# **REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE. REPRESENTATIVES OF THE STATE AND THE CONTRACTOR. ALONG WITH LOCAL REPRESENTATIVES. SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS. INLETS. CATCH BASINS. AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

## 202 CONCRETE BARRIER REMOVED AS PER PLAN

THIS ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REMOVE THE EXISTING PORTABLE CONCRETE BARRIER ON WESTBOUND S.R. 32 AS SHOWN IN THE PLANS. THE BARRIER SHALL BECOME PROPERTY OF THE CONTRACTOR. APPROXIMATELY 906 LF OF THE EXISTING PORTABLE CONCRETE BARRIER HAS BEEN DETERMINED TO NOT MEET THE QUALITY STANDARDS PER 614.03 AND CANNOT BE REUSED.

#### SAWCUT TO SOUND PAVEMENT

THE EXISTING PAVEMENT EDGES SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PAVEMENT REMOVED.

#### **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.

# EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE WORK DESCRIBED ABOVE HAS BEEN INCLUDED IN THE QUANTITIES SHOWN IN THE UNDERDRAIN SUBSUMMARY. SEE SHEET 127.

# ITEM 606 - IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE TYPE 2 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE (REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS), WHEN BI-DIRECTIONAL DESIGNS ARE SPECIFIED. THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606. IMPACT ATTENUATOR. TYPE 2 [60 MPH, 36" WIDTH, UNIDIRECTIONAL], EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM. INCLUDING ALL RELATED BACKUPS/BACKSTOPS, TRANSITIONS, HARDWARE AND GRADING. NOT SEPARATELY SPECIFIED. AS REQUIRED BY THE MANUFACTURER. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS. IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

# POST CONSTRUCTION STORM WATER TREATMENT

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

#### VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(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 AND ITEM 670. SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS. THE EDGE OF SHOULDER. AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

#### ITEM 204 - GEOTEXTILE FABRIC

THIS ITEM WILL BE PLACED BENEATH ITEM 304 - AGGREGATE BASE AT THE TOE OF PROPOSED BARRIER WALLS ALONG RAMP I TO PREVENT WEED GROWTH IN AREA AROUND EXISTING BRIDGE PIERS.

#### ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN

A CONCRETE PAVED GUTTER WILL BE PLACED TO THE NORTH OF THE PROPOSED SOIL NAIL WALL PER THE WALL SECTION SHOWN ON SHEET 170. THIS WORK SHALL CONFORM TO CMS SECTION 601 AND SCD DM-2.1.

JoeS DATE

40

 $\overline{}$ 

9

ကို

ш

# ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016

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.

# ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED.

ALL TESTING. INSPECTION AND QUALITY CONTROL FOR CONCRETE. NOT INCLUDED UNDER QC/QA PAY ITEMS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY IN ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE TESTING DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT. SUBMIT TO THE ENGINEER FOR APPROVAL. THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.

TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN CMS SPECIFICATIONS 455 RESPECTIVELY.

THROUGH THE CONTRACTOR. THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT CONSTRUCTION INSPECTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIAN(S), ALL EQUIPMENT, AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST **RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE** PLACEMENT.

THE TECHNICIAN SHALL BE ACI LEVEL 1 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT VERSED IN THE REQUIRED TESTING PROCEDURE.

### ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION (CONT.)

THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT FOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS. TE-45'S. INSPECTORS DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY. UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM. THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER. STATE OF OHIO. WHICH CONTAINS THE TESTING-RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR.

THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER. STATE OF OHIO. WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY. THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION.

THE ITEM WILL BE PAID FOR AS FOLLOWS:

PROGRESSIVE EQUIVALENT PAYMENTS . . . . . . 50% UPON SUBMISSION OF FINAL REPORT ..... 30%.

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.



	AINTAINI	NG TRAFFIC
THIS ITEM	SHALL CO	NSIST OF MAINTENANCE OF TRAFFIC ON
		S AND TEMPORARY ROADWAYS IN
		THE OHIO MANUAL OF UNIFORM TRAFFIC
		THE PLANS AND SPECIFICATIONS, AND THE
FOLLOWIN		
02207777		
ON SR 32 A	ND ALL RA	AMPS, ALL EXISTING LANES SHALL BE
		TIMES, EXCEPT LANES MAY BE CLOSED
		TH THE PERMITTED LANE CLOSURE TIMES
		THE EXISTING PAVEMENT, ITEM 615
		ENT, AND THE COMPLETED PAVEMENT.
	דג <i>פו</i> וח חו	ION OF LANE CLOSURES AND RESTRICTIONS
		PROVAL OF THE ENGINEER. IT IS THE INTENT
		PACT TO THE TRAVELING PUBLIC. LANE
		RICTIONS OVER SEGMENTS OF THE PROJECT
		IS ANTICIPATED WITHIN A REASONABLE TIME
		INED BY THE ENGINEER, SHALL NOT BE
-		VEL OF UTILIZATION OF MAINTENANCE OF
		HALL BE COMMENSURATE WITH THE WORK IN
PROGRESS		
		PERFORMED AND ALL EXISTING LANES TRAFFIC DURING THE FOLLOWING
-	-	AYS OR EVENTS:
CHRIST	AS FO	URTH OF JULY
NEW YE	R'S LAE	BOR DAY
MEMORI	AL DAY T	HANKSGIVING
THE PERIO	O OF TIME	E THAT THE LANES ARE TO BE OPEN
		AY OF THE WEEK ON WHICH THE HOLIDAY
		IE FOLLOWING SCHEDULE SHALL BE USED
TO DETERI	1INE THIS	PERIOD:
	10	
SUNDAY		00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY		
		00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNES	12:( DAY 12:(	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY
WEDNES THURSDA	12:0 DAY 12:0 Y 12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY
WEDNES	12:0 DAY 12:0 Y 12:0 Y (TH	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY IANKSGIVING ONLY)
WEDNES THURSDA THURSDA	12:0 DAY 12:0 Y 12:0 Y (TH 6:00	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY IANKSGIVING ONLY) 0AM WEDNESDAY THROUGH 6:00AM MONDAY
WEDNES THURSDA	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY IANKSGIVING ONLY)
WEDNES THURSDA THURSDA FRIDAY SATURDA	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 1ANKSGIVING ONLY) 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY
WEDNES THURSDA THURSDA FRIDAY SATURDA	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 1ANKSGIVING ONLY) 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TI REQUIREM	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THI	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 1ANKSGIVING ONLY) 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TI REQUIREM	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THI	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 1ANKSGIVING ONLY) 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY RACTOR FAIL TO MEET ANY OF THESE E CONTRACTOR SHALL BE ASSESSED A
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 1ANKSGIVING ONLY) 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY RACTOR FAIL TO MEET ANY OF THESE E CONTRACTOR SHALL BE ASSESSED A
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 Y 12:0 WING EST	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 8ACTOR FAIL TO MEET ANY OF THESE E CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING EST IERAL SU	OON MONDAY THROUGH 6:00AM WEDNESDAY OON TUESDAY THROUGH 6:00AM THURSDAY OON WEDNESDAY THROUGH 6:00AM FRIDAY ANKSGIVING ONLY) OAM WEDNESDAY THROUGH 6:00AM MONDAY OON THURSDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY RACTOR FAIL TO MEET ANY OF THESE E CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING EST IERAL SUI FOR THE	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 00N WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 8ACTOR FAIL TO MEET ANY OF THESE E CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING EST IERAL SUI FOR THE	OON MONDAY THROUGH 6:00AM WEDNESDAY OON TUESDAY THROUGH 6:00AM THURSDAY OON WEDNESDAY THROUGH 6:00AM FRIDAY ANKSGIVING ONLY) OAM WEDNESDAY THROUGH 6:00AM MONDAY OON THURSDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY THROUGH 6:00AM MONDAY THROUGH 6:00AM MONDAY THROUGH 6:00AM MONDAY
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THI VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN ENGINEER	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THI VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN ENGINEER	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THI VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLC N THE GEN THE GEN TEM 410, TEM 614,	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THI VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT MAINTAIN	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 0AM WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN TEM 410, TEM 614,	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT MAINTAIN	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 00N WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. 25 CU. YD. COMPACTED SURFACE, 25 CU. YD.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN ENGINEER TEM 410, TEM 614, THE CONTRANC	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR 12:0 Y 12:0 IE CONTR 12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 00N WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH 6:00AM MONDAY 100 THROUGH 6:00AM MONDAY 100 THROUGH 6:00AM MONDAY 100 THROUGH 6:00AM MONDAY 100 THROUGH 6:00AM THROUGH 6:00AM MONDAY 100 THROUGH 6:00AM THROUGH 6:00AM MONDAY 100 THROUGH 6:00AM
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN TEM 410, TEM 410, TEM 614, THE CONTR AND SIGN T	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR 12:0 Y 12:0 IE CONTR 12:0	00N MONDAY THROUGH 6:00AM WEDNESDAY 00N TUESDAY THROUGH 6:00AM THURSDAY 00N WEDNESDAY THROUGH 6:00AM FRIDAY 00N WEDNESDAY THROUGH 6:00AM MONDAY 00N THURSDAY THROUGH 6:00AM MONDAY 00N FRIDAY THROUGH
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN TEM 410, TEM 410, TEM 614, TEM 614, THE CONTH AND SIGN S JNIFORM TO DF THE TY	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR IE CONTR IE CONTR 12:0 12:	OON MONDAY THROUGH 6:00AM WEDNESDAY OON TUESDAY THROUGH 6:00AM THURSDAY OON WEDNESDAY THROUGH 6:00AM FRIDAY DAM WEDNESDAY THROUGH 6:00AM MONDAY OON THURSDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD. CONCRETE FOR WING TRAFFIC 25 CU. YD. SHALL PROVIDE, ERECT AND MAINTAIN SIGNS S, AS DETAILED IN THE OHIO MANUAL OF CONTROL DEVICES, AND TYPE III BARRICADES DCATION AS SHOWN IN THE PLANS.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN DISINCENT TEM 410, TEM 410, TEM 614, TEM 614, THE CONTH AND SIGN S JNIFORM TO DF THE TY ALL WORK	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT MAINTAIN RACTOR S SUPPORTS RAFFIC C PE AND LC	OON MONDAY THROUGH 6:00AM WEDNESDAY OON TUESDAY THROUGH 6:00AM THURSDAY OON WEDNESDAY THROUGH 6:00AM FRIDAY DANKSGIVING ONLY) OAM WEDNESDAY THROUGH 6:00AM MONDAY OON THURSDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD. CONCRETE FOR NING TRAFFIC SHALL PROVIDE, ERECT AND MAINTAIN SIGNS S, AS DETAILED IN THE OHIO MANUAL OF CONTROL DEVICES, AND TYPE III BARRICADES DCATION AS SHOWN IN THE PLANS.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT TEM 410, TEM 410, TEM 614, TEM 614, TEM 614, TEM 614, TEM 614, TEM 614,	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING EST IERAL SUI FOR THE VE OF \$9 WING EST IERAL SUI FOR THE TRAFFIC TYPE A ASPHALT MAINTAIN RACTOR S SUPPORTS RAFFIC C PE AND LC	OON MONDAY THROUGH 6:00AM WEDNESDAY OON TUESDAY THROUGH 6:00AM THURSDAY OON WEDNESDAY THROUGH 6:00AM FRIDAY IANKSGIVING ONLY) OAM WEDNESDAY THROUGH 6:00AM MONDAY OON THURSDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY CACTOR FAIL TO MEET ANY OF THESE E CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD. CONCRETE FOR NING TRAFFIC SHALL PROVIDE, ERECT AND MAINTAIN SIGNS S, AS DETAILED IN THE OHIO MANUAL OF CONTROL DEVICES, AND TYPE III BARRICADES OCATION AS SHOWN IN THE PLANS.
WEDNES THURSDA THURSDA FRIDAY SATURDA SHOULD TH REQUIREM DISINCENT THE FOLLO N THE GEN THE FOLLO N THE GEN THE FOLLO N THE GEN THE FOLLO N THE GEN DISINCENT THE FOLLO N THE GEN DISINCENT THE FOLLO N THE TY ALL WORK ACCORDAN PORTIONS	12:0 DAY 12:0 Y 12:0 Y (TH 6:00 12:0 Y 12:0 Y 12:0 IE CONTR ENTS, THE VE OF \$9 WING ES IERAL SUI FOR THE VE OF \$9 VE OF	OON MONDAY THROUGH 6:00AM WEDNESDAY OON TUESDAY THROUGH 6:00AM THURSDAY OON WEDNESDAY THROUGH 6:00AM FRIDAY DANKSGIVING ONLY) OAM WEDNESDAY THROUGH 6:00AM MONDAY OON THURSDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY OON FRIDAY THROUGH 6:00AM MONDAY CONTRACTOR SHALL BE ASSESSED A 5 PER MINUTE PER LANE. TIMATED QUANTITIES HAVE BEEN INCLUDED MMARY FOR USE AS DETERMINED BY THE MAINTENANCE OF TRAFFIC. COMPACTED SURFACE, 25 CU. YD. CONCRETE FOR NING TRAFFIC SHALL PROVIDE, ERECT AND MAINTAIN SIGNS S, AS DETAILED IN THE OHIO MANUAL OF CONTROL DEVICES, AND TYPE III BARRICADES DCATION AS SHOWN IN THE PLANS.

MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT

INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614.

MAINTAINING TRAFFIC. UNLESS SEPARATELY ITEMIZED IN THE

FOR ALL LABOR. EQUIPMENT AND MATERIALS SHALL BE

### TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

# OVERNIGHT TRENCH CLOSING

IN ADDITION TO THE MOT SCHEMES IN THE PLANS, DROP-OFFS IN WORK ZONES SHALL BE SUBJECT TO SCD MT-101.90. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR, OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

# DRUM REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AT THE TIME OF ARRIVAL ON THE PROJECT. ANY DRUMS BROUGHT ON THE PROJECT, WHICH HAVE PREVIOUSLY BEEN USED ELSEWHERE, WILL NOT BE ACCEPTED.

PAYMENT FOR DRUMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

#### 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

#### WORK ZONE MARKINGS

SEE THE MAINTENANCE OF TRAFFIC SUBSUMMARY FOR ESTIMATED QUANTITIES TO BE USED AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.

# ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

PLAN.

3 M. GAL.

## FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CUASE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOOLIGHT PLACEMT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMENCING 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, EQUIPEMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

# ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

# ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

# ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (CONT.)

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER. OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS. INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.



					SHEET N	UM.		PART.	ITEM	ITEM	GRAND	UNIT	DES
12	78	81	130	137				01/SAF/ OT		EXT	TOTAL	UNIT	DES
		4,492						4,492	202	23000	4,492	SY	PAVEMENT REMOVED
		548						548	202	30700	548	FT	CONCRETE BARRIER REMOVED
		4,974						4,974	202	30701	4,974	FT	CONCRETE BARRIER REMOVED, AS PER
		577						577	202	38000	577	FT	GUARDRAIL REMOVED
		1							202	58100	1	EACH	CATCH BASIN REMOVED
			3,739 843					3,739 843	203 203	10000	3,739	CY CY	
	7,250		043					7,250	203	20000	843 7,250	SY	EMBANKMENT SUBGRADE COMPACTION
378	1,200							378	204	13000	378	CY	EXCAVATION OF SUBGRADE
378								378	204	30010	378	CY	GRANULAR MATERIAL, TYPE B
8								8	204	45000	8	HOUR	PROOF ROLLING
1,134		265						1,399	204	50000	1,399	SY	GEOTEXTILE FABRIC
		750						750	606	15050	750	FT	GUARDRAIL, TYPE MGS
		2						2	606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E MASH 2
		2							606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T
		1						1	606	35002	1		MGS BRIDGE TERMINAL ASSEMBLY, TYPE
		1							606 606	35102 60022	1	EACH EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE
		18						18	609	24510	18	FT	CURB, TYPE 4-C
		867						867	622	10060	867	FT	CONCRETE BARRIER, SINGLE SLOPE, TY
		487						487	622	10160	487	FT	CONCRETE BARRIER, SINGLE SLOPE, TY
		2						2	622	25000	2	EACH	CONCRETE BARRIER END SECTION, TYPI
		1						1	622	25001	1		CONCRETE BARRIER END SECTION, TYPI
		3						3	622	25004	3		CONCRETE BARRIER, END ANCHORAGE,
		4						4	622	25050	4	EACH	CONCRETE BARRIER, END ANCHORAGE,
								4	623	40500	4	EACH	REFERENCE MONUMENT
								LS	878	25000	LS		INSPECTION AND COMPACTION TESTING
								LS	SPECIAL	69098400	LS		MISC.: CONSULTANT FOR CONCRETE QU INCLUDING TESTING AND INSPECTION
													EROS
2								2	659	00100	2	EACH	SOIL ANALYSIS TEST
713								713	659	00300	713	CY	TOPSOIL
6,425								6,425	659	10000	6,425	SY	SEEDING AND MULCHING
321 321								321 321	659 659	14000	321 321	SY SY	REPAIR SEEDING AND MULCHING INTER-SEEDING
521								321	003	13000	521	01	
0.87								0.87	659	20000	0.87	TON	
<u>1.33</u> 35.6							 	1.33 35.6	659 659	31000 35000	1.33 35.6	ACRE MGAL	LIME WATER
14.5								14.5	659	40000	14.5	MSF	MOWING
11.0		956						956	670	00500	956	SY	SLOPE EROSION PROTECTION
								LS	832	15000	LS		STORM WATER POLLUTION PREVENTION
								LS	832	15002	LS		STORM WATER POLLUTION PREVENTION
							 	LS	832	15010	LS	=	STORM WATER POLLUTION PREVENTION
								74,075	832	30000	74,075	EACH	EROSION CONTROL
								0.05	<b>E</b> 4 4	40040	0.05	OV	CLASS QC1CONCRETE, HEADWALL
				0.05					511	46610	0.25	CY	
				0.25				0.25	601		273		
				0.25 273 2,353				273 2,353	601 605	37501 11100	273 2,353	FT FT	PAVED GUTTER, TYPE 1-2, AS PER PLAN 6" SHALLOW PIPE UNDERDRAINS
				273 2,353 451				273 2,353 451	605 605	37501	2,353 451	FT FT FT	PAVED GUTTER, TYPE 1-2, AS PER PLAN
				273 2,353				273 2,353	605	37501 11100	2,353	FT FT	PAVED GUTTER, TYPE 1-2, AS PER PLAN 6" SHALLOW PIPE UNDERDRAINS
				273 2,353 451 4,674 40				273 2,353 451 4,674 40	605 605 605 611	37501 11100 13300 14000 00510	2,353 451 4,674 40	FT FT FT FT	<ul> <li>PAVED GUTTER, TYPE 1-2, AS PER PLAN</li> <li>6" SHALLOW PIPE UNDERDRAINS</li> <li>6" UNCLASSIFIED PIPE UNDERDRAINS</li> <li>6" BASE PIPE UNDERDRAINS</li> <li>6" CONDUIT, TYPE F FOR UNDERDRAIN O</li> </ul>
				273 2,353 451 4,674 40 179				273 2,353 451 4,674 40 179	605 605 605 611 611	37501 11100 13300 14000 00510 04600	2,353 451 4,674 40 179	FT FT FT FT FT FT	<ul> <li>PAVED GUTTER, TYPE 1-2, AS PER PLAN</li> <li>6" SHALLOW PIPE UNDERDRAINS</li> <li>6" UNCLASSIFIED PIPE UNDERDRAINS</li> <li>6" BASE PIPE UNDERDRAINS</li> <li>6" CONDUIT, TYPE F FOR UNDERDRAIN O</li> <li>12" CONDUIT, TYPE C</li> </ul>
				273 2,353 451 4,674 40 179 53				273 2,353 451 4,674 40 179 53	605 605 605 611 611 611	37501 11100 13300 14000 00510 04600 05900	2,353 451 4,674 40 179 53	FT FT FT FT FT FT FT	<ul> <li>PAVED GUTTER, TYPE 1-2, AS PER PLAN</li> <li>6" SHALLOW PIPE UNDERDRAINS</li> <li>6" UNCLASSIFIED PIPE UNDERDRAINS</li> <li>6" BASE PIPE UNDERDRAINS</li> <li>6" CONDUIT, TYPE F FOR UNDERDRAIN O</li> <li>12" CONDUIT, TYPE C</li> <li>15" CONDUIT, TYPE B</li> </ul>
				273 2,353 451 4,674 40 179				273 2,353 451 4,674 40 179	605 605 605 611 611	37501 11100 13300 14000 00510 04600	2,353 451 4,674 40 179	FT FT FT FT FT FT FT FT	<ul> <li>PAVED GUTTER, TYPE 1-2, AS PER PLAN</li> <li>6" SHALLOW PIPE UNDERDRAINS</li> <li>6" UNCLASSIFIED PIPE UNDERDRAINS</li> <li>6" BASE PIPE UNDERDRAINS</li> <li>6" CONDUIT, TYPE F FOR UNDERDRAIN O</li> <li>12" CONDUIT, TYPE C</li> </ul>
				273 2,353 451 4,674 40 179 53				273 2,353 451 4,674 40 179 53	605 605 605 611 611 611 611 611	37501 11100 13300 14000 00510 04600 05900 06100 98470	2,353 451 4,674 40 179 53	FT FT FT FT FT FT FT EACH	<ul> <li>PAVED GUTTER, TYPE 1-2, AS PER PLAN</li> <li>6" SHALLOW PIPE UNDERDRAINS</li> <li>6" UNCLASSIFIED PIPE UNDERDRAINS</li> <li>6" BASE PIPE UNDERDRAINS</li> <li>6" CONDUIT, TYPE F FOR UNDERDRAIN O</li> <li>12" CONDUIT, TYPE C</li> <li>15" CONDUIT, TYPE B</li> <li>15" CONDUIT, TYPE C</li> <li>CATCH BASIN, NO. 2-2B</li> </ul>
				273 2,353 451 4,674 40 179 53				273 2,353 451 4,674 40 179 53	605 605 605 611 611 611 611	37501 11100 13300 14000 00510 04600 05900 06100	2,353 451 4,674 40 179 53	FT FT FT FT FT FT FT EACH EACH	<ul> <li>PAVED GUTTER, TYPE 1-2, AS PER PLAN</li> <li>6" SHALLOW PIPE UNDERDRAINS</li> <li>6" UNCLASSIFIED PIPE UNDERDRAINS</li> <li>6" BASE PIPE UNDERDRAINS</li> <li>6" CONDUIT, TYPE F FOR UNDERDRAIN O</li> <li>12" CONDUIT, TYPE C</li> <li>15" CONDUIT, TYPE B</li> <li>15" CONDUIT, TYPE C</li> </ul>

CLE-32-01.40 MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 12/8/2022 TIME: 8:16:19 AM USER: JoeS

ESCRIPTION	SEE SHEET	
ESCRIPTION	NO.	
ROADWAY		
R PLAN	13	
	10	
H 2016		
PE 1		
CTIONAL) 60 MPH, 36" WIDTH		IAF
YPE B		SUMMARY
YPE D		
PED		
PED, AS PER PLAN	11	AL
E, REINFORCED, TYPE B E, REINFORCED, TYPE D		
		Z
		GENERAL
IG OF UNBOUND MATERIALS	13	Ŭ
DSION CONTROL		
55ION CONTROL		
ON PLAN		
ON INSPECTIONS ON INSPECTION SOFTWARE		
DRAINAGE		
J	13	DESIGN AGENCY
OUTLETS		STRAND Associates®
		DESIGNER ATW
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		REVIEWER JDH 11/12/21
	······	PROJECT ID
E		111492 SHEET TOTAL
<b>_</b>		75 183

