

0 100 200
 HORIZONTAL
 SCALE IN FEET

CALCULATED
 ATR
 CHECKED
 CWL

SCHEMATIC PLAN

FRA-70-13.11

6
 1151



E040 (634) E131 (501)
 END PROJECT STA. 193+21.67 SEE PROJECT FRA-70-14.05
 I-70 EB PROJECT 4B
 S.L.M. 14.05 (96053)

4 STRUCTURE NO.
 FRA-70-1373R
 (105523)

5 STRUCTURE NO.
 FRA-70-1373A
 (105523)

6 STRUCTURE NO.
 FRA-70-1390C
 (105523)

7 STRUCTURE NO.
 FRA-70-1395C
 (105523)

8 STRUCTURE NO.
 FRA-70-1405C
 (105596)

NO.	DESCRIPTION	REV. BY	DATE
1	REMOVED 4W13	CWL	10-2-23

FOR GEOMETRIC PLAN, SEE SHEETS 7-9
 FOR CURVE DATA, SEE SHEETS 10-13

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GENERAL

UTILITIES

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

AMERICAN ELECTRIC POWER (TRANSMISSION)
ATTN: MICHAEL CARR
8600 SMITHS MILL ROAD
NEW ALBANY, OH 43054
(380) 205-5072
TL_PublicProjects@aep.com

CITY OF COLUMBUS
DIVISION OF SEWERAGE AND DRAINAGE
1250 FAIRWOOD AVENUE
COLUMBUS, OH 43206
(614) 645-7102 (SMOC)

AMERICAN ELECTRIC POWER (DISTRIBUTION)
ATTN: PAUL PAXTON
777 HOPEWELL DRIVE
HEATH, OH 43056
(740) 348-5322
AEP SOLUTION CENTER:
(800) 277-2177
pfpaxton@aep.com
ohfiberrelocate@aep.com

LUMEN (FKA CENTURY LINK/ LEVEL 3/TW TELECOM)
250 W OLD WILSON BRIDGE RD.
SUITE 130
WORTHINGTON, OH 43085
relocations@lumen.com

CITY OF COLUMBUS
DIVISION OF POWER
ATTN: CHARLES HORNER
3500 INDIANOLA AVENUE
COLUMBUS, OH 43214
(614) 645-7569
crhorner@columbus.gov

AT&T (FKA SBC)
ATTN: DONALD G. MARSHALL JR.
111 N 4TH STREET
COLUMBUS, OH 43215
(614) 216-2396 CELL
AT&T REPAIR SERVICE:
(888) 611-4466
DAMAGE PREVENTION:
(937) 296-3929
dm619w@att.com
t19569@att.com
KG1963@att.com
BT2178@att.com

COLUMBIA GAS OF OHIO
ATTN: ROB CALDWELL
3550 JOHNNY APPLESEED CT.
COLUMBUS, OH 43231
(614) 818-2104
(614) 370-1906 CELL
CUSTOMER SERVICE:
(800) 344-4077
DAMAGE PREVENTION:
(866) 632-6243
columbiagas_columbuseng@nisource.com
rcaldwell@nisource.com

WINDSTREAM-KDL INC.
(MCLEODUSA)
ATTN: LEON TAYLOR
2165 STATE ROUTE 133 SOUTH
BLANCHESTER, OH 45107
(937) 725-5358 CELL
leon.taylor@windstream.com

CITY OF COLUMBUS
DIVISION OF WATER
910 DUBLIN ROAD
COLUMBUS, OH 43215
(614) 645-7788

VERIZON BUSINESS (AKA MCI/XO)
757 COMMERCE CT.
LEWIS CENTER, OH 43035
(614) 593-6685 (MAURICE JONES)
(614) 816-0361 (BOB DILLOW)
vz.net.columbus@verizon.com
john.cornell@verizonwireless.com
michael.hennon@verizonwireless.com
michael.bondy@verizonwireless.com
sven.christianson@verizonwireless.com

CHARTER COMMUNICATIONS/
SPECTRUM (AKA TIME WARNER COMMUNICATIONS)
3760 INTERCHANGE DRIVE
COLUMBUS, OH 43204
DL-MOH-CONSTRUCTION-FRELO-TEAM@charter.com

