

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

- 659, SOIL ANALYSIS TEST 2 EACH
- 659, TOPSOIL 1,226 CU. YD.
- 659, SEEDING AND MULCHING 11,045 SQ. YD.
- 659, REPAIR SEEDING AND MULCHING 553 SQ. YD.
- 659, INTER-SEEDING 553 SQ. YD.
- 659, COMMERCIAL FERTILIZER 1.55 TON
- 659, LIME 2.29 ACRES
- 659, WATER 63 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

**JOINT SEAL**

ALL FEATHER OR BUTT JOINTS SHALL BE AS PER ODOT STANDARD CONSTRUCTION DRAWING BP-3.1 AND IN ADDITION, SHALL INCLUDE A 4" WIDE STRIP OF ASPHALT CEMENT 702.01 APPLIED TO THE SURFACE OF THE JOINT. JOINT SEAL SHALL ALSO BE APPLIED AT ALL LOCATIONS MEETING CURB AND GUTTER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR, EQUIPMENT AND MATERIALS, FOR THE WORK NOTED ABOVE AND SHALL BE INCLUDED WITH THE CONTRACT UNIT PRICE BID FOR ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**POST CONSTRUCTION STORM WATER TREATMENT**

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

**VEGETATED BIOFILTER**

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**POST-CONSTRUCTION BRIDGE INSPECTION**

AT LEAST TWO WEEKS PRIOR TO OPENING THE BRIDGE TO TRAFFIC, THE CONTRACTOR SHALL NOTIFY THE ODOT DISTRICT 8 BRIDGE INSPECTION ENGINEER (513-932-3030) TO ALLOW FOR THE NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) REQUIRED POST-CONSTRUCTION INITIAL INSPECTION OF THE BRIDGE.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E**

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. 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, 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.

**INSTREAM RESTRICTIONS**

ODOT WILL OBTAIN ALL APPROPRIATE WATERWAY PERMITS PRIOR TO ANY WORK WITHIN THE JURISDICTIONAL BOUNDARY OF ANY WATERWAY, INCLUDING WETLANDS, AND ALL WATERWAY PERMIT SPECIAL PROVISIONS WILL BE NOTED UNDER SPECIAL PROVISIONS IN THE PLANS AND ADHERED TO DURING CONSTRUCTION

**ITEM 254 - PAVEMENT PLANING**

THE PAVEMENT PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE SURFACE COURSE PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$8,000 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

DESIGN AGENCY



DESIGNER  
RJN

REVIEWER  
JDH 09/27/21

PROJECT ID  
109357

SHEET	TOTAL
10	160

**ITEM 614, MAINTAINING TRAFFIC**

THE SAME NUMBER OF LANES THAT EXISTED PRIOR TO CONSTRUCTION IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON CLE-28 BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT AND PAVEMENT FOR MAINTAINING TRAFFIC, EXCLUDING THE FOLLOWING:

- LANES MAY BE CLOSED IN ACCORDANCE WITH THE CLE-28 UNAUTHORIZED LANE USE TABLE PROVIDED ON THIS SHEET.
- SR -28 MAY BE REDUCED TO FIVE LANES FOR PHASES 1 AND 2 AND FOUR LANES FOR PHASES 3 THROUGH 5 OF THE MOT PLAN, AS FURTHER DETAILED IN THIS NOTE AND PLAN SHEETS 17 TO 48.

THE SAME NUMBER OF LANES THAT EXISTED PRIOR TO CONSTRUCTION IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON BUS-28 AND RAMP C BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT AND PAVEMENT FOR MAINTAINING TRAFFIC.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN SCD MT-95.41 AND MT-95.45

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEAR'S	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	6:00 AM FRIDAY THROUGH 7:00 PM MONDAY
MONDAY	6:00 AM FRIDAY THROUGH 7:00 PM TUESDAY
TUESDAY	6:00 AM MONDAY THROUGH 7:00 PM WEDNESDAY
WEDNESDAY	6:00 AM TUESDAY THROUGH 7:00 PM THURSDAY
THURSDAY	6:00 AM WEDNESDAY THROUGH 7:00 PM MONDAY
FRIDAY	6:00 AM THURSDAY THROUGH 7:00 PM MONDAY
SATURDAY	6:00 AM FRIDAY THROUGH 7:00 PM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE

CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP AND ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER	125 M. GAL.
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**NOTIFICATION OF TRAFFIC RESTRICTIONS**

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP AND ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	21 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES AND RESTRICTIONS	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	21 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION AND TRAFFIC PATTERN CHANGES		21 CALENDAR DAYS PRIOR TO IMPLEMENTATION

**DELINEATION OF PORTABLE AND PERMANENT BARRIER**

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

[INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.]

[THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.]

[DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.]

[TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1, ONE-WAY	110 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	16 EACH
ITEM 614, INCREASED BARRIER DELINEATION	800 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

[ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.]



**MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION (CONT.)**

2. NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION. IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE OR MIAMI TOWNSHIP FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONST-

RUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6:00 AM TO 9:00 AM AND 3:00 PM TO 7:00 PM/ ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF-DUTY MIAMI TOWNSHIP POLICE, HIRED BY THE CONTRACTOR:

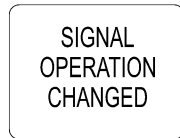
- 1. SR-28 & BUS-28 & ROMAR DRIVE

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

- 1. TIME OF NOTIFICATION OF MALFUNCTION;
- 2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
- 3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
- 4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
- 5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.