P         01         141         PS         105           42.04         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>SHEET NU</th><th>JM.</th><th></th><th></th><th>PART.</th><th>ŢŢĘŅ⋪</th><th>ITEM</th><th>GRAND</th><th></th><th>DE</th></td<>							SHEET NU	JM.			PART.	ŢŢĘŅ⋪	ITEM	GRAND		DE
2085         2086         Classes         Control Control         Classes         Control         Classes		78	81	144	145	165							EXT	TOTAL	UNIT	DE
Dob		40.004									40.004	054	04000	40.004	0)/	
1/00         4'         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td></td> <td>, ,</td> <td></td> <td></td> <td>,</td> <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td>											, ,			,		· · · · · · · · · · · · · · · · · · ·
USB         Contraction         Contreaction <thcontraction< th=""> <thco< td=""><td></td><td>· · ·</td><td>44</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>, ,</td><td></td><td></td><td>+ · · +</td><td></td><td></td></thco<></thcontraction<>		· · ·	44								, ,			+ · · +		
Act         Sate         42         Other         Sate         42         Other         Sate         42         Other         Sate         Act         Other         Sate         Construction         Construction <thconstruction< th=""> <thconstase< th=""> <thconstructi< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td></thconstructi<></thconstase<></thconstruction<>														· · · · · · · · · · · · · · · · · · ·		
2023         -         -         -         2023         442         -         Com         ASPHALT CONCERTS SUBSACE COUNSE           684         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td></td> <td>· ·</td> <td></td> <td>· · · ·</td> <td></td> <td></td>		· ·												· · · ·		
Last         All         All         All         All         All         All         All         All         All         Comparing the all <thcomparind all<="" th="" the=""> <thcomparing all<="" th="" the=""></thcomparing></thcomparind>		· ·										442	10000		CY	ASPHALT CONCRETE SURFACE COURSE
1.891         42         1.891         442         1010         7.891         CV         ASHHALT CONCRETE INTERMEDIATE CC           2         2         2         2         2         625         00661         2         6424           1         1         625         1308         1         524         MEXANGET IONE FLIPS PULL APART           1         000         1000         625         2308         1.020         FT         PT         DETRIBUTION CARLE MIGN IN 0.4 AWD           1         000         1000         625         2308         1.020         FT         DETRIBUTION CARLE MIGN IN 0.4 AWD           1         1         625         27020         1         EACH         REMONL OF LUMARE AND REPECTE           1         1         1         625         27020         1         EACH         REMONL OF LUMARE AND REPECTE           1         1         625         7000         1         EACH         REMONL OF LUMARE AND REPECTE           1         1         1         625         7000         1         EACH         REMONL OF LUMARE AND REPECT           2         2         2         2         2         REMONL OF LUMARE AND REPECT         REMONL OF LUMARE AND REPECT		694									694	442	20200	694	CY	ASPHALT CONCRETE INTERMEDIATE CO
Image: state of the s		1,891									1,891	442	10100	1,891	CY	VARIABLE THICKNESS (1.75" - 8.95") ASPHALT CONCRETE INTERMEDIATE CO
Image: state of the s																
1.020         1.020         1.020         1.020         1.020         1.020         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027         1.027 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td>2</td><td>625</td><td>00450</td><td>2</td><td>EACH</td><td>CONNECTION, FUSED PULL APART</td></th<>						2					2	625	00450	2	EACH	CONNECTION, FUSED PULL APART
100         100         100         622         2340         100         FT         NO. 18 AVM PPOLE AND BRACKET CABLE           1         340         1         20         1         22         2730         1         ECONDUT. 72 aC 651           1         3         1         20         1         225         27500         1         EACH         REMOVAL OF LUM NAME AND REFECT EXISTING LIGHT           1         1         235         29500         1         EACH         REMOVAL OF LUM NAME AND REFECT EXISTING LIGHT           1         1         1         255         29500         1         EACH         REMOVE AND REFECT EXISTING LIGHT           1         1         1         10         25         75500         1         EACH         INFINITION CABLE REMOVED           2         840         9         2         825         75500         2         EACH         INFINITION CABLE REMOVED           2         37         2         37         2         37         2         1         TA           37         3         3         3         37         2         2         2         1         TA           37         3         3         37						1					1	625	14306	1	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DE
340         340         825         28614         340         FT         CONDUT, 47, 25, 051           1         1         825         27500         1         EACH         REMOVEL OF LUMINAE AND RECRECT           1         1         1         1         825         27500         1         EACH         REMOVEL OF LUMINTON REAV           1         1         1         1         1         623         283010         1         EACH         REMOVE AND REPRECT EXISTINGLIGHT           1         1         1         1         623         75500         1         EACH         REMOVE AND REPRECT EXISTINGLIGHT           2         2         2         2         2         FACH         REMOVE AND REPRECT EXISTINGLIGHT           2         2         2         2         2         FACH         REMOVE AND REPRECT EXISTINGLIGHT           2         2         2         2         2         FACH         REMOVE AND REPRECT EXISTINGLIGHT           2         2         2         2         FACH         REMOVE AND REPORT EXISTINGLIGHT         FACH           3         2         2         2         FACH         REMOVE AND REPORT EXISTINGLIGHT         FACH           3											, , , , , , , , , , , , , , , , , , , ,			· · · ·		DISTRIBUTION CABLE, MISC.: NO. 4 AWG
Image: Construction of the second s																
3         3         6,25         29830         3         EACH         MEDIANUINGTION BOX           1         6,25         30200         1         EACH         REMOVE AND REPRECT EXISTING LIGHT           1         1         6,25         3000         1         EACH         REMOVE AND REPRECT EXISTING LIGHT           2         840         2         2         6,25         75500         2         EACH         MEMOVED CIRCUIT           37         2         2         6,25         75500         2         EACH         MEMOVED CIRCUIT         TRA           37         2         2         6,26         31200         37         EACH         REMOVED CIRCUIT         TRA           247         247         2         6,26         8200         2         EACH         REMOVAL OF DELINEATOR         TRA           247         3         20         7         6,20         3120         2         EACH         REPLAY TO PROP         10         EACH         REPLAY TO PROP         10         10         10						340					340	625	25604	340	FI	CONDUIT, 4", 725.051
Image: Construct of the second seco						1					1	625	27520	1	EACH	REMOVAL OF LUMINAIRE AND REERECTI
Image: state of the s						3					3			3		
Image: Construction						1					1			1		
840         840         840         840         840         825         75550         940         FT         DISTRIBUTION CABLE REMOVED           2         2         625         75800         2         EACH         DISCONNECT CIRCUIT         TBA           26         2         625         75800         2         EACH         DISCONNECT CIRCUIT         TBA           26         26         20         60000         24         EACH         DELINEATOR         POST SURFACE MOUNTED           247         3         26         226         00100         247         EACH         REMOVAL OF DELINEATOR         POST SURFACE MOUNTED           24         3         626         30200         3         EACH         REMOVAL OF DELINEATOR         POST SURFACE MOUNTED           24         3         626         30200         34         EACH         RARE REFLECTOR. TYPE 1, MWY           24         307         36         25         300         930         FT         GROUND MOUNTED STRUCTURAL BEA           24         307         28         2         2         2         2         2         2         2         2         2         2         2         2         30						1								1		
Image: Construct of the construct												025	73300	I	LACIT	
Image: State in the s											840					