CITY OF COLUMBUS
DEPARTMENT OF TECHNOLOGY
CABLE INTERCONNECT SECTION
ATTN: DAVE MCNALLY
1355 MCKINLEY AVENUE BLDG C
COLUMBUS, OH 43222
OFFICE: (614) 645-1501
CONTRACTOR LINE: (614) 645-7756
CABLE LOCATES FAX: (614) 645-6627
dwmcnally@columbus.gov
dhjoyce@columbus.gov

BREEZELINE
(FKA WOW)
3675 CORPORATE DRIVE
COLUMBUS, OH 43231
DL_CMHFR@ATLANTICBB.COM
mfrey@breezeline.com

CITY OF COLUMBUS
TRAFFIC SIGNALS
ATTN: BRAD HEGWOOD
1820 17TH AVE
COLUMBUS, OH 43219
(614) 560-0839
bdhegwood@columbus.gov

SPRINT/T-MOBILE
ATTN: STEVEN HUGHES
11370 ENTERPRISE PARK DR.
SHARONVILLE, OH 45241
(513) 459-5796
(513) 462-7221 CELL
Steven.Hughes@t-mobile.com

CITY OF COLUMBUS SUPPORT SERVICES DIVISION (COMMUNICATIONS)
ATTN: WILLIAM GRIFFITH
4211 GROVES ROAD
COLUMBUS, OH 43232
(614) 645-7344 EXT. 100
WGriffith@columbus.gov
JOHN GREMBOWSKI (RADIO)
(614) 724-4006
JAGembowski@columbus.gov

ZAYO GROUP (FKA CITY NET)
ATTN: ERIC L. ALEXANDER
251 NEILSTON ST.
COLUMBUS, OH 43215
(614) 989-9655
eric.alexander@zayo.com

CROWN CASTLE
ATTN: JON TARNOWSKI
2 EASTON OVAL - SUITE 425
COLUMBUS, OH 43219
(585) 445-5813
(614) 940-2462 CELL
jon.tarnowski@crowncastle.com

ODOT ITS
1606 W. BROAD ST.
COLUMBUS, OH 43223
(614) 387-4113
cen.its.lab@dot.ohio.gov

HORIZON
ATTN: JIM LUMP
1123 GOODALE BOULEVARD
SUITE 550
COLUMBUS, OH 43212
(740) 772-8256
HorizonUtility@HorizonConnects.com
kravel@nbcllc.com

FAX REQUEST FOR MARKINGS, TWO BUSINESS DAYS PRIOR TO WORKING IN THIS AREA.

THE UNDERGROUND UTILITIES ON THIS PLAN HAVE BEEN LOCATED BY USING A SUBSURFACE UTILITY ENGINEERING COMPANY (SUE) AND EXISTING PLANS AS SUPPLIED BY THE RESPECTIVE UTILITY OWNERS, AS REQUIRED BY SECTION 153.64 O.R.C.

COLUMBUS DIVISION OF POWER

THE DIVISION OF POWER (DOP) MAY HAVE UNDERGROUND OR OVERHEAD PRIMARY POWER, SECONDARY POWER, CONDUIT SYSTEMS AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OHIO811 AT 811 OR 1-800-362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING STREET LIGHTING LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-01, COPIES OF WHICH ARE AVAILABLE FROM DOP.

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP DISPATCH OFFICE SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 14 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: GPS
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID99

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(86)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, SOUTH ZONE
COMBINED SCALE FACTOR: 1.000043907 (GRID TO GROUND)
ORIGIN OF COORDINATE SYSTEM: FRANKLIN COUNTY MONUMENT "FRANK 143"
N: 711726.0754
E: 1840542.0310

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

UNITS ARE IN U.S. SURVEY FEET.

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED R/W SHEET #	CWL	10-2-23

WORK LIMITS

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

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

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

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS.

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

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

CLEARING AND GRUBBING

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

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

COLUMBIA GAS DAMAGE PREVENTION CENTER

FOR INFORMATION CONCERNING COLUMBIA GAS LINES OR EQUIPMENT, OR IF DAMAGE OCCURS TO GAS LINES OR EQUIPMENT THE CONTRACTOR CAN CALL THE COLUMBIA GAS DAMAGE PREVENTION CENTER AT (614) 280-7372 OR TOLL FREE AT (866) 632-6243.