W3-H10-30

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

**ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN**

WHERE SIGNIFICANT EARTHWORK IS REQUIRED, CROSS SECTIONS ARE SHOWN IN THE PLANS AND PAY ITEM FOR "ROADS FOR MAINTAINING TRAFFIC" HAS BEEN INCLUDED. FOR SHORTER ROADWAY SECTIONS OR WHERE ONLY MINOR GRADING IS REQUIRED ALL EXCAVATION, EMBANKMENT, TEMPORARY SEEDING, AND ALL OTHER INCIDENTAL ITEMS SHALL BE INCLUDED UNDER THE "PAVEMENT FOR MAINTAINING TRAFFIC" PAY ITEM. PAYMENT FOR EARTHWORK SHALL NOT BE MADE SEPARATELY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL GRADING, EMBANKMENT, EXCAVATION, MATERIALS, AND OTHER INCIDENTALS WHICH ARE REQUIRED TO PROVIDE AND MAINTAIN A SAFE DRIVING SURFACE, AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING TEMPORARY GRADING, DRAINAGE FACILITIES, AND PAVEMENT RESURFACING (OVERLAYS) NECESSARY TO MAINTAIN ADEQUATE AND POSITIVE DRAINAGE THROUGHOUT THE WORK ZONE, AS SPECIFIED IN THE PLAN OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL MAINTAIN, TEMPORARILY RELOCATE, OR ADJUST TO TEMPORARY GRADE ALL TOPOGRAPHIC ELEMENTS WITHIN THE WORK LIMITS INCLUDING BUT NOT LIMITED TO: CATCH BASINS, INLETS, SIGNS, LIGHTING FEATURES, AND OTHER UTILITY APPURTENANCES AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING TEMPORARY DRAINAGE FACILITIES INCLUDING SIZE, TYPE, AND LOCATION OF TEMPORARY DRAINAGE ITEMS, TEMPORARY SHEETING AND SHORING, WHERE NEEDED TO KEEP SIDE SLOPES FROM INTERFERING WITH OTHER CONSTRUCTION ACTIVITIES AND/OR THE TRAVELING PUBLIC, SHALL ALSO BE INCLUDED WITH THIS ITEM.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND OTHER INCIDENTALS REQUIRED TO CONSTRUCT TEMPORARY ROADWAY WIDENING SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN, SHALL CONSIST OF:

- 1-1/2" - 441 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 1 (448)
- 5" - 302 ASPHALT CONCRETE BASE
- 4" - 304 AGGREGATE BASE

AND SHALL CONFORM TO THE SPECIFICATION REQUIREMENTS FOR ITEM 615.

**TEMPORARY PAVEMENT RESTORATION**

ONCE CONSTRUCTION ENDS, ALL AREAS WHERE TEMPORARY PAVEMENT WAS PLACED MUST BE RESTORED TO PRE-EXISTING CONDITIONS AND IS SUBJECT TO APPROVAL BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUSIVE IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

**MAINTENANCE OF MAJOR GUIDE SIGNS**

THE CONTRACTOR SHALL MAINTAIN THE SAME NUMBER OF GUIDE SIGNS AS CURRENTLY EXISTS FOR EACH FREEWAY EXIT AND ENTRANCE TO ALLOW MOTORISTS TO FIND THEIR DESTINATIONS SAFELY. NO MORE THAN ONE (1) SIGN FOR ANY EXIT MAY BE REMOVED AT ANY TIME, IN INSTANCES WHERE THE COPY ON THE REPLACEMENT SIGN SUBSTANTIALLY DIFFERENT FROM THE

COPY ON THE EXISTING SIGNS IN THE SEQUENCE FOR THAT RAMP SHALL BE CHANGED WITHIN ONE CALENDAR DAY.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND OTHER INCIDENTALS REQUIRED TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**TEMPORARY OVERHEAD GUIDE SIGN LOCATIONS**

THE CONTRACTOR SHALL ADJUST THE OVERHEAD LOCATION OF GUIDE SIGNS ON THE EXISTING OR FINAL PERMANENT OVERHEAD SUPPORTS TO CORRESPOND WITH THE REVISED LANE LOCATION. PAYMENT FOR ALL ITEMS ASSOCIATED WITH THE TEMPORARY RELOCATION OF SIGNS ON THE EXISTING OR FINAL PERMANENT SUPPORTS SHALL BE INCLUDED UNDER THE LUMP SUM PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAYMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES, LAP LONGITUDINAL JOINTS, AS SHOWN ON STANDARD CONSTRUCTION DRAWINGS BP-3.1.