37         37         37         620         31200         37         EACH         REMOVAL OF DELINEATOR           247         3         247         621         00100         247         EACH         REMOVAL OF DELINEATOR, POST SUPRACE MOUNTED           247         3         3         3         247         621         00100         247         EACH         RRVM         ROUND ROD           16         3         3         24         24         626         00102         18         EACH         BARRIER REFLECTOR, TYPE 1, 1WAY           24         24         24         626         00110         24         EACH         BARRIER REFLECTOR, TYPE 2, 1WAY           24         307         38         33         630         00510         307         FT         GROUND MOUNTED SUPPORT, NO, 3 PO           38         630         06500         38         FT         GROUND MOUNTED SUPPORT, NO, 3 PO         38         630         05500         38         FT         GROUND MOUNTED SUPPORT, TYPE T, 1WAY           4         4         630         7240         1         EACH         BRAWAW STRUCTURAL BEAM         BRAWAWS STRUCTURAL BEAM           2         2         2         2         630 <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>625</td> <td>75800</td> <td>2</td> <td>EACH</td> <td></td>						2					2	625	75800	2	EACH	
26         247         247         247         621         00100         26         EACH         DELINEATOR, POST SURFACE MOUNTED           16         3         625         32000         3         EACH         GRUND ROD           24         3         625         32000         3         EACH         GRUND ROD           24         24         626         00102         16         EACH         BARRIER REFLECTOR, TYPE 1, 1WAY           24         526         0010         24         EACH         BARRIER REFLECTOR, TYPE 2, 1WAY           38         307         530         03100         307         FT         GROUND MOUNTED SUPPORT, NO, 3 PO           2         33         2         530         03000         2         EACH         BARRIER REFLECTOR, TYPE 1, 1WAY           38         307         530         03000         2         EACH         BARRIER REFLECTOR, TYPE 7, 1, WAY           42         307         1         EACH         BARRIER REFLECTOR, TYPE 7, 1, WAY         FROUND MOUNTED SUPPORT, NO, 3 PO           42         530         05000         2         EACH         BARRIER REFLECTOR, TYPE 7, 1, 20         FROUND MOUNTED SUPPORT, NO, 3 PO           5308         1         EACH													0.4000			TRAF
247         247         621         00100         247         EACH         RPM           16         3         625         32000         3         EACH         GROUND ROD           24         4         626         00102         16         EACH         BROUND ROD           24         24         24         24         7         GROUND MOUNTED STRUCTURAL DEAM         00110         24         EACH         BROUND MOUNTED STRUCTURAL DEAM           38         38         307         630         0300         2         FGROUND MOUNTED STRUCTURAL DEAM         004           24         2         2         307         630         0300         2         EACH         BROUND MOUNTED STRUCTURAL DEAM         004           2         38         630         0500         2         EACH         OVERHEAD SIGN SUPPORT, NO. 3PO           1         630         72340         1         EACH         OVERHEAD SIGN SUPPORT, NO. 3PO           2         2         2         630         79811         2         EACH         SIGN SUPPORT, NO. 3PO           2         2         2         630         79811         2         EACH         SIGN SUPPORT, NO. 3PO           2																
16         3         625         32000         3         EACH         GROUND ROD           24         16         626         00102         16         EACH         BARRIER REFLECTOR, TYPE 1, 1WAY           24         307         307         307         630         03100         307         FT         GROUND MOUNTED SUPPORT, No. 3 PO           38         38         2         307         630         03100         307         FT         GROUND MOUNTED SUPPORT, NO. 3 PO           2         2         2         2         630         09000         EACH         BRARIER REFLECTOR, TYPE 1, 1WAY           1         530         7630         0307         FT         GROUND MOUNTED STRUCTURAL BEAM           2         2         2         630         09000         EACH         BRARIER REFLECTOR, TYPE 1, 1WAY           1         530         72240         1         EACH         SIGN SUPPORT, TYPE 17-12           1         1         530         7240         1         EACH         SIGN SUPPORT, TYPE 17-12           2         2         2         630         76610         2         EACH         SIGN SUPPORT, TYPE 17-12           1         1         630         7240<				-							-			-		
16         16         24         16         626         00102         16         EACH         BARRIER REFLECTOR, TYPE 1, 1WAY           24         307         307         307         307         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         307         100         20         20         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100 <td></td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>247</td> <td></td> <td></td> <td>247</td> <td></td> <td></td>					3						247			247		
307         307         630         03100         307         FT         GROUND MOUNTED SUPPORT, NO. 3 PO           2         2         2         2         2         2         2         338         307         307         830         05000         2         EACH         BREAKAWAY STRUCTURAL BEAM CONN           1         1         1         1         1         EACH         DVERHEAD SIGN SUPPORT, TYPE TC-12           1         630         72340         1         EACH         DVERHEAD SIGN SUPPORT, TYPE TC-12           2         2         2         630         78611         2         EACH         DVERHEAD SIGN SUPPORT, TYPE TC-12           2         2         2         630         78611         2         EACH         SIGN, SUPPORT, SSEMBLY, BARRIER MC           229         2         2         630         78610         1         EACH         SIGN, OVERHEAD EXTRUSHEET           444         444         630         80100         2         EACH         ROUND MOUNTED STRUCTURAL BEAM           2         2         2         630         84500         2         EACH         ROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         630			16		5						16			16		
307         307         630         03100         307         FT         GROUND MOUNTED SUPPORT, NO. 3 PO           2         2         2         2         2         2         2         338         307         307         830         05000         2         EACH         BREAKAWAY STRUCTURAL BEAM CONN           1         1         1         1         1         EACH         DVERHEAD SIGN SUPPORT, TYPE TC-12           1         630         72340         1         EACH         DVERHEAD SIGN SUPPORT, TYPE TC-12           2         2         2         630         78611         2         EACH         DVERHEAD SIGN SUPPORT, TYPE TC-12           2         2         2         630         78611         2         EACH         SIGN, SUPPORT, SSEMBLY, BARRIER MC           229         2         2         630         78610         1         EACH         SIGN, OVERHEAD EXTRUSHEET           444         444         630         80100         2         EACH         ROUND MOUNTED STRUCTURAL BEAM           2         2         2         630         84500         2         EACH         ROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         630			24								24	626	00110	24	FACH	BARRIER REELECTOR TYPE 2 1WAY
38         38         38         630         06500         38         FT         GROUND MOUNTED STRUCTURAL BEAM CONN           1         1         2         630         09000         2         EACH         BREAKAWAY STRUCTURAL BEAM CONN           1         1         630         72340         1         EACH         OVERHEAD SIGN SUPPORT, TYPE TC-12           1         630         77240         1         EACH         OVERHEAD SIGN SUPPORT, TYPE TC-12           2         630         779611         2         EACH         SIGN SUPPORT, TYPE TC-12           2         630         779611         2         EACH         SIGN SUPPORT, TYPE TC-12           2         29         20         2         630         779611         2         EACH         SIGN SUPPORT, TYPE TC-12           2         29         20         20         20         EACH         SIGN SUPPORT ASSEMBLY, BARRIER MC           44         44         630         80224         444         SF         SIGN, OVERHEAD EXTRUSHEAT           2         2         2         2         630         84500         EACH         ROUNDANOVERHEAD           2         2         30         2         630         8450			<u> </u>		307											- · · ·
Image: Note of the second se											38					GROUND MOUNTED STRUCTURAL BEAM