GAS SERVICE VALVES ADJUSTED TO GRADE (CITY OF COLUMBUS)

THE CONTRACTOR SHALL CONTACT COLUMBIA GAS (614) 460-2244 TO COORDINATE THE ADJUSTMENT OF GAS SERVICE VALVES.

CITY OF COLUMBUS PRE-APPROVED SUPPLIERS AND PRODUCTS

SEE THE FOLLOWING WEBSITES FOR CITY OF COLUMBUS PRE-APPROVED SUPPLIER AND PRODUCT LISTS FOR THOSE ITEMS REQUIRED TO MEET CMSC SPECIFICATIONS:

<http://www.columbus.gov/utilities/document-library/>

<http://www.columbus.gov/publicservice/Design-and-Construction/Document-Library/>

WATER MAIN & SERVICE PROTECTION NOTE

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PROTECT THE EXISTING WATERLINES AND WATER SERVICES, WITHIN THE LIMITS OF THIS IMPROVEMENT, FROM DAMAGE DUE TO MINIMAL COVER OF LESS THAN (48" MIN) WATER LINES AND (42" MIN) WATER SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST AND THE REPAIR OF ANY DAMAGES CAUSED BY NOT FOLLOWING THIS REQUIREMENT.

PRE-CONSTRUCTION NOTIFICATIONS REQUIRED (CITY OF COLUMBUS)

CONTRACTOR SHALL NOTIFY THE FOLLOWING DIVISIONS AT LEAST 48 HOURS BEFORE STARTING WORK:

ANY DPS NON-TRAFFIC SIGNALS, MARK LAW (614) 645-0415 OR mwlaw@columbus.gov (COPY DOUG ROBERTS mdroberts@columbus.gov).

ANY DPS PAVEMENT RELATED ITEMS INCLUDING GRANITE CURB, CURB RAMPS AND BRICK PAVEMENT, DPS CONSTRUCTION SECTION (COPY MARK LAW).

ANY TRAFFIC SIGNALS, GLEN RICHMOND (614) 645-1297 OR gwrichmond@columbus.gov.

CITY OF COLUMBUS DIVISION OF DESIGN AND CONSTRUCTION @ (614) 645-3182
CITY OF COLUMBUS DIVISION OF INFRASTRUCTURE MANAGEMENT - OPERATIONS SECTION @ (614) 645-7738
DIVISION OF WATER @ (614) 645-7677
DIVISION OF SEWERAGE AND DRAINAGE @ (614) 645-7102,
DIVISION OF RECREATION AND PARKS @ (614) 645-7665,
DIVISION OF POWER @ (614) 645-7627.

EMERGENCY PROVISIONS (CITY OF COLUMBUS)

THE CONTRACTOR SHALL PROVIDE TO THE CITY OF COLUMBUS PROJECT REPRESENTATIVE AND ODOT PROJECT MANAGER A LIST OF 24 HOUR EMERGENCY TELEPHONE NUMBERS (IN WRITING) PRIOR TO THE START OF CONSTRUCTION AS WELL AS MAINTENANCE OF THE LIST DURING CONSTRUCTION.

SECURING EXCAVATIONS & TRENCHES FOR NON-WORKING HOURS (CITY OF COLUMBUS)

EXCAVATIONS AND TRENCHES OVER 24 INCHES DEEP SHALL BE SECURELY PLATED OR BACKFILLED DURING NON-WORKING HOURS.

MISC: DETAILS - CITY OF COLUMBUS STANDARD DRAWINGS

ANY MISCELLANEOUS DETAIL LOCATED WITHIN THIS CONSTRUCTION DOCUMENT THAT REFER TO THE CITY OF COLUMBUS STANDARD DRAWINGS, SHALL BE USED IN CONJUNCTION WITH THE 2018 CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION (CMSC) AND ALL CITY OF COLUMBUS SUPPLEMENTAL SPECIFICATIONS, INCLUDING 1100.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON R/W SHEET 6/74.

ITEM SPECIAL - DEPARTMENTS SHARE FACILITATED PARTNERING COSTS

THIS ITEM SHALL CONSIST OF PROVIDING FACILITATED PARTNERING FOR THE PROJECT AS REQUIRED IN ODOT PN 111.

ALL MATERIALS, LABOR AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM SPECIAL - DEPARTMENTS SHARE FACILITATED PARTNERING COSTS.

ROUNