

ITEM 614 - MAINTAINING TRAFFIC

THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATION 614, THESE MAINTENANCE OF TRAFFIC NOTES AND DETAILS, AND THE TRAFFIC CONTROL DETAILS DESCRIBED IN THESE PLANS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. 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 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.

THE CONTRACTOR SHALL SUBMIT, IN WRITING, A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL COORDINATE THE MAINTENANCE OF TRAFFIC OPERATIONS WITH THE LOCAL STATE HIGHWAY PATROL. THE CONTRACTOR SHALL ALSO NOTIFY IN WRITING, ALL APPROPRIATE LOCAL AGENCIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE TIME WHEN THE DETOUR WILL BE IMPLEMENTED.

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 THE **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 OF TRAFFIC RESTRICTIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS > 12 HOURS & < 2 WEEKS < 12 HOURS	21 CALENDAR DAYS PRIOR TO CLOSURE 14 CALENDAR DAYS PRIOR TO CLOSURE 4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

A. SR 15

SR 15 / CR 180 GRADE SEPARATION CONSTRUCTION OF THIS PROJECT WILL BE BY THREE (3) SEPARATE PHASES. THE SEQUENCE FOR CONSTRUCTION SHALL BE PHASE 1, PHASE 2 AND PHASE 3 AS NOTED ON SHEET 19. EACH PHASE SHALL BE COMPLETED IN ITS ENTIRETY BEFORE PROCEEDING TO THE NEXT PHASE AS APPROVED BY THE ENGINEER.

A MINIMUM OF ONE (1) LANE OF TRAFFIC IN EACH DIRECTION USING THE EXISTING PAVEMENT SHALL BE MAINTAINED AT ALL TIMES ON SR. 15, EXCEPT FOR MINIMUM PERIODS, TEMPORARY CLOSURES WILL BE PERMITTED AS DIRECTED BELOW. THE MINIMUM LANE WIDTH FOR TRAFFIC CONTROL SHALL BE 12 FEET AT ALL TIMES.

ALL EXISTING LANES, INCLUDING RAMPS, SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT BETWEEN OCTOBER 15 AND APRIL 1. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 900 PER CALENDAR DAY.

B. TEMPORARY CLOSURES ON SR 15

TEMPORARY CLOSURES ON SR 15 AT THE PROPOSED CR 180 OVERPASS ARE REQUIRED TO AVOID PERFORMING WORK OVER TRAVELED LANES DURING THE ERECTION OF THE PROPOSED BEAMS. SUCH CLOSURES SHALL OCCUR ONLY BETWEEN THE HOURS OF 12:00 A.M. TO 5:00 A.M., MONDAY THROUGH THURSDAY. TRAFFIC NEED ONLY BE STOPPED DURING THE ACTUAL ATTACHMENTS, LIFTING AND HANDLING OF THE BEAMS OVER THE TRAVELED LANES AND AT NO TIME SHALL ANY ONE CLOSURE EXCEED FIFTEEN (15) MINUTES PER EACH HOUR. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC.

ADVANCE NOTICE: ONE ADDITIONAL PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) IN EACH DIRECTION SHALL BE PROVIDED FOR SEVEN (7) DAYS IN ADVANCE OF THE CLOSURE DATES TO PROVIDE ADVANCE NOTICE OF THE TEMPORARY CLOSURE. THESE SIGNS ARE TO BE LOCATED AT AN APPROVED LOCATION NEAR THE CLOSURE SITE.

CLOSURE NOTICE: ONE PCMS IN EACH DIRECTION SHALL BE PROVIDED THE DAY(S) OF THE CLOSURE TO PROVIDE SPECIFIC CLOSURE INFORMATION. THE ADVANCE NOTICE PCMS NOTED ABOVE MAY BE RELOCATED TO PERFORM THIS FUNCTION. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN APPROVED PCMS APPROXIMATELY FOUR (4) MILES, IN EACH DIRECTION IN ADVANCE OF THE CLOSURE TO ADVISE TRAFFIC OF A POTENTIAL STOP CONDITION AND CONSTRUCTION DELAY. THE MESSAGE CONTENT SHALL BE APPROVED BY THE ENGINEER.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESS IN THE AMOUNT OF \$ 110 PER MINUTE PER LANE.

TEMPORARY CLOSURES SHALL BE IN ACCORDANCE WITH STANDARD DRAWING MT-99.60. THE COST OF THE ABOVE WORK INCLUDING PROVIDING, ERECTING, MAINTAINING AND REMOVING THE ADDITIONAL PCMS SHALL BE CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

AN ADDITIONAL ESTIMATED QUANTITY OF 50 HOURS OF ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR IS PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER FOR THESE CLOSURES.

C. CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

IN ADDITION TO THE REQUIREMENTS OF SECTION 614.035 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING SHALL APPLY: THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. A FLAGGER SHALL BE USED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT.

EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY, THIRTY (30) FEET FROM THE EDGE OF TRAVELED LANE OR SEVEN (7) FEET BEHIND THE FACE OF GUARDRAIL, WHEN VARIOUS OPERATIONS ARE SCHEDULED TO CONTINUE THE NEXT WORKDAY. ON WEEKENDS OR AT OTHER TIMES OF SUSPENSION OF WORK, THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA REMOVED FROM THE RIGHT OF WAY. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY EXCEPT WHEN TRAFFIC IS MAINTAINED ON THE OUTSIDE LANES. ADEQUATE BARRICADES AND LIGHT SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA.