New year         1         630         72420         1         FACH         OVERHEAD SIGN SUPPORT TYPE TC 45           2         630         79611         2         EACH         SIGN SUPPORT ASSEMBLY, BARRIER MC           44         229         630         79611         2         EACH         SIGN SUPPORT ASSEMBLY, BARRIER MC           44         44         630         80224         SF         SIGN, OVERHEAD EXTRUSHEET           1         1         444         1         630         84010         1         EACH         CONCRETE BARRIER MEDIAN OVERHEAD           1         1         1         1         630         84010         1         EACH         RIGID OVERHEAD EXTRUSHEET           1         2         1         2         630         84500         2         EACH         RIGID OVERHEAD EXTRUSHEET           2         2         2         2         2         2         630         84500         2         EACH         RIGID OVERHEAD EXTRUSHEET           3         3         3         3         830         2         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAN           4         2         630         84500         3         EACH         REMOVAL OF					2						2	630	09000	2	EACH	BREAKAWAY STRUCTURAL BEAM CONNE
Image: Construction of the construction of					1						1	630	72340	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.3
1         229         630         80100         229         SF         SIGN, FLAT SHEET           44         44         630         80224         44         SF         SIGN, OVERHEAD EXTRUSHEET           1         1         1         630         84100         1         EACH         GROUND MOUNTED STRUCTURAL BEAM           2         2         2         2         2         630         84500         2         EACH         RGOUND MOUNTED STRUCTURAL BEAM           2         2         2         2         2         2         630         84500         2         EACH         RGOUND MOUNTED STRUCTURAL BEAM           3         3         3         3         630         84500         3         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         3         8         8         8         900         8         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         630         8630         8         8         900         8         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         3         630					1						1	630	72420	1	EACH	OVERHEAD SIGN SUPPORT TYPE TC-15
Mark         Mark <th< td=""><td></td><td></td><td></td><td></td><td></td><td>hum</td><td>h</td><td></td><td>·····</td><td>humun</td><td>2</td><td></td><td></td><td>2</td><td></td><td>SIGN SUPPORT ASSEMBLY, BARRIER MO</td></th<>						hum	h		·····	humun	2			2		SIGN SUPPORT ASSEMBLY, BARRIER MO
Image: Note of the second se																
NUMBER         2         2         2         630         84500         2         EACH         GROUND MOUNTED STRUCTURAL BEAM           2         2         2         2         2         2         630         84500         2         EACH         RIGID OVERHEAD SIGN SUPPORT FOUN           3         3         3         3         3         630         84500         3         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         3         630         84500         3         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM           3         3         3         3         3         630         85400         3         EACH         REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM           4         8         3         630         86102         5         EACH         REMOVAL OF GROUND MOUNTED STRUCTURE MOUNTED STRU					44						44			44		· ·
OWNER         2         2         3         2         630         84510         2         EACH         RIGID OVERHEAD SIGN SUPPORT FOUN           997 9350 0000000000000000000000000000000000	u				1						1	630	84010	1	EACH	
Non-state         Name         Nam         Name         Name	02.d <u>ç</u>										2			2		GROUND MOUNTED STRUCTURAL BEAM
Normalized       3       3       630       85400       3       EACH       REMOVAL OF GROUND MOUNTED MAJO         8       8       8       8       8       630       86002       8       EACH       REMOVAL OF GROUND MOUNTED POST         5       5       630       86002       8       EACH       REMOVAL OF GROUND MOUNTED POST         5       5       630       86102       5       EACH       REMOVAL OF GROUND MOUNTED STRUCTURE MOUNTED STRUCTURE MOUNTED STRUCTURE MOUNTED SIG         1       1       1       630       86320       3       EACH       REMOVAL OF OF OVERHEAD MOUNTED SIG         1       1       1       630       87400       1       EACH       REMOVAL OF OVERHEAD MOUNTED SIG         1       1       1       1       630       89706       2       EACH       REMOVAL OF OVERHEAD SIGN SUPPOR         1       1       1       630       89804       1       EACH       REMOVAL OF OVERHEAD SIGN SUPPOR         1       1.51       1       630       89804       1       EACH       REMOVAL OF OVERHEAD SIGN SUPPOR         1       1.51       1.48       1       630       89804       1       EACH       REMOVAL OF OVERHEAD SIGN SUPPOR	00										2			2		
NUMBER       Num       Number       Number	oeS 1492										8			8		
000000000000000000000000000000000000	SER: Jo eets\11										8					REMOVAL OF GROUND MOUNTED MAJOR REMOVAL OF GROUND MOUNTED POST :
000000000000000000000000000000000000	PM U: vay∖She				5						5	630	86102	5	БЛСЦ	
Image: Normal Strategy of the second seco	25:02 Roadv										3			3		
MULTONE       2       2       630       89706       2       EACH       REMOVAL OF OVERHEAD SIGN SUPPOR         1       1       1       1       1       1       1       630       89804       1       EACH       REMOVAL OF OVERHEAD SIGN SUPPOR         1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1	12.2 Ting\F				1						1			1		
OOTOGET IN CONTRACTOR       Image: Contractor <t< td=""><td>TIME Jineer</td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td>2</td><td></td><td>REMOVAL OF OVERHEAD SIGN SUPPORT</td></t<>	TIME Jineer				2						2			2		REMOVAL OF OVERHEAD SIGN SUPPORT
Image: Note of the second s	'2022 <sup>-</sup> 00-Eng				1						1	630	89804	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT
No.       1.48       1.48       MILe       EDGE LINE, 6", YELLOW         1.48       2.07       2.07       MILe       EDGE LINE, 6", YELLOW	E: 12/5, 1492∖4			1.51							1.51	644	00104	1.51	MILE	EDGE LINE, 6", WHITE
<u>, 9</u>   2.07   MILE  LANE LINE, 6"	DATE VD/11			_								644	00104	1.48		EDGE LINE, 6", YELLOW
3,776       3,776       644       00404       3,776       FT       CHANNELIZING LINE, 12"         36       36       36       36       644       00500       36       FT       STOP LINE         91       91       91       91       91       644       00700       91       FT       TRANSVERSE/DIAGONAL LINE         249       249       91       91       644       00701       249       FT       TRANSVERSE/DIAGONAL LINE, AS PER F         266       266       91       644       00700       91       FT       CHEVRON MARKING         333       91       91       91       644       00700       33       SF       ISLAND MARKING         99       565       91       91       644       00701       249       FT       DOTTED LINE, 6"	$\dot{\mathbf{O}}$													-		
30       30       6       644       00500       36       F1       STOP LINE         91       91       91       91       91       644       00700       91       FT       TRANSVERSE/DIAGONAL LINE         249       249       91       91       644       00701       249       FT       TRANSVERSE/DIAGONAL LINE, AS PER F         266       266       91       91       644       00720       266       FT       CHEVRON MARKING         33       96       964       910       33       644       00900       33       SF       ISLAND MARKING         990%       565       964       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       910       9100       9100       9100       9100 </td <td>x22 (i awinç</td> <td>  </td> <td></td> <td></td> <td></td> <td></td> <td>     </td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>· · ·</td>	x22 (i awinç															· · ·
919191FTTRANSVERSE/DIAGONAL LINE24924900002496440070091FTTRANSVERSE/DIAGONAL LINE, AS PER F266266000026664400720266FTCHEVRON MARKING3333000033SFISLAND MARKING90%565000056564401510565FTDOTTED LINE, 6"	ZE: 34. 322\Dr			30							30	044		30		
249       249       644       00701       249       FT       TRANSVERSE/DIAGONAL LINE, AS PER F         266       266       644       00720       266       FT       CHEVRON MARKING         33       33       644       00900       33       SF       ISLAND MARKING         99000       565       565       644       01510       565       FT       DOTTED LINE, 6"	ERSI5 3589\(			91							91	644	00700	91		
266       266       FT       CHEVRON MARKING         33       33       644       00900       33       SF       ISLAND MARKING         565       565       565       644       01510       565       FT       DOTTED LINE, 6"	PAPI 599\3													-		TRANSVERSE/DIAGONAL LINE, AS PER P
33       33       644       00900       33       SF       ISLAND MARKING         1       565       644       01510       565       FT       DOTTED LINE, 6"	J03:															
505         505         FT         DOTTED LINE, 6"	EL: SI 0\35(															
				565							565	644	01510	565	۲I	DUTTED LINE, 6"
	2 V)			1										1		

CLE-32-01.40

ESCRIPTION	SEE SHEET NO.	
PAVEMENT		
ETE, VARIABLE THICKNESS		
49)		
SE, 12.5 MM, TYPEA (446)		
OURSE, 19 MM, TYPE A (448)		
OURSE, 19 MM, TYPE A (446)		
LIGHTING		
DEEP G 5000 VOLT DISTRIBUTION CABLE E	164	
TION		
		$\succ$
IT POLE	164	GENERAL SUMMARY
AFFIC CONTROL		:RAL
D, WHITE		
		GE
OST M SUPPORT, W6X9		
NECTION		
2.31, DESIGN 12		
5.116_DESIGN 2		
OUNTED, AS PER PLAN	146	
AD SIGN SUPPORT FOUNDATION, TYPE TC-21.50		
M SUPPORT FOUNDATION		
NDATION I AND DISPOSAL		
OR SIGNAND DISPOSAL		
T SUPPORT AND DISPOSAL		
JCTURAL BEAM SUPPORT AND DISPOSAL		
GN AND REERECTION GN AND DISPOSAL		
RT AND DISPOSAL, TYPE TC-12.30		
RT AND DISPOSAL, TYPE TC-15.115		DESIGN AGENCY
		STRAND
		ASSOCIATES®
		DESIGNER ATW
PLAN	12	REVIEWER JDH 11/12/21
		PROJECT ID 111492
		SHEET TOTAL 76 183

				SHEET NUM.	PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEE1
15	79 80	144	159	160 166 173	02/BRO/1 01/SAF/ 4 OT		EXT	TOTAL	UNIT	DESCRIPTION	NO.
		1,450			1,450	644	01520	1,450	FT	DOTTED LINE, 12"	
		407			407	644	30010	407	SF	REMOVAL OF PAVEMENT MARKING	
										TRAFFIC SIGNALS	
			20		20	625	25402	20	FT	CONDUIT, 2", 725.05	
			40		40	625	25502	40	FT	CONDUIT, 3", 725.05	
			8		8	625	29000	8	FT		
			3 4			625 630	32000 79000	3 4	EACH EACH	GROUND ROD SIGN HANGER ASSEMBLY, SPAN WIRE	
						000	7 3000	<u>т</u>	LAON		
			33		33	630	80100	33	SF	SIGN, FLAT SHEET	
			2		2	632	04802	2		VEHICULAR SIGNAL HEAD, (LED), 1-SECTION, 12" LENS, 1-WAY, POLYCARBONATE	
			6 8		<b>0</b>	632 632	05006 25000	6 8		VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE COVERING OF VEHICULAR SIGNAL HEAD	
			407		407	632	30400	407	FT	MESSENGER WIRE, 7 STRAND, 1/2" DIAMETER WITH ACCESSORIES	
			407		407	632	30600	407	FT FT	TETHER WIRE, WITH ACCESSORIES	
			1,045 2		1,045	632 632	40700 64000	1,045	EACH	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG STRAIN POLE FOUNDATION	
			55		55	632	67200	55	FT	POWER CABLE, 2 CONDUCTOR, NO. 8 AWG	
			110		110	632	69400	110	FT	SERVICE CABLE, 2 CONDUCTOR, NO. 8 AWG	
			1			600	70004	4			100
			1			632 632	70001 86140	2		POWER SERVICE, AS PER PLAN STRAIN POLE, TYPE TC-81.11, DESIGN 12	
			<u> </u>	1		632	90100	1		REMOVAL OF TRAFFIC SIGNAL INSTALLATION	
			1		1	632	90104	1		REUSE OF TRAFFIC CONTROL ITEM, UNINTERRUPTIBLE POWER SUPPLY	
			1			632	90104	1	EACH	REUSE OF TRAFFIC CONTROL ITEM, HIGH-SPEED ETHERNET RADIO	
			1			632	90212	1	EACH	REUSE OF CONTROLLER	
			1			633	65520	1		CABINET, TYPE 332	
			1		1	633	67100	1		CABINET FOUNDATION	
			1 60		1 60	633 809	67200 64550	1 60		CONTROLLER WORK PAD ETHERNET CABLE, OUTDOOR-RATED	
			00			009	04550	00	ГІ	ETTERNET CADLE, OUTDOOR-RATED	
										RETAINING WALLS (SOIL NAIL WALL)	
				356	356	503	21101	356	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	166
				10,944 147	10,944	509 511	10000 46010	10,944 147	LB CY	EPOXY COATED REINFORCING STEEL CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
				388	388	512	10100	388	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
				320	320	518	20000	320	SY	PREFABRICATED GEOCOMPOSITE DRAIN	
				24	24	518	21200	24	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
				3,342	3,342	520	10001	3,342	SF	POROUS BACKFILL WITH GEOTEXTILE FABRIC PNEUMATICALLY PLACED CONCRETE SHOTCRETE, AS PER PLAN	166
				119	119		53051100	+ +	EACH	RETAINING WALL, SOIL NAIL	166
							53051110			RETAINING WALL, SOIL NAIL VERIFICATION TEST	166
					8	SPECIAL	53051120	8	EACH	RETAINING WALL, SOIL NAIL PROOF TEST	166
										STRUCTURE REPAIR (CLE-275-1040L SFN 1305735)	
				100	100	509	20001	100		REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	173
				8 56.5	<u> </u>	512 519	10101	8 56.5	SY SF	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN PATCHING CONCRETE STRUCTURE, AS PER PLAN	173
						519		50.5	JF	FATCHING CONCRETE STRUCTURE, AS FER FLAN	173
										MAINTENANCE OF TRAFFIC	
	25				25	410	10000	25		TRAFFIC COMPACTED SURFACE, TYPE A	
	500 7 4				500	614 614	11110 12380	500 11		LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
	50				50	614	12600	50		REPLACEMENT DRUM	
	496 963	}			1,459	614	12800	1,459		WORK ZONE RAISED PAVEMENT MARKER	
	25					611	12000	05	<u></u>		_
	25 117 83				25 200	614 614	13000 13310	25 200	CY EACH	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC BARRIER REFLECTOR, TYPE 1, UNIDIRECTIONAL	
	117 83				200	614	13350	200		OBJECT MARKER, ONE WAY	
15					15	614	18600	15	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN	
	0.7				0.7	614	20056	0.7	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
	0.55 1.78	3			2.33	614	22056	2.33	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, YELLOW	
	0.52 2.12				2.63	614	22056	2.63	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, VHITE	
	3,352 5,83	7			9,189	614	23100	9,189	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 807 PAINT	
	835 2,25	4			3,089	614	24102	3,089	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
-	1					615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	23-36

						SH	IEET NU	JM.		
		17	79	80						
	E				 					
			3 5,596	4,021						
		4	5,590	4,021						
	uß									
	GG004 dgn									
	S 492_G(									
	ER Joe ets/111									
	∕I USE ay∖She									
	7 04 Al Roadw									
	∕IE: 9:2 eering∖									
	122 TIN -Engin									
	12/7/20 92\400									
	MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 12/7/2022 TIME: 9:27:04 AM USER: JoeS S:\COO\35003599\3589\022\Drawings\CAD\111492\400-Engineering\Roadway\Sheets\111492									
	(in.) ngs\CA									
) ;	34x22 \\Drawii								 	
•. 	RSIZE: 89\022									
	PAPE1 \$599\35									
	Sheet 35003									
	ODEL \COO\									
	≥ ທ									