**ITEM 625, SPECIAL - MAINTAIN EXISTING LIGHTING**

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN. BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE

MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

**ITEM 625, SPECIAL - MAINTAIN EXISTING LIGHTING (CONT.)**

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.  
 THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

A LUMP SUM QUANTITY OF ITEM 625, SPECIAL - MAINTAIN EXISTING LIGHTING HAS BEEN PROVIDED IN THE LIGHTING SUBSUMMARY

**WORK ZONE MARKINGS AND SIGNS**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND

SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT 2.63 MILE
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 807 PAINT 0.24 MILE
- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 807 PAINT 0.79 MILE
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT 1014 FEET
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT 9488 FEET
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 807 PAINT 176 FEET

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE PER THE REQUIREMENTS OF MOT PHASE 8:

- ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT 1.28 MILE

- ITEM 614 - WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT 1.15 MILE
- ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 6", 642 PAINT 0.46 MILE
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT 272 FEET
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT 2104 FEET
- ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT 301 FEET
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS III, 12", 642 PAINT 73 FEET

**DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL**

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET

[OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

- ITEM 614, BARRIER REFLECTOR, TYPE 2 (ONE-WAY OR BIDIRECTIONAL) 20 EACH
- ITEM 614, OBJECT MARKER, ONE-WAY 16 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEMS.

**UNAUTHORIZED LANE USE**

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE UNAUTHORIZED LANE USE TABLE LOCATED ON THIS SHEET FOR EACH UNIT OF TIME A CRITICAL LANE IS CLOSED BY THE CONTRACTOR WHILE NOT OTHERWISE PERMITTED BY THIS CONTRACT. THE DISINCENTIVE WILL BE FOR ANY LANE CLOSURES CAUSED BY THE CONTRACTOR DURING TIMES AND LOCATIONS NOT SPECIFICALLY PERMITTED BY THIS CONTRACT.

**PERMITTED LANE CLOSURE TIMES AND UNAUTHORIZED LANE USE TABLE**

LOCATION	DIRECTION	EX. NO. OF THRU LANES	1 LANE CLOSED		2 LANES CLOSED		15 MINUTE SHORT DURATION COMPLETE CLOSURES	COMPLETE CLOSURE	TIME UNIT	DISINCENTIVE PER LANE PER TIME UNIT
			WEEKDAY	WEEKEND	WEEKDAY	WEEKEND				
IR 275	BOTH	3	10 AM TO 2 PM, 7 PM TO 6 AM SEE NOTE 3	6 PM TO 9 AM	SB - 10 PM TO 6 AM NB - 9 PM TO 5 AM	9 PM TO 6 AM	12 AM TO 5 AM	N/A	1 MINUTE	\$275
SR 28	EB	3	7 PM TO 11 AM	7 PM TO 11 AM	9 PM TO 7 AM	9 PM TO 7 AM	N/A	N/A	1 MINUTE	\$135
SR 28	WB	3	7 PM TO 7 AM	7 PM TO 7 AM	8 PM TO 5 AM	8 PM TO 7 AM	N/A	N/A	1 MINUTE	\$135
BUS 28	BOTH	2	7 PM TO 11 AM	7 PM TO 11 AM	N/A	N/A	N/A	N/A	1 MINUTE	\$35
Ramps	-	3	FOLLOW TIMES FOR SR 28		N/A	N/A	N/A	10 PM TO 5 AM	1 MINUTE	\$275
Ramps	-	1	N/A	N/A	N/A	N/A	N/A	10 PM TO 5 AM	1 MINUTE	\$275

**NOTES**

- No southbound I-275 closures 2 hours before to 1 hour after events at Riverbend. No northbound I-275 lane closures 1 hour before the scheduled end of events to 2 hours after the event at Riverbend.
- Only one ramp is permitted to be closed at a time.
- No daytime lane closures on Friday.

ORDER OF COMPLETION	TRAFFIC CONTROL OPERATION	WORK TO BE COMPLETED
PRE-CONSTR.	MAINTAIN NORMAL OPERATIONS, LANE CLOSURES AS PER STANDARD DRAWINGS MT-95.31 AND MT-95.32 AS NEEDED. AT NO TIME SHALL THE CONTRACTOR DETOUR TRAFFIC ON SR-28.	ALL PRE-CONSTRUCTION ACTIVITIES, INCLUDING MOBILIZATION, CLEARING AND GRUBBING, TEMPORARY PAVEMENT FOR MAINTAINING TRAFFIC, AND STAKING SHALL BE COMPLETED.
PHASE 1	SHIFT ALL TRAFFIC TO THE SOUTH SIDE OF SR-28. MAINTAIN THREE 11' LANES OF TRAFFIC IN THE EAST DIRECTION ON SR-28 AND TWO 11' LANES OF TRAFFIC IN THE WEST DIRECTION AT ALL TIMES. SHOULDERS SHALL BE 2' WIDE AS ALLOWABLE. ACCESS TO ALL INTERSTATE RAMP SHALL REMAIN OPEN FOR THE DURATION OF PHASE 1.	REPLACE NORTH SIDE EXISTING PARAPET AND VANDAL PROTECTION FENCE WITH A NEW SINGLE SLOPE CONCRETE BARRIER PER SBR-1-20 AND NEW 6' TALL FENCE PER VPF-1-90 ON THE BRIDGE. INCLUDE A 3" CONDUIT IN EACH PARAPET. REPLACE THE PARAPET TRANSITIONS, BRIDGE TERMINAL ASSEMBLIES, AND APPROACH GUARDRAIL TO MEET CURRENT STANDARDS. SEAL THE NEW PARAPETS WITH AN EPOXY URETHANE SEALER, FEDERAL COLOR 17778.
PHASE 2	SHIFT ALL TRAFFIC TO THE NORTH SIDE OF SR-28. MAINTAIN THREE 11' LANES OF TRAFFIC IN THE EAST DIRECTION ON SR-28 AND TWO 11' LANES OF TRAFFIC IN THE WEST DIRECTION AT ALL TIMES. SHOULDERS SHALL BE 2' WIDE AS ALLOWABLE. ACCESS TO ALL INTERSTATE RAMP SHALL REMAIN OPEN FOR THE DURATION OF PHASE 2.	REPLACE SOUTH SIDE EXISTING PARAPET AND VANDAL PROTECTION FENCE WITH A NEW SINGLE SLOPE CONCRETE BARRIER PER SBR-1-20 AND NEW 6' TALL FENCE PER VPF-1-90 ON THE BRIDGE. INCLUDE A 3" CONDUIT IN EACH PARAPET. REPLACE THE PARAPET TRANSITIONS, BRIDGE TERMINAL ASSEMBLIES, AND APPROACH GUARDRAIL TO MEET CURRENT STANDARDS. SEAL THE NEW PARAPETS WITH AN EPOXY URETHANE SEALER, FEDERAL COLOR 17778.
PHASE 3	TRAFFIC SHALL BE KEPT SHIFTED TO THE NORTH SIDE OF SR-28. MAINTAIN TWO 10.5' LANES OF TRAFFIC IN EACH DIRECTION ON SR-28 AT ALL TIMES. SHOULDERS SHALL BE 2' WIDE AS ALLOWABLE. ACCESS TO ALL INTERSTATE RAMP SHALL REMAIN OPEN FOR THE DURATION OF PHASE 3.	REPLACE THE EXISTING MSC OVERLAY AND PORTION OF THE ORIGINAL DECK USING HYDRODEMOLITION AND REPLACE WITH A NEW SUPERPLASTICIZED DENSE CONCRETE (SDC) IN AREA DESIGNATED AS WORK AREA.
PHASE 4	SHIFT EASTBOUND TRAFFIC TO THE SOUTH SIDE OF SR-28. MAINTAIN TWO 10.5' LANES OF TRAFFIC IN EACH DIRECTION ON SR-28 AT ALL TIMES. SHOULDERS SHALL BE 2' WIDE AS ALLOWABLE. ACCESS TO ALL INTERSTATE RAMP SHALL REMAIN OPEN FOR THE DURATION OF PHASE 4.	REPLACE THE EXISTING MSC OVERLAY AND PORTION OF THE ORIGINAL DECK USING HYDRODEMOLITION AND REPLACE WITH A NEW SUPERPLASTICIZED DENSE CONCRETE (SDC) IN AREA DESIGNATED AS WORK AREA.
PHASE 5	SHIFT ALL TRAFFIC TO THE SOUTH SIDE OF SR-28. MAINTAIN TWO 10.5' LANES OF TRAFFIC IN EACH DIRECTION ON SR-28 AT ALL TIMES. SHOULDERS SHALL BE 2' WIDE AS ALLOWABLE. ACCESS TO ALL INTERSTATE RAMP SHALL REMAIN OPEN FOR THE DURATION OF PHASE 3.	REPLACE THE EXISTING MSC OVERLAY AND PORTION OF THE ORIGINAL DECK USING HYDRODEMOLITION AND REPLACE WITH A NEW SUPERPLASTICIZED DENSE CONCRETE (SDC) IN AREA DESIGNATED AS WORK AREA.
PHASE 6	SHOULDER CLOSURE AS PER STANDARD DRAWING MT-95.45 ON RAMP C LEFT EDGE OF TRAVEL WAY.  - PHASE 6 SHALL BE PERFORMED IN CONJUNCTION WITH PHASES 1 THROUGH 5 AND PRIOR TO COMMENCEMENT OF PHASE 7.	SAWCUT LEFT EDGE OF TRAVEL LAND AND CONSTRUCT NEW LANE AND SHOULDER OF RAMP C AS PER TYPICAL SECTIONS UP TO AND INCLUDING THE 442 INTERMEDIATE COURSE. FOUNDATIONS AND NEW LIGHTING SHALL BE INSTALLED PRIOR TO REMOVAL OF EXISTING RAMP LIGHTING. ALL STORM SEWER, CURBS, MEDIANS, OVERHEAD SIGN STRUCTURES AND SPAN WIRE OVERHEAD SIGN SUPPORTS SHALL BE CONSTRUCTED.
PHASE 7	SHOULDER CLOSURE AS PER STANDARD DRAWING MT-95.45 ON RAMP C RIGHT EDGE OF TRAVEL WAY. - PHASE 7 SHALL BE PERFORMED IN CONJUNCTION WITH PHASES 1 THROUGH 5 UPON COMPLETION OF PHASE 6.	SAWCUT AND RECONSTRUCT LEFT EDGE OF TRAVEL LANE AND SHOULDER OF RAMP C AS PER TYPICAL SECTIONS UP TO AND INCLUDING WEARING SURFACE.
PHASE 8	LANE CLOSURE AS PER STANDARD DRAWING MT-95.31, MT-95.32, AND MT-98.28	PREP SR-28, BUS-28 AND RAMP C FOR PAVING OPERATIONS. PAVE SR-28, BUS-28 AND RAMP C WITH FINAL 442 SURFACE COURSE, APPLY CLASS III PAVEMENT MARKINGS UNTIL APPLICATION OF FINAL 644/646 PAVEMENT MARKINGS. LANE CLOSURES SHALL BE LIMITED TO WORKING HOURS ONLY, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

CLE-28-1.76

MODEL SHEET: PAPER SIZE: 17x11 (in.) DATE: 1/21/2022 TIME: 8:53:45 AM USER: AJSScott F:\37\37079\370790004\_CAD\TRNS\109357400-Engineering\MO\T\Sheets\109357\_MN004.dgn

MAINTENANCE OF TRAFFIC GENERAL NOTES

DESIGN AGENCY



DESIGNER  
RJN

REVIEWER  
JDH 09/27/21

PROJECT ID  
109357

SHEET TOTAL  
14 160



CLE-28-1.76

MODEL: Sheet PAPER:SIZE: 17x11 (in.) DATE: 1/21/2022 TIME: 9:26:43 AM USER: AJScott F:\37\3709\370900\04\_CAD\TRNS\109357\400-Engineering\Roadway\Sheets\109357\_GG001.dgn

SHEET NUM.								PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9	10	16	54	55	56	58	01/SAF/OT	02/IMS/BR							
<b>ROADWAY</b>															
							LS		201	11000	LS		CLEARING AND GRUBBING		
			30				30		202	30700	30	FT	CONCRETE BARRIER REMOVED		
			177				177		202	35100	177	FT	PIPE REMOVED, 24" AND UNDER		
			864				144	720	202	38000	864	FT	GUARDRAIL REMOVED		
			5				5		202	58100	5	EACH	CATCH BASIN REMOVED		
				9,088			9,088		203	10000	9,088	CY	EXCAVATION		
				752			752		203	20000	752	CY	EMBANKMENT		
						6,427	6,427		204	10000	6,427	SY	SUBGRADE COMPACTION		
			665					665	606	15050	665	FT	GUARDRAIL, TYPE MGS		
			1					1	606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016		
			2					2	606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T		
			2					2	606	35002	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
			1					1	606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		
			779				1	2	606	60012	3	EACH	IMPACT ATTENUATOR, TYPE 1 (BI-DIRECTIONAL)		
			1				779		622	10100	779	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1		
			1						622	24850	1	EACH	CONCRETE BARRIER END SECTION, TYPE B1		
							LS		878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS		
<b>EROSION CONTROL</b>															
5							5		601	21050	5	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
					22		22		601	21060	22	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT		
					4		4		601	32200	4	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		
	2						2		659	00100	2	EACH	SOIL ANALYSIS TEST		
	1,226				26		1,252		659	00300	1,252	CY	TOPSOIL		
	11,045						11,045		659	10000	11,045	SY	SEEDING AND MULCHING		
	553						553		659	14000	553	SY	REPAIR SEEDING AND MULCHING		
	553						553		659	15000	553	SY	INTER-SEEDING		
	1.55						1.55		659	20000	1.55	TON	COMMERCIAL FERTILIZER		
	2.29						2.29		659	31000	2.29	ACRE	LIME		
	63						63		659	35000	63	MGAL	WATER		
				737			737		670	00700	737	SY	DITCH EROSION PROTECTION		
							LS		832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN		
							LS		832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
							LS		832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
							30,000		832	30000	30,000	EACH	EROSION CONTROL		
<b>DRAINAGE</b>															
				0.79			0.79		602	20000	0.79	CY	CONCRETE MASONRY		
			2,227				2,227		605	11100	2,227	FT	6" SHALLOW PIPE UNDERDRAINS		
50							50		605	13300	50	FT	6" UNCLASSIFIED PIPE UNDERDRAINS		
			3,146				3,146		605	14000	3,146	FT	6" BASE PIPE UNDERDRAINS		
250							250		605	31100	250	FT	AGGREGATE DRAINS		
				45			45		611	00510	45	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		
100							100		611	01500	100	FT	6" CONDUIT, TYPE F		
					131		131		611	04400	131	FT	12" CONDUIT, TYPE B		
					222		222		611	05900	222	FT	15" CONDUIT, TYPE B		
					13		13		611	06100	13	FT	15" CONDUIT, TYPE C		
					10		10		611	10400	10	FT	24" CONDUIT, TYPE B, 706.02		
					95		95		611	10600	95	FT	24" CONDUIT, TYPE C		
					1		1		611	98150	1	EACH	CATCH BASIN, NO. 3		
					3		3		611	98180	3	EACH	CATCH BASIN, NO. 3A		
					3		3		611	98410	3	EACH	CATCH BASIN, NO. 8		
					1		1		611	98470	1	EACH	CATCH BASIN, NO. 2-2B		
					2		2		611	99100	2	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1		
					1		1		611	99574	1	EACH	MANHOLE, NO. 3		
3			3				6		611	99710	6	EACH	PRECAST REINFORCED CONCRETE OUTLET		

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER  
AJS

REVIEWER  
JDH 09/27/21


PROJECT ID  
109357

SHEET	TOTAL
50	160


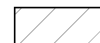


ROADWAY QUANTITIES TABLE																		
REF NO.	SHEET NO.	STATION TO STATION		SIDE	202	202	202	202	609	609	606	606	606	606	606	606	622	622
		FROM	TO		GUARDRAIL REMOVED FT	CONCRETE BARRIER REMOVED FT	CATCH BASIN REMOVED EACH	PIPE REMOVED, 24" AND UNDER	CURB, TYPE 4-C FT	CURB, TYPE 6 FT	GUARDRAIL, TYPE MGS FT	ANCHOR ASSEMBLY, MGS TYPE E EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL) EACH	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 FT	CONCRETE BARRIER END SECTION, TYPE B1 EACH
R-1	62	64+11.81	66+81.73	RT.	282													
R-2	63	70+61.92	71+88.56	RT.	136													
R-3	63/64	71+63.18	73+56.22	LT.	192													
R-4	65	10+84.06	12+21.18	LT.	140													
R-5	66	14+76.98	15+06.04	LT.	31													
R-6	66	15+05.69	15+35.09	LT.		30												
R-7	66	15+32.59	16+10.62	LT.	83													
R-8	67	211+95.77	211+95.77	LT.			1											
R-9	69	218+70.90	218+70.90	LT.			1											
R-10	69	218+70.90	219+74.25	LT.				98										
R-11	69	219+74.25	219+74.25	LT.			1											
R-12	65	231+33.68	231+33.68	LT.			1											
R-13	65	231+54.85	231+54.85	LT.			1											
R-14	65	231+33.68	231+54.85	LT.				38										
R-15	65	231+33.68	232+05.63	LT.				41										
GR-1	62	63+92.38	66+85.49	RT.						288		1	1					
GR-2	63	70+57.32	72+08.46	RT.						150		1		1	2			
GR-3	63/64	71+57.21	74+36.63	LT.						227	1		1					
I-1	70	233+25.00	233+40.00	LT.										1				
C-1	62	66+58.55	66+85.49	RT.				19										
C-2	63	71+57.21	71+85.24	LT.				19										
C-3	65,66,70	228+00.00	235+55.77	LT.					733									
B-1	65,66,70	225+15.94	233+25.00	LT.													779	
B-2	70	233+25.00	233+25.00	LT.														1
TOTALS CARRIED TO GENERAL SUMMARY					864	30	5	177	38	733	665	1	2	2	1	3	779	1

SUBSUMMARIES

DESIGN AGENCY  
  
 DESIGNER  
 AJS  
 REVIEWER  
 JDH 09/27/21  
 PROJECT ID  
 109357  
 SHEET TOTAL  
 54 160

**LEGEND**

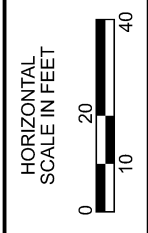
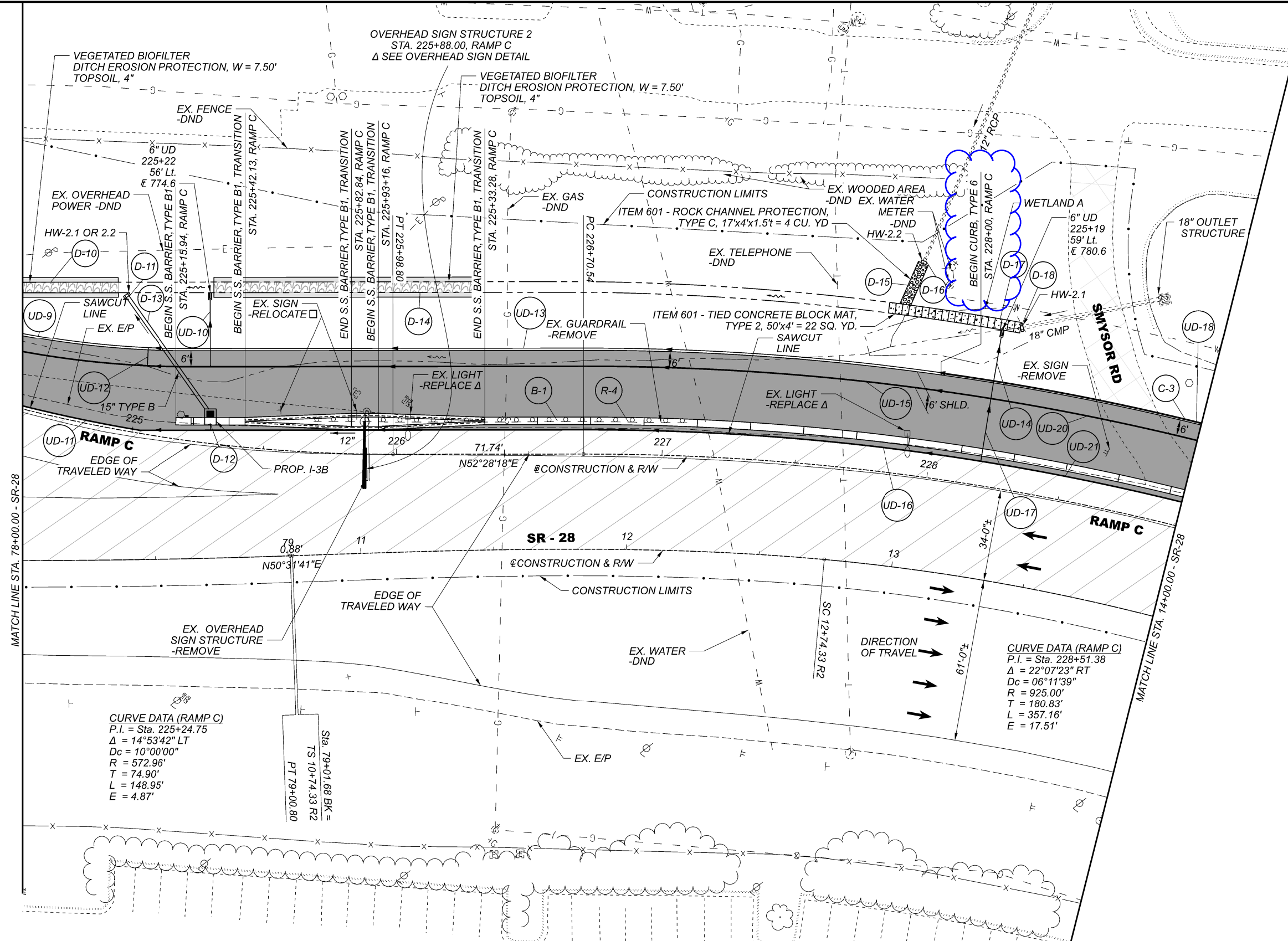
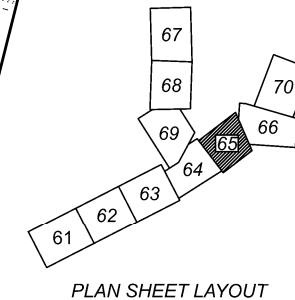
-  FULL DEPTH PAVEMENT
-  PAVEMENT PLANING & RESURFACING
-  PAVEMENT REMOVAL

**SPIRAL DATA (SR-28)**  
 P.I. = Sta. 12+07.78 R2  
 Ls = 200.000'  
 $\theta_s = 07^\circ 15' 00.0''$   
 LT = 133.445'  
 ST = 66.768'  
 x = 199.68'  
 y = 8.43'  
 k = 99.95'  
 p = 2.11'  
 C = 199.858'  
 Start = Sta. 10+74.33 R2  
 End = Sta. 12+74.33 R2  
 C.B. = N52°56'40"E

**CURVE DATA (RAMP C)**  
 P.I. = Sta. 225+24.75  
 $\Delta = 14^\circ 53' 42''$  LT  
 $D_c = 10^\circ 00' 00''$   
 R = 572.96'  
 T = 74.90'  
 L = 148.95'  
 E = 4.87'

Sta. 79+01.68 BK =  
 TS 10+74.33 R2  
 PT 79+00.80

**CURVE DATA (RAMP C)**  
 P.I. = Sta. 228+51.38  
 $\Delta = 22^\circ 07' 23''$  RT  
 $D_c = 06^\circ 11' 39''$   
 R = 925.00'  
 T = 180.83'  
 L = 357.16'  
 E = 17.51'



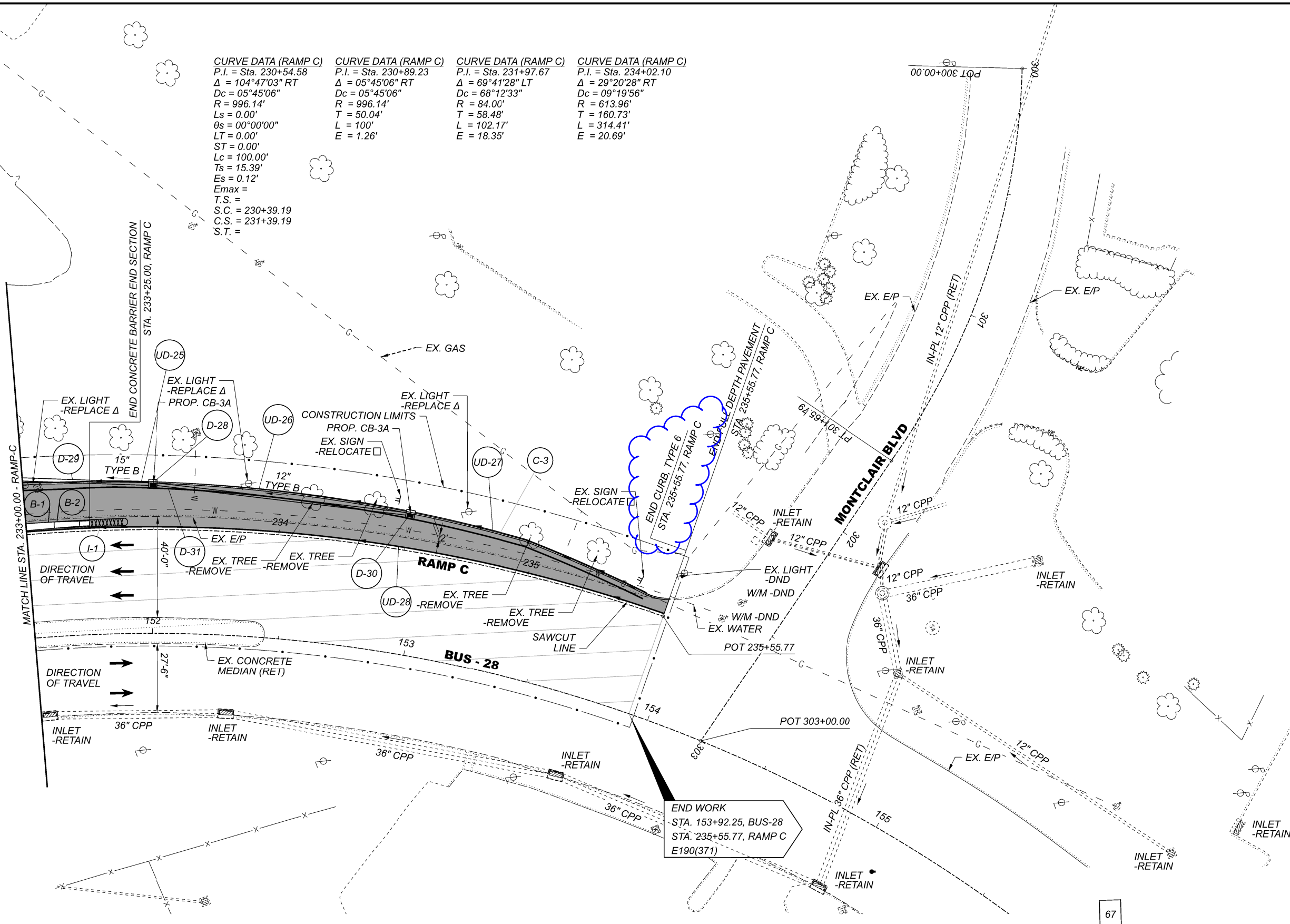
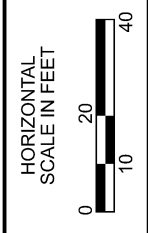
**PLAN**  
 SR-28 - STA. 78+00.00 TO STA. 14+00.00

DESIGN AGENCY	
<b>BARGE</b>	
DESIGNER	RJN
REVIEWER	JDH
PROJECT ID	109357
SHEET	TOTAL
65	160

$\Delta$  SEE LIGHTING SHEETS FOR NEW LIGHT POLE LOCATIONS  
 NOTE:  
 ATG - ADJUST TO GRADE  
 DND - DO NOT DISTURB



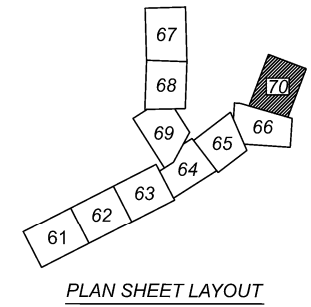
CURVE DATA (RAMP C)	CURVE DATA (RAMP C)	CURVE DATA (RAMP C)	CURVE DATA (RAMP C)