D. CR 180

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 180 CONSECUTIVE CALENDAR DAYS WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET NO. 18. THE DETOUR PERIOD WILL BE FOR BOTH PHASE 2 AND PHASE 3 OF CONSTRUCTION. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 2500 PER CALENDAR DAY.

LOCAL ACCESS MUST BE MAINTAINED AT ALL TIMES AS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS AND THE ADVANCE WARNING SIGNS AS SHOWN ON THE STANDARD DRAWING MT-101.60.


DURING THE DETOUR PERIOD, THE CONTRACTOR SHALL COMPLETE ALL WORK REQUIRED FOR BRIDGE CONSTRUCTION, NEW CR 180 ROADWAY CONSTRUCTION, GRADING AND EROSION CONTROL ITEMS.

MAINTENANCE OF TRAFFIC NOTES

HAN-SR15/CR180-19.56/00.21

MODEL: Sheet-1 PAPER SIZE: 17x11 (in.) DATE: 8/5/2022 TIME: 6:26:10 AM USER: smorr F:\2020\21481 HAN-15-19.56-HAN-180-021 - ODOT\11379\400-Engineering\DOT\Sheets\111379_MN001.dgn

DESIGN AGENCY

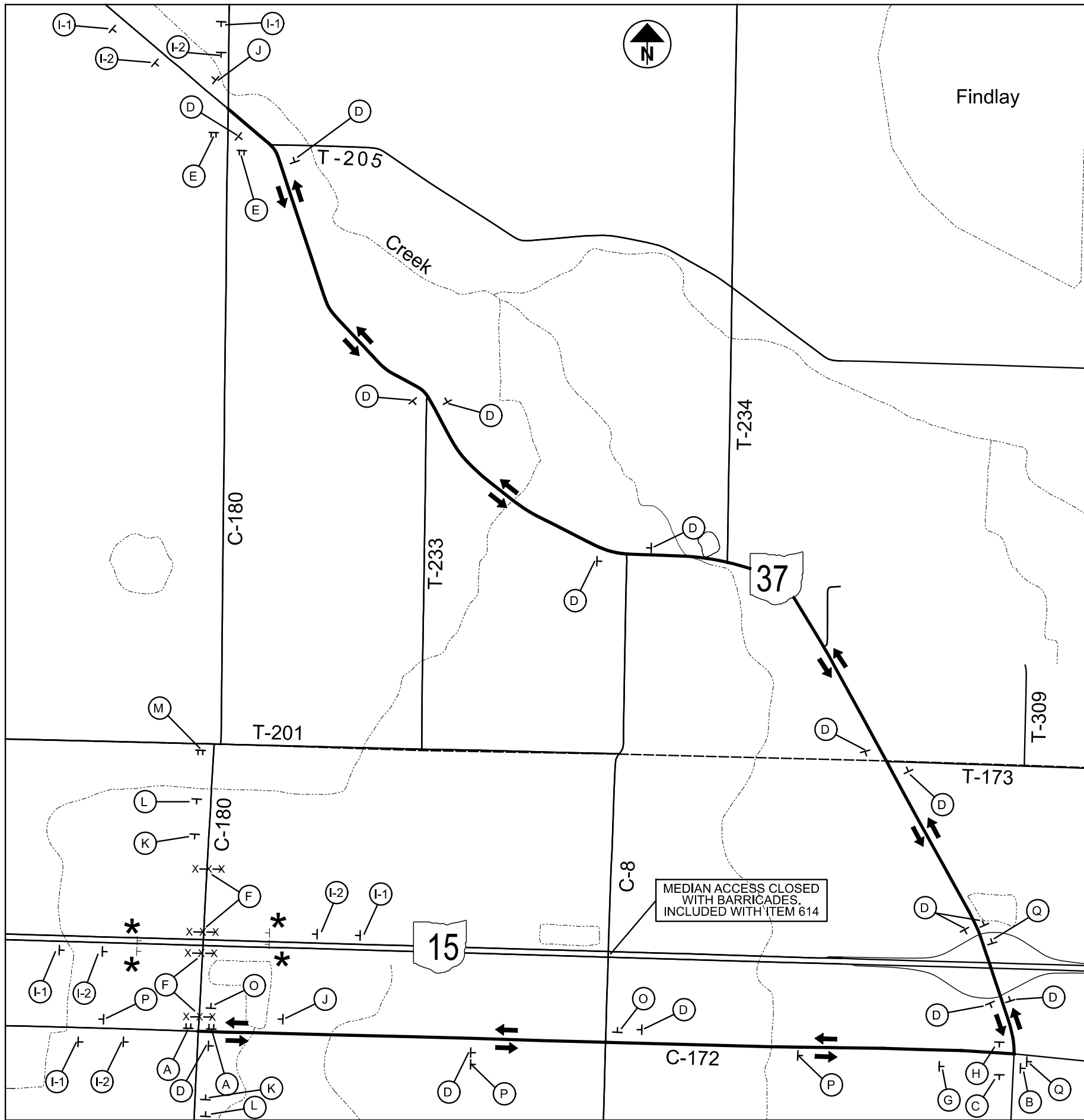


DESIGNER
ALP

REVIEWER
PRS 4-21-22

PROJECT ID
111379

SHEET TOTAL
11 | 149



COUNTY ROAD 180 DETOUR ROUTE

MEDIAN ACCESS CLOSED WITH BARRICADES. INCLUDED WITH ITEM 614

LEGEND

- DENOTES DETOUR ROUTE
- DENOTES GATES & BARRICADES AS PER ODOT STD. DWG. MT-101.60
- REMOVE EXISTING SIGNS AT THE TIME OF CR 180 ROAD CLOSURE. SEE TRAFFIC CONTROL PLANS FOR DETAILS.