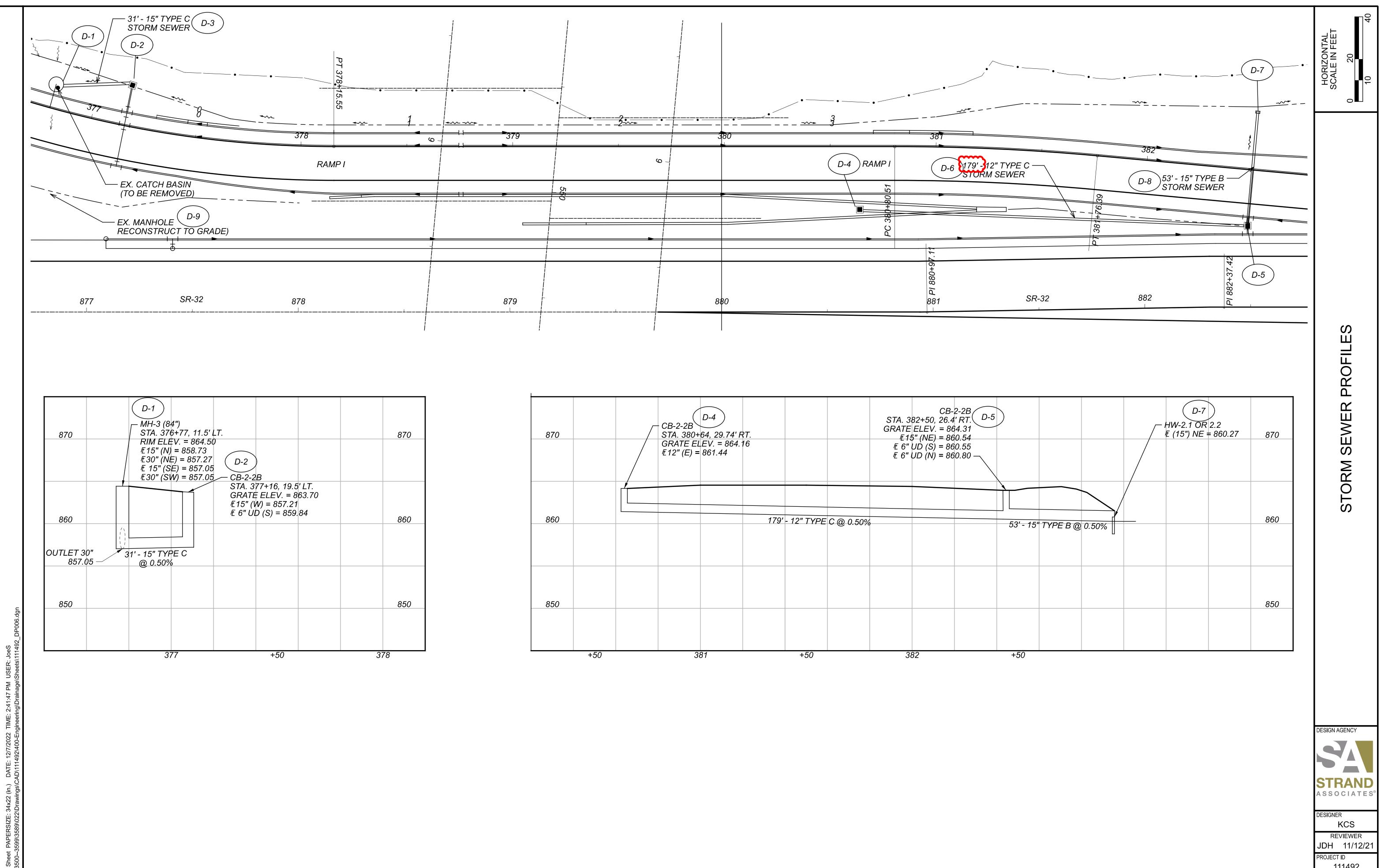
DE	UNIT	GRAND TOTAL	ITEM EXT	ITEM	PART.		
PAVEMENT FOR MAINTAINING TRAFFIC,	SY	397	20000	615	от 397		~~~~~
WATER		3	10000	616	397	+	
PORTABLE BARRIER, UNANCHORED		9,617	41100	622	9,617		
DIGITAL SPEED LIMIT (DSL) SIGN ASSEM	SNMT	4	18700	808	4		
MAINTAINING TRAFFIC		LS	11000	614	LS		
FIELD OFFICE, TYPE B		12	16010	619	12		
CONSTRUCTION LAYOUT STAKES AND S		LS	10000	623	LS		
MOBILIZATION		LS	10000	624	LS		

	SEE	
ESCRIPTION	SHEET NO.	
		3
, CLASS A	23-36	3
MBLY		
INCIDENTALS		
SURVEYING		
		SUMMARY
		MI
		2∩
		SI
		٦L
		R/
		Щ
		GENERAL
		Ċ
		DESIGN AGENCY
		STRAND
		A S S O C I A T E S <sup>®</sup>
		DESIGNER
		ATW REVIEWER
		JDH 11/12/21
		PROJECT ID 111492
		SHEET TOTAL
		77A 183

					511		605			· · · · · · · · · · · · · · · · · · ·			611				601
REF. NO.	SHEET	ALIGNMENT	BEGIN STA.	END STA.	S QC1CONCRETE, HEADWALL	SHALLOW PIPE JNDERDRAINS	NCLASSIFIED PIPE UNDERDRAINS	6" BASE PIPE UNDERDRAINS	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	CONDUIT, TYPE C	CONDUIT, TYPE B	CONDUIT, TYPE C	CH BASIN, NO. 2-2B	IANHOLE NO. 3	MANHOLE ONSTRUCTED TO GRADE	H BASINADJUSTED TO GRADE	D GUTTER, TYPE AS PER PLAN
		<	ш		CLAS	ר 9	<i>6" U</i>			12" (	15"	15" (	CATC	2	REC	CATC	PAVEL 1-2,
UD-1	139	RAMP I	374+90 375+21	375+21 377+16	CUYD	FT	<i>FT</i> <i>30</i>	FT 192	FT	FT	FT	FT	EA	EA	EA	EA	FT
UD-2	139	RAMP I	374+90 375+21	375+21 377+16		195	30										
UD-30	139	RAMP I	374+90 375+21	375+21 377+16			30	203									
UD-3	139	RAMP I	375+21	377+16			26	203	10								
UD-4	139-140	RAMP I	377+16	378+76		100		158									
UD-5 UD-31	<i>139-140</i> <i>1319-140</i>	RAMP I RAMP I	<i>377+16</i> <i>377+16</i>	<i>378+76</i> <i>378+76</i>		160		163									
UD-6	139	S.R. 32	77+09	77+41			31	100									
UD-7	139	S.R. 32	77+41	77+41			5	E 40									
UD-8	139-140	S.R. 32	77+41	82+83				542									
UD-9	140	RAMP I	378+76	382+85				410									
UD-10 UD-11	140 140	<i>RAMP I</i> <i>S.R. 32</i>	378+76 379+25	<i>382+85</i> <i>382+50</i>		409		371								<u> </u>	
UD-11 UD-12	140	<i>S.R. 32</i> <i>RAMP I</i>	379+25 382+50	382+50					4								
UD-12A	140	S.R. 32	82+48	82+48				~~	3								8
UD-13 UD-14	140 140	RAMP I RAMP I	382+50 382+85	<i>382+85</i> <i>382+85</i>			32	35									
UD-15	140	S.R. 32	82+83	84+28		145											
	141	3.R. 32 RAMP I	84+28 382+85	84+78 387+87			50	503									
UD-16 UD-17	140-141 140-141	RAMP I RAMP I	382+85 382+85	387+87 387+87				503									
UD-18	141	RAMP I	387+87	387+87			14		23								
UD-19	141-142	S.R. 32	87+89	92+85				496									
UD-20	141-142	S.R. 32	87+89	90+49		260											
UD-21	142	RAMP H	587+26 587+57	587+57 592+84			30	523									
UD-22	142	RAMP H	587+26 587+57	587+57		500	30										
	110		587+57	592+84 587+57		528	30										
UD-32	142	RAMP H	587+57	592+84				377									
UD-23 UD-24	142 142	S.R. 32 S.R. 32	90+49 90+49	90+49 92+85		236	4										
UD-24 UD-25	142	RAMP H	592+84	592+85 592+84		230	37										
UD-26	142	RAMP H	592+84	594+81				196									
	143 142		<i>594+81</i> <i>592+84</i>	595+11 594+81		196	30										
UD-27	143	RAMP H	594+81	595+11			30										
UD-28	142-143	S.R. 32	92+85	95+09		224											
UD-29	143	S.R. 32	95+09	95+09			12										
D-1	138	RAMP I	376+80											1			
<u>D-2</u> D-3	138 138	RAMP I RAMPI	377+14 376+80	377+14								31	1				
D-4	138	RAMP I	380+64	077714									1				
D-5	138	RAMPI	382+50	202150						170			1				
D-6 D-7	138 138	RAMP I RAMP I	380+64 382+50	382+50	0.25					179							
D-8	138	RAMP I	382+50	382+50							53				4		
D-9 D-10	138 84	RAMP I RAMP I	376+90 377+50	379+42											1		191
D-11	85	RAMP I	380+03	380+85													82
	141	S.R. 32	87	+87						[						1	
													i		•	<b>_</b>	

CLE-32-01.40

			DRAINAGE SUBSUMMARY
			DESIGN AGENCY
			STRAND
			ASSOCIATES® DESIGNER
			ATW REVIEWER
			JDH 11/12/21 PROJECT ID 111492
			SHEET TOTAL 137 183