P.I. = Sta. 230+54.58	P.I. = Sta. 230+89.23	P.I. = Sta. 231+97.67	P.I. = Sta. 234+02.10
$\Delta = 104^\circ 47' 03''$ RT	$\Delta = 05^\circ 45' 06''$ RT	$\Delta = 69^\circ 41' 28''$ LT	$\Delta = 29^\circ 20' 28''$ RT
Dc = $05^\circ 45' 06''$	Dc = $05^\circ 45' 06''$	Dc = $68^\circ 12' 33''$	Dc = $09^\circ 19' 56''$
R = 996.14'	R = 996.14'	R = 84.00'	R = 613.96'
Ls = 0.00'	T = 50.04'	T = 58.48'	T = 160.73'
$\theta_s = 00^\circ 00' 00''$	L = 100'	L = 102.17'	L = 314.41'
LT = 0.00'	E = 1.26'	E = 18.35'	E = 20.69'
ST = 0.00'			
Lc = 100.00'			
Ts = 15.39'			
Es = 0.12'			
Emax =			
T.S. =			
S.C. = 230+39.19			
C.S. = 231+39.19			
S.T. =			



END WORK  
 STA. 153+92.25, BUS-28  
 STA. 235+55.77, RAMP C  
 E190(371)

**LEGEND**

	FULL DEPTH PAVEMENT
	PAVEMENT PLANING & RESURFACING



□ SEE SIGNING & PAVEMENT MARKING SHEETS FOR NEW SIGN LOCATIONS  
 Δ SEE LIGHTING SHEETS FOR NEW LIGHT POLE LOCATIONS

**NOTE:**  
 ATG - ADJUST TO GRADE  
 DND - DO NOT DISTURB

PLAN

RAMP C - STA. 233+00.00 TO STA. 235+55.77

DESIGN AGENCY	<b>BARGE</b>
DESIGNER	RJN
REVIEWER	JDH
PROJECT ID	109357
SHEET	70
TOTAL	160