ITEM 614 - DETOUR SIGNING

COUNTY ROAD 180	LS
TOTAL CARRIED TO GENERAL SUMMARY	LS

NOTE:
 EXISTING SIGNS AT THE INTERSECTION OF SR 15 AND CR 180 SHALL BE REMOVED AT THE TIME OF CR 180 ROAD CLOSURE. SEE TRAFFIC CONTROL PLANS FOR DETAILS.

Sign Details:

- A:** ROAD CLOSED 0.1 MILES AHEAD LOCAL TRAFFIC ONLY (R11-3A-60), DETOUR (M4-10R-48)
- B:** D3-1-VAR C.R. 180, DETOUR (M4-9L-30)
- C:** D3-1-VAR C.R. 180, DETOUR (M4-9R-30)
- D:** D3-1-VAR C.R. 180, DETOUR (M4-9-30)
- E:** ROAD CLOSED 1.9 MILES AHEAD LOCAL TRAFFIC ONLY (R11-3A-60), DETOUR (M4-10L-48)
- F:** ROAD CLOSED (R11-2-48), MOUNTED ON GATES AND BARRICADES AS PER STD. DWG. MT-101.60
- G:** M4-8-30 DETOUR, D3-1-VAR C.R. 180, M5-1L-30
- H:** M4-8-30 DETOUR, D3-1-VAR C.R. 180, M5-1R-30
- I:** DETOUR AHEAD (W20-2-36), 1500 FEET (W16-2P-30), 1000 FEET (W16-2P-30)
- J:** END DETOUR (M4-8A-24)
- K:** ROAD CLOSED AHEAD (W20-3-36), 1000 FEET (W16-2P-30)
- L:** ROAD CLOSED AHEAD (W20-3-36), 1500 FEET (W16-2P-30)
- M:** ROAD CLOSED TO THRU TRAFFIC (R11-4-60), MOUNTED ON TYPE III PORTABLE BARRICADE
- N:** D3-1-VAR C.R. 180, W20-H15a-72 CLOSED, M4-8-30 DETOUR, C.R. 8, D3-1-VAR TO BE PLACED AT THE INTERSECTION OF CR 182 AND CR 26
- O:** D9-13aP HOSPITAL, M6-1R
- P:** D9-13aP HOSPITAL, M6-3
- Q:** D9-13aP HOSPITAL, M6-1L

Large Sign Dimensions: 60" x 36"

Large Sign Text: C.R. 180 WILL BE CLOSED FOR 180 DAYS INFO: 419-222-9055

HAN-SR15/CR180-19.56/00.21

REFER TO STANDARD BRIDGE DRAWINGS

- AS-1-15 (REVISED 7-17-2015)
- AS-2-15 (REVISED 1-18-2019)
- GSD-1-19 (REVISED 1-15-2021)
- SBR-1-20 (REVISED 7-17-2020)
- SICD-1-21 (DATED 1-21-2022)
- SICD-2-14 (REVISED 1-15-2021)
- VPF-1-90 (REVISED 7-20-2018)

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

- SS800 (SEE PROPOSAL) SS840 (DATED 4-15-2022)
- SS832 (DATED 10-19-2018) SS845 (DATED 4-20-2018) ³

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9TH EDITION 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

HL-93, FUTURE WEARING SURFACE (FWS) OF 0.060 KIP/FT².

DESIGN DATA

CONCRETE, CLASS QC2 - (SUPERSTRUCTURE)
COMPRESSIVE STRENGTH 4.5 KSI

CONCRETE, CLASS QC1 - (SUBSTRUCTURE, COPING, AND LEVELING PAD) COMPRESSIVE STRENGTH 4.0 KSI

CONCRETE, CLASS QC5 - (DRILLED SHAFTS)
1/2" MAX. AGGREGATE SIZE - COMPRESSIVE STRENGTH 4.5 KSI

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60,
MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - (GALVANIZED OR METALIZED) ³
ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

STEEL H-PILES -
ASTM A572 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2 1/2" CONCRETE COVER
CONCRETE CLASS QC2

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PROPOSED BRIDGE WORK

THE PROPOSED WORK CONSISTS OF CONSTRUCTING THE PROPOSED BRIDGE.

DECK PLACEMENT DESIGN ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MINIMUM WHEEL LOAD OF 2.2 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

UTILITY LINES

ALL EXPENSES INVOLVED IN RELOCATION OF THE AFFECTED UTILITY LINE(S) SHALL BE BORNE BY THE UTILITY (OR UTILITIES). THE CONTRACTOR AND UTILITIES ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ROCK-SOCKETED DRILLED SHAFTS

THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 980 KIPS AT THE PIER. THIS LOAD IS RESISTED BY TIP RESISTANCE. AT THE PIERS, TIP RESISTANCE IS 1340 KIPS.

ITEM 203 - EMBANKMENT, AS PER PLAN

ALL FILL MATERIAL FOR CONSTRUCTION OF THE APPROACH EMBANKMENT SHALL BE PLACED IN 6 INCH MAXIMUM LIFTS

ITEM 507 - STEEL PILES HP10X42, FURNISHED, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL PILES INTO PREBORED HOLES. PLACE EACH PILE VERTICALLY WITHIN THE HOLE SO IT IS NOT INCLINED MORE THAN ONE INCH BETWEEN THE TOP AND BOTTOM. SUPPORT THE PILE SO THAT IT DOES NOT MOVE DURING PLACEMENT OF BACKFILL MATERIAL.

THE TOTAL FACTORED LOAD IS 120 KIPS PER PILE FOR THE REAR ABUTMENT PILES AND 120 KIPS PER PILE FOR THE FORWARD ABUTMENT PILES.

REAR ABUTMENT PILES:
10 - HP10 X 42 PILES, 35 FEET LONG, ORDER LENGTH (PILES 1-10)

FORWARD ABUTMENT PILES:
10 - HP10 X 42 PILES, 35 FEET LONG, ORDER LENGTH (PILES 11-20)

PILE SPLICES: IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN CMS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION
8 WOOD HOLLOW RD. PLAZA 1
PARSIPPANY, NEW JERSEY 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

ITEM 507 - PREBORED HOLES, AS PER PLAN ⁴

PREBORE HOLES AT THE REAR ABUTMENT TO AN ELEVATION OF 789.1 OR 5 FEET INTO ROCK AND AT THE FORWARD ABUTMENT TO AN ELEVATION OF 788.4 OR 5 FEET INTO ROCK, WHICHEVER IS DEEPER. PROVIDE A HOLE DIAMETER OF 14 INCH MINIMUM. LARGER SIZED HOLES MAY BE USED, BUT THE CONTRACTOR IS RESPONSIBLE FOR ALL BACKFILL COSTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AN OPEN HOLE. PLACE THE H-PILES AT THE ABUTMENTS IN PREBORED HOLES, WITHOUT DRIVING THE PILES AND FILL THE VOID BETWEEN THE PILES AND THE PREBORED HOLES WITH CLASS QC MISC. CONCRETE UP TO THE BOTTOM OF MSE WALL FOUNDATION PREPARATION ELEVATION, AFTER PILE INSTALLATION. THE CLASS QC MISC. CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 507 - PREBORED HOLES, AS PER PLAN. INSTALL PILE SLEEVES AROUND THE ABUTMENT PILES FROM THE BOTTOM OF FOUNDATION PREPARATION ELEVATION UP TO THE BOTTOM OF PILE CAP BEFORE CONSTRUCTING THE MSE WALL. PAYMENT FOR THE PILE SLEEVING WILL BE INCLUDED IN PAYMENT UNDER ITEM 840 - MECHANICALLY STABILIZED EARTH WALL.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE CONCRETE PARAPET AND MSE WALL AS SHOWN ON THE PLANS. SEAL MSE WALL, PARAPETS, AND EXPOSED SURFACES OF THE ABUTMENTS WITH AN EPOXY-URETHANE SEALER MATCHING FEDERAL COLOR STANDARD 27769, GENERAL / LIGHT NEUTRAL.

³	1/09/23	ADDED SS845 (METALIZING)
⁴	1/13/23	UPDATED NOTE

DUE TO THE RECENT SUPPLY SHORTAGES, THE DEPARTMENT HAS BEEN MADE AWARE OF DIFFICULTIES THAT SUPPLIERS ARE HAVING IN OBTAINING THE NECESSARY MATERIALS FOR EPOXY. ON THIS PROJECT THE CONTRACTOR CAN USE TRADITIONAL EPOXY-URETHANE SEALERS APPROVED ON THE QPL OR SELECT AN APPROVED NOISE BARRIER SEALER FROM THE LIST BELOW.

ODOT APPROVED NOISE BARRIER SEALERS	
SUPPLIERS	DRAWINGS & NOTES
TAMMSCOAT FINE ODOT TAMMS INDUSTRIES COMPANY/EUCLID CHEMICAL 19215 REDWOOD ROAD CLEVELAND, OH 44110 800-321-7628 INFO@EUCLIDCHEMICAL.COM	APPLICATION DRY FILM THICKNESS 20 MILS SMOOTH SURFACE RATE OF 50 SF/GAL TEXTURED SURFACE (ASHLAR STONE) RATE OF 40 SF/GAL TEXTURED SURFACE (3/4 FLUTED) RATE OF 25 SF/GAL
BRIDGE COTE XL-70 W/SILANE (FINE TEXTURED) BY TEX COTE OR BRIDGE COTE XL-70 BY TEX-COTE TEXTURED COATING OF AMERICA 4101 RAVENSWOOD ROAD SUITE 218 FORT LAUDERDALE, FL 33312-5371 954-581-0771	APPLICATION DRY FILM THICKNESS 15 MILS SMOOTH SURFACE RATE OF 50 SF/GAL TEXTURED SURFACE (ASHLAR STONE) RATE OF 40 SF/GAL TEXTURED SURFACE (3/4 FLUTED) RATE OF 25 SF/GAL
TEXTURED DOT BY CHEMMASTERS 300 EDWARDS ST MADISON, OH 44057 800-486-7866	APPLICATION DRY FILM THICKNESS 15 MILS (380 MICROMETERS) SMOOTH SURFACE RATE OF 50 SF/GAL TEXTURED SURFACE (ASHLAR STONE) RATE OF 40 SF/GAL TEXTURED SURFACE (3/4 FLUTED) RATE OF 25 SF/GAL
SHERWIN WILLIAMS 809 GUNPOWDER DRIVE LEXINGTON, KY 40509 DERRICK CASTLE, PROJECT DEVELOPMENT MANAGER BRIDGE AND HIGHWAY 913-481-0612 DERRICK.CASTLE@SHERWIN.COM	B97W160 SMOOTH TEXTURE APPLICATION DRY FILM THICKNESS 10-15 MILS DFT SMOOTH SURFACE RATE OF 60-90 SF/GAL TEXTURED SURFACE (ASHLAR STONE) RATE OF 45-75 SF/GAL TEXTURED SURFACE (3/4 FLUTED) RATE OF 15-25 SF/GAL APPROVED ON 6/15/17

IF AN ODOT APPROVED NOISE BARRIER SEALER IS CHOSEN, FOLLOW THE SURFACE PREPARATION REQUIREMENTS LISTED UNDER C&MS 512 FOR EPOXY URETHANE SEALERS AND APPLY AT THE DRY FILM THICKNESS SHOWN ABOVE. ALL OTHER REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 2, AS PER PLAN (SHOP GALVANIZING)

1.0 DESCRIPTION

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATION 513, THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND GALVANIZE ALL STRUCTURAL STEEL SURFACES, AS SPECIFIED HEREIN. THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT QUALIFIED AS A FABRICATION SHOP UNDER CONSTRUCTION AND MATERIAL SPECIFICATION 513, BUT THE APPROVED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATING SYSTEM AND ANY REPAIRS, RE-FABRICATING, ADDITIONAL LAYDOWNS REQUIRED TO ASSURE THE FABRICATED STEEL MEETS ALL REQUIREMENTS OF THIS SPECIFICATION. SECTIONS 513.27 AND 513.28 SHALL NOT APPLY.

THIS ITEM SHALL ALSO INCLUDE GALVANIZING, PER 711.02, OF ALL NUTS, WASHERS, BOLTS, ANCHOR BOLTS.

SHEAR STUDS SHALL BE INSTALLED AS PER SECTION 513.22.

2.0 PRE-FABRICATION MEETING

IN ADDITION TO THE PRE-FABRICATION MEETING REQUIREMENTS UNDER 513.07, BOTH THE FABRICATOR'S QUALITY CONTROL SPECIALIST, (QCS) AND GALVANIZER'S QCS COATING APPLICATOR SHALL BE PRESENT AND DISCUSS METHODS OF OPERATION, QUALITY CONTROL, INCLUDING REPAIRS, TRANSPORTATION, ERECTION METHODS TO ACCOMPLISH ALL PHASES OF THE PREPARATION AND COATING WORK REQUIRED BY THIS SPECIFICATION.

3.0 QUALITY CONTROL

3.1 QUALITY CONTROL SPECIALIST

THE GALVANIZER'S QCS (QUALITY CONTROL SPECIALIST) REQUIRED UNDER 514, IS RESPONSIBLE FOR ALL QUALITY CONTROL REQUIREMENTS OF THIS SPECIFICATION. THE QCS SHALL HAVE THE TESTING EQUIPMENT SPECIFIED IN 514.05

3.2 QUALITY CONTROL POINTS (QCP)

QUALITY CONTROL POINTS (QCP) ARE POINTS IN TIME WHEN ONE PHASE OF THE WORK IS COMPLETE AND READY FOR INSPECTION BY THE FABRICATOR'S QCS AND THE DEPARTMENT'S QA REPRESENTATIVE. THE NEXT OPERATIONAL STEP MUST NOT PROCEED UNLESS THE QCP HAS BEEN ACCEPTED OR QA INSPECTION WAIVED BY THE DEPARTMENT'S QA REPRESENTATIVE. AT THESE POINTS THE FABRICATOR MUST AFFORD ACCESS TO INSPECT ALL AFFECTED SURFACES. IF INSPECTION INDICATES A DEFICIENCY, THAT PHASE OF THE WORK MUST BE CORRECTED IN ACCORDANCE WITH THESE SPECIFICATIONS PRIOR TO BEGINNING THE NEXT PHASE OF WORK. DISCOVERY OF DEFECTIVE WORK OR MATERIAL AFTER A QUALITY CONTROL POINT IS PAST OR FAILURE OF THE FINAL PRODUCT BEFORE FINAL ACCEPTANCE, MUST NOT IN ANY WAY PREVENT REJECTION OR OBLIGATE THE DEPARTMENT TO FINAL ACCEPTANCE.

QUALITY CONTROL POINTS

QUALITY CONTROL POINTS (QCP) PURPOSE

- A. SOLVENT CLEANING REMOVE ASPHALTIC CEMENT, OIL, GREASE, SALT, DIRT, ETC.
- B. GRINDING EDGES REMOVE SHARP CORNERS PER AWS.
- C. ABRASIVE BLASTING BLAST SURFACES, INCLUDING REPAIR FINS, TEARS, SLIVERS OR SHARP EDGES.
- D. GALVANIZING CHECK COATING THICKNESS
- E. FAYING SURFACE CLEANING CHECK FAYING SURFACE ROUGHNESS. CHECK BOLT HOLE CLEARANCE. CHECK FOR OTHER FIELD CONNECTIONS UNIFORM COATING THICKNESS.
- F. SECOND LAY DOWN CHECK SWEEP AND CAMBER TOLERANCES OF EACH STRUCTURAL MEMBER.
- G. FIELD REPAIR OF DAMAGE AREAS CHECK FOR DAMAGE AREAS AFTER ERECTION OF STRUCTURE. PERFORM DAMAGE REPAIRS
- H. FINAL REVIEW CLEAN STRUCTURE AS PER QCP#1. VISUALLY INSPECT SYSTEM FOR ACCEPTANCE.

A. SOLVENT CLEANING (QCP #1)

THE STEEL MUST BE SOLVENT CLEANED WHERE NECESSARY TO REMOVE ALL TRACES OF ASPHALTIC CEMENT, OIL, GREASE, DIESEL FUEL DEPOSITS, AND OTHER SOLUBLE CONTAMINANTS PER SSPC-SP 1 SOLVENT CLEANING. UNDER NO CIRCUMSTANCES MUST ANY ABRASIVE BLASTING BE DONE TO AREAS WITH ASPHALTIC CEMENT, OIL, GREASE, OR DIESEL FUEL DEPOSITS. STEEL MUST BE ALLOWED TO DRY BEFORE BLAST CLEANING BEGINS. THE GALVANIZER'S QCS SHALL INSPECT AND DOCUMENT THAT THE CLEANING CONFORMS TO SSPC-SP1 AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

B. GRINDING EDGES (QCP #2)

ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES MUST HAVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE. THERMALLY CUT MATERIAL THICKER THAN 1 1/2 INCH MUST HAVE THE SIDES GROUND TO REMOVE THE HEAT EFFECTED ZONE, AS NECESSARY TO ACHIEVE THE SPECIFIED SURFACE CLEANING. THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE GRINDING CONFORMS TO THIS SPECIFICATION AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

C. ABRASIVE BLASTING (QCP #3)

BEAMS AND GIRDERS MUST BE PREPARED BY THE FABRICATOR TO STEEL STRUCTURES PAINTING COUNCIL (SSPC) GRADE SIX (6) COMMERCIAL BLAST CLEANING PRIOR TO GALVANIZING. ALL MATERIAL MUST BE FREE OF PAINT MARKS. SECONDARY ANGLE, PLATES, BARS AND SHAPES NEED NOT BE BLAST CLEANED.

ABRASIVES MUST ALSO BE CHECKED FOR OIL CONTAMINATION BEFORE USE. A SMALL SAMPLE OF ABRASIVES MUST BE ADDED TO ORDINARY TAP WATER. ANY DETECTION OF A OIL FILM ON THE SURFACE OF THE WATER MUST BE CAUSE FOR REJECTION. THE GALVANIZER'S QCS MUST PERFORM AND RECORD THIS TEST AT THE START OF EACH SHIFT.

ALL FINS, TEARS, SLIVERS AND BURRED OR SHARP EDGES THAT ARE PRESENT ON ANY STEEL MEMBER OR THAT APPEAR AFTER THE BLASTING OPERATION MUST BE CONDITIONED PER ASTM A6. WELDING REPAIRS MUST ONLY BE PERFORMED BY THE 513 FABRICATOR.

THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE BLAST CONFORMS TO SSPC-SP6, THAT ALL CONDITIONING IS PERFORMED PER ASTM A6, AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

D. GALVANIZING (QCP #4)

GALVANIZED PER 711.02 AND THIS SPECIFICATION. COATING THICKNESS MUST BE A MINIMUM OF 4 MILS MEASURED AS SPECIFIED.

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE FABRICATOR, GALVANIZER AND ERECTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. PRIOR TO GALVANIZING, SURFACE IMPERFECTIONS MAY BE REPAIRED BY THE FABRICATOR IN CONFORMANCE WITH ASTM A6. IMPERFECTIONS GREATER THAN THE LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE DEPARTMENT.

GENERAL NOTES
BRIDGE NO. HAN-CR180-00.21
OVER STATE ROUTE 15

SFN	3200845
DESIGN AGENCY	
DESIGNER	BLN
CHECKER	dht
REVIEWER	DLR
PROJECT ID	111379
SUBSET	2
TOTAL	23
SHEET	96
TOTAL	149

ESTIMATED QUANTITIES


CALCULATED RWC DATED 09-2021
 CHECKED dht DATED 09-2021

ITEM	ITEM EXT.	TOTAL (01/NHS/08)	UNIT	DESCRIPTION	SUPERSTR.	ABUTS.	PIER	MSE WALL	GEN'L	SEE SHEET
203	20001	2,689	CY	EMBANKMENT, AS PER PLAN					2,689	2/23
203	35110	331	CY	GRANULAR MATERIAL, TYPE B				331		
203	35120	215	CY	GRANULAR MATERIAL, TYPE C				215		
503	21300	LS		UNCLASSIFIED EXCAVATION					LS	
507	00101	700	FT	STEEL PILES HP10X42, FURNISHED, AS PER PLAN		700				2/23
507	92201	195	FT	PREBORED HOLES, AS PER PLAN		195				2/23
509	10000	77,940	LB	EPOXY COATED REINFORCING STEEL	64,890	7,131	5,919			
509	30020	5,280	FT	NO. 4 GFRP DEFORMED BARS	5,280					
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE		2				
511	34446	213	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	213					
511	34450	51	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	51					
511	41010	24	CY	CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS			24			
511	43510	85	CY	CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING		85				
512	10101	1,053	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	392	57	79	525		2/23
513	20001	2,484	EACH	WELDED STUD SHEAR CONNECTORS, AS PER PLAN	2,484					3/23
516	10010	66	FT	ARMORLESS PREFORMED JOINT SEAL					66	
516	13600	61	SF	1" PREFORMED EXPANSION JOINT FILLER		61				
516	13900	62	SF	2" PREFORMED EXPANSION JOINT FILLER		62				
516	14020	113	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		113				
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2.483" x 12" x 20" PAD AND 2" x 13" x 21" PLATE)	6					
516	44100	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2.483" x 10" x 15" PAD, 2-1.5" x 11" x 17" STEEL PLATES AND HP10 x 42 SECTION)	12					
518	21200	36	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		36				
518	40000	81	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		81				
518	40010	139	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		139				
524	94704	14	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK			14			
524	94802	33	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK			33			
526	30000	220	SY	REINFORCED CONCRETE APPROACH SLABS (T=17")					220	
526	90030	66	FT	TYPE C INSTALLATION					66	
607	39900	270	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	270					
840	20000	6,042	SF	MECHANICALLY STABILIZED EARTH WALL				6,042		
840	21000	797	CY	WALL EXCAVATION				797		
840	22000	645	SY	FOUNDATION PREPARATION				645		
840	23000	3,996	CY	SELECT GRANULAR BACKFILL				3,996		
840	25010	660	FT	6" DRAINAGE PIPE, PERFORATED				660		
840	25020	195	FT	6" DRAINAGE PIPE, NON-PERFORATED				195		
840	26000	371	FT	CONCRETE COPING				371		
840	27000	5	DAY	ON-SITE ASSISTANCE				5		
840	28000	LS		SGB INSPECTION AND COMPACTION TESTING				LS		
513	10241	281,000	LB	GALVANIZED STEEL OPTION A STRUCTURAL STEEL MEMBERS, AS PER PLAN (SHOP GALVANIZING)	281,000					2/23 & 3/23
513	10241	281,000	LB	METALIZED STEEL OPTION B STRUCTURAL STEEL MEMBERS, AS PER PLAN (SHOP METALIZING)	281,000					3/23

2	1/04/23	ADDED ITEM 516 QUANTITY
3	1/09/23	ADDED METALIZING & SPLIT CODE
4	1/13/23	UPDATED PIER REINFORCING WEIGHT

HAN-SR15/CR180-19.56/00.21

ESTIMATED QUANTITIES
 BRIDGE NO. HAN-CR180-00.21
 OVER STATE ROUTE 15

SFN 3200845
 DESIGN AGENCY

 DESIGNER CHECKER
 BLN dht
 REVIEWER
 DLR
 PROJECT ID
 111379
 SUBSET TOTAL
 4 23
 SHEET TOTAL
 98 149

MARK	NUMBER			LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS								
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC		
ABUTMENTS							CALCULATED $\frac{RB}{dht}$ DATE 10/21 CHECKED $\frac{dht}{dht}$ DATE 10/21								
A501	16	16	32	22'-0"	734	STR									
A502	40	40	80	17'-1"	1425	3	5'-8"	2'-7"							
A503	40	40	80	15'-1"	1259	3	2'-8"	4'-7"							
A504	6	6	12	20'-0"	250	2	9'-7½"	1'-0"	9'-7½"						
A505	6	6	12	21'-0"	263	2	9'-8"	1'-11½"	9'-8"						
A506	14	14	28	13'-1"	382	2	6'-1"	1'-2"	6'-1"						
A507	8	8	16	9'-11"	165	3	2'-8"	2'-0"							
A801	16	16	32	22'-8"	1937	STR									
DG601	5	5	10	13'-8"	205	3	2'-8"	3'-8½"							
DG801	7	7	14	13'-8"	511	5	2'-8"	3'-7"	2'-4"						
TOTAL					7131										

MARK	NUMBER TOTAL	LENGTH	GFRP TOTAL LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS									
						A	B	C	D	E	R	INC			
RAILING							CALCULATED $\frac{RB}{dht}$ DATE 10/21 CHECKED $\frac{dht}{dht}$ DATE 10/21								
*R401	48	10'-0"	480'	-	STR										
*R402	24	6'-4"	152'	-	25	2'-6"	2'-5"	1'-4"	0'-1½"	0'-5"					
*R403	24	5'-1"	122'	-	STR										
*R404	88	38'-3"	3366'	-	STR										
*R405	16	12'-6"	200'	-	STR										
*R406	96	10'-0"	960'	-	STR										
R602	308	7'-0"		3328	23	6"	3'-6"	3'-3"			2"				
TOTAL			5280'	3328											