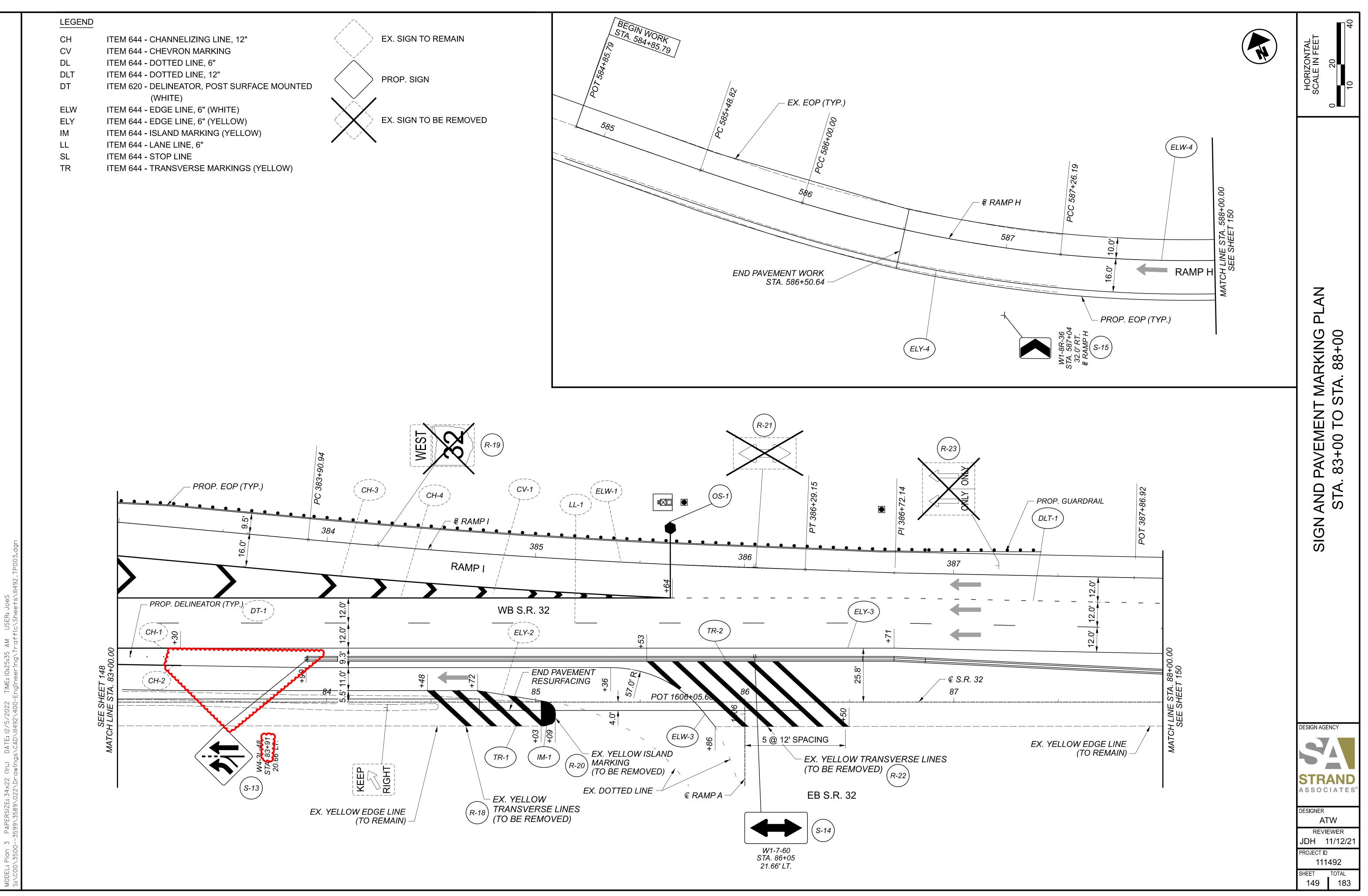
CLE-32-01.40

111492 SHEET TOTAL
138
183

					(:	ER 'LAN	۲	ED IST	a a a	TED	UNI INDI	IND DSAL	IND IRAL VD	IEAD VD	12.30 630	IEAD VD	17	ER
NO		AENT	ATION	Щ	(INCHES)	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED, AS PER PLAN	.SHEE	GROUND MOUNTED SUPPORT, NO. 3 POS	REMOVAL OF GROUND MOUNTED SIGNAND DISPOSAL	REMOVAL OF STRUCTURE MOUNTED SIGNAND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST UPPORT AND DISPOSA	L OF GROUND STRUCTURAL JPPORTAND SPOSAL	REMOVAL OF OVERHEA MOUNTED SIGNAND DISPOSAL	OVERHEA ORTAND PE TC-12.	REMOVAL OF OVERHEA SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 12	BARRIER
REF. I	SHEI	IGNME	STATI	CODE		sN SUF MBLY, ED, AS	N, FLAT	JND M DRT, N	VAL OF VTED S DISPO	EMOVA TURE ND REI	/AL OF TED M/ D DISF	VAL OF UNTEL RTANL	/AL OF ED STI 'SUPP DISPO,	AL OF ( VTED S DISPO	AL OF ( SUPP( AL, TYI	4L OF ( SUPP( POSAL TC-15.	ERHEA PPOR1 2.31, DH	RETE
		ALIGI			SIZE	SIG ASSEI NOUNT	SIGN,	GROI	REMO MOUN	RI STRUC SIGNAI	REMO MOUNT AN	REMOV MO	REMOVAL MOUNTED S BEAM SUI	REMOVA	REMOVAL OF OVEF SIGN SUPPORT / DISPOSAL, TYPE TC	REMOVA SIGN DIS	OVE SUI TC-12	CONCI
R-11	147	RAMP I	375+29			EA	SQ FT	FT	EACH 1	EACH	EACH	EACH 1	EACH	EACH	EACH	EACH	EACH	E/
R-12 R-13 R-14	147 147 147	RAMP I S.R. 32 RAMP I	<i>375+87</i> <i>77+00</i> <i>377+16</i>						1		1	1 2	2					
R-15 R-16	148 148	S.R. 32 S.R. 32	80+50 80+66						1	1		1			1			
<i>R-19</i>	149	S.R. 32	84+25						2			1						
R-21 R-23	149 149	S.R. 32 S.R. 32	86+05 87+22						1		1	1	2					
R-24 R-25 R-26	150 150 150	RAMP H S.R. 32 S.R. 32	588+88 90+10 91+75						1	2	1	1	1			1		
<i>R-27</i>	151	S.R. 32	98+00											1	1			
S-1 S-2	147 147	RAMP I RAMP I	374+36 375+29	W1-8R-36 I-H25b-12	36 X 48 12 X 12		<i>12.0</i> <i>1.0</i>	11.8 12.7										
<u></u>	147 147 147	RAMP I RAMP I RAMP I	375+29 375+56 375+97	W1-8R-36 R5-H10d-36	36 X 48		12.0 9.0	11.8 13.8										
S-5	147	RAMP I	376+76	W1-8R-36 M3-4-36	36 X 48 36 X 18		12.0 4.5	11.8 15.2										
S-6 	147 147	S.R. 32 RAMP I	77+00 377+11	M1-5-36-2 W13-3-48	36 X 36 48 X 60		9.0 20.0	15.83 / 16.33										
S-8 S-9	147	RAMPI	NOT USED 377+96				12.0	11.8										
S-10 S-11	148	S.R. 32	NOT USED 82+55	E5-H1c-48	48 X 84		28.0	19.8/19.8										
S-12			NOT USED															
S-13 S-14 S-15	149 149	S.R. 32 S.R. 32	83+91 86+05	W4-3L-48 W1-7-60	48 X 48 60 X 30	1 1	16.0 12.5	37.2										
S-16	150/158	S.R. 32	NOT USED 89+00	D12-2-96	96 X 66													
S-17 S-18	150 150	RAMP H RAMP H	589+09 589+16	W1-8R-36 R5-H10d-36	36 X 48		<i>12.0</i> <i>9.0</i>	11.8 13.8										
S-19 S-20	150 150 150	RAMP H RAMP H	590+24 590+35	W1-8R-36 W13-3-48	36 X 48 48 X 60		12.0 20.0	11.8 16.5 / 16.83										
S-21	150	S.R. 32	90+56	E5-H1c-48	48 X 84		28.0	19.16/19.16										
<i>OS-1</i>	149/157	S.R. 32	85+67		180 X 120												1	_
<i>OS-2</i>	151/157	S.R. 32	93+58		192 X 132 144 X 132													_
	TOTALS C	ARRIED TO	) GENERAL	SUMMARY		2	229	307	8	3	3	8	5	1	2	1	1	

CLE-32-01.40 MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 12/5/2022 TIME: 10:09:10 AM U

RIGID OVERHEAD SIGN SUPPORT FOUNDATION	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 2	SIGN, OVERHEAD EXTRUSHEET	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W6X9	BREAKAWAY STRUCTURAL BEAM CONNECTION	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
EACH	EACH	SQ FT	FT	EA	EA	
						SIGNING SUBSUMMARY
		44	18.35 / 18.92	2	2	
1						
4	4					
1	1					
						DESIGN AGENCY
						STRAND ASSOCIATES®
						DESIGNER
						REVIEWER JDH 11/12/21
						PROJECT ID
2	1	44	38	2	2	111492 SHEET TOTAL
		-				145 183



-32-01.40

Ш

 $\cup$ 

