
JEL

**DRAINAGE SUBSUMMARY**

**CUY - 176 - 10.13**