* - DENOTES GFRP REINFORCING BAR

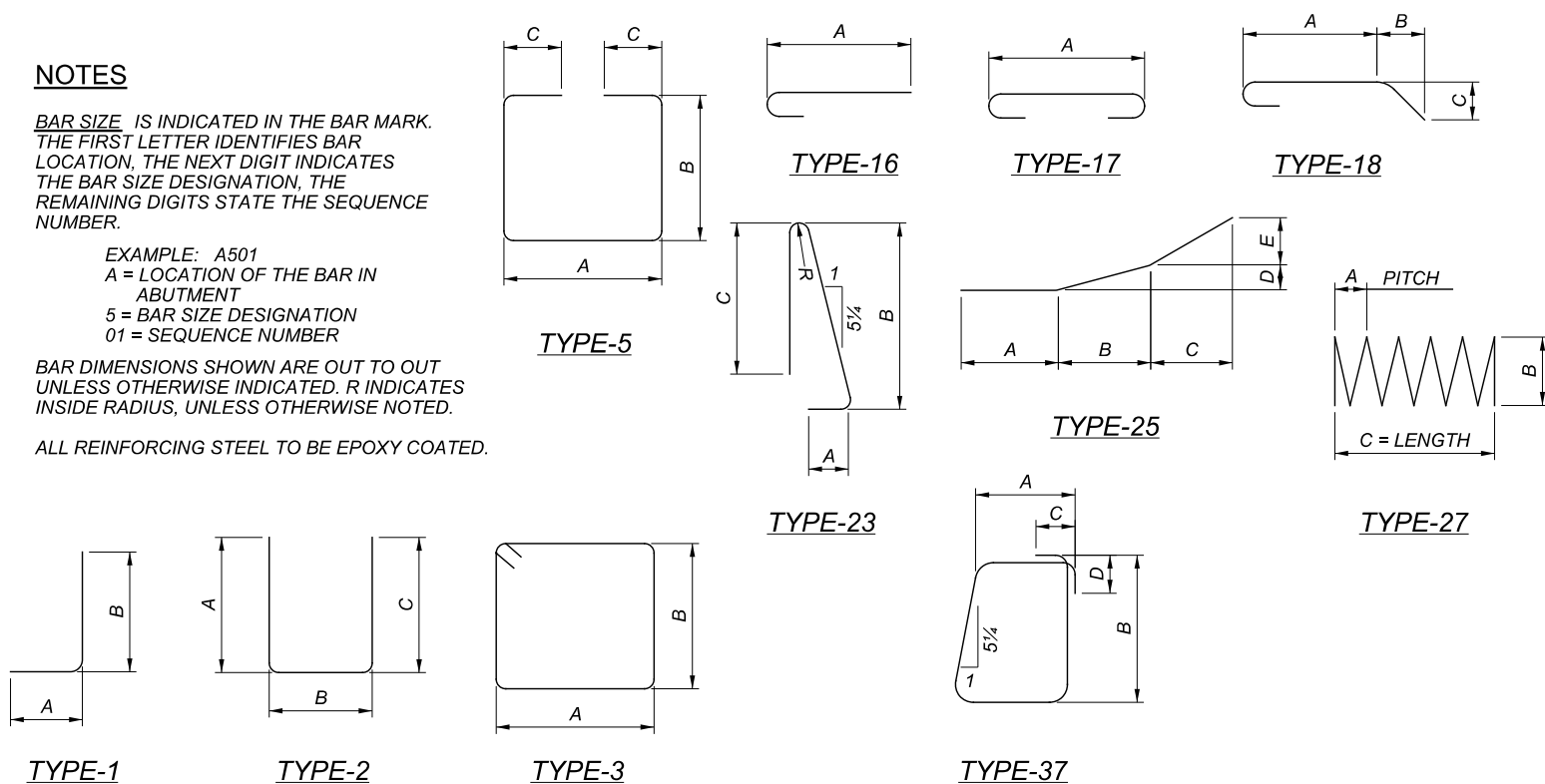
NOTES

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES BAR LOCATION, THE NEXT DIGIT INDICATES THE BAR SIZE DESIGNATION, THE REMAINING DIGITS STATE THE SEQUENCE NUMBER.

EXAMPLE: A501
A = LOCATION OF THE BAR IN ABUTMENT
5 = BAR SIZE DESIGNATION
01 = SEQUENCE NUMBER

BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

ALL REINFORCING STEEL TO BE EPOXY COATED.



MARK	NUMBER TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS										
					A	B	C	D	E	R	INC				
PIER							CALCULATED $\frac{RB}{dht}$ DATE 10/21 CHECKED $\frac{dht}{dht}$ DATE 10/21								
P401	10	32'-8"	218	STR											
P501	240	7'-7"	1898	2	3'-0"	1'-10"	3'-0"								
P502	6	4'-7"	29	2	0'-10"	3'-2"	0'-10"								
P801	13	32'-8"	1134	STR											
P901	33	17'-9"	1992	16	16'-6"										
SP401	3	323'-6"	648	27	0'-4½"	2'-6"	14'-7"								
DRILLED SHAFTS - PIER							CALCULATED $\frac{RB}{dht}$ DATE 10/21 CHECKED $\frac{dht}{dht}$ DATE 10/21								
DS401	3	328'-8"	659 **	27	0'-4½"	2'-6"	14'-10"								
DS901	33	20'-11"	2347 **	STR											
TOTAL			5919 *												

* DOES NOT INCLUDE DRILLED SHAFT BARS
** DRILLED SHAFT BARS INCLUDED WITH DRILLED SHAFTS FOR PAYMENT. WEIGHT FOR INFORMATIONAL PURPOSES ONLY.

SUPERSTRUCTURE							CALCULATED $\frac{RB}{dht}$ DATE 10/21 CHECKED $\frac{dht}{dht}$ DATE 10/21								
S401	180	30'-0"	3607	STR											
S402	72	16'-10"	810	STR											
S403	30	30'-0"	601	STR											
S404	12	16'-0"	135	STR											
S501	180	30'-0"	5632	STR											
S502	72	18'-1"	1358	STR											
S503	1388	19'-4"	27989	16	18'-7½"										
S504	694	9'-9"	7057	2	7'-0"	0'-6"	2'-6"								
S505	70	40'-0"	2920	STR											
S506	70	33'-11"	2476	STR											
S507	104	7'-11"	859	2	2'-9"	2'-8"	2'-9"								
S508	48	6'-9"	338	2	2'-7"	1'-10"	2'-7"								
S509	6	8'-8"	54	3	1'-2"	2'-8"									
S510	8	7'-5"	62	2	2'-7"	2'-6"	2'-7"								
S511	8	5'-9"	48	2	2'-8"	0'-8"	2'-8"								
S512	6	9'-0"	56	3	2'-4"	1'-10"									
S601	16	4'-11"	118	1	3'-1"	2'-0"									
S602	8	6'-8"	80	17	5'-4"										
S603	8 SR OF TO	4'-2½" TO	611	1	1'-0"	3'-4½" TO								0'-1"	
S604	11	5'-0½"				4'-2½"									
S605	32	4'-2½"	202	1	1'-0"	3'-4½"									
S605	308	7'-4¼"	3421	37	9½"	2'-5½"	7"	1'-0"							
S801	24	15'-8"	1004	STR											
S802	16	35'-0"	1495	STR											
D801	46	5'-1½"	629	18	2'-10"	1'-0"	1'-0"								
TOTAL			61562												

4	1/13/23	UPDATE TOTAL PIER BAR WEIGHT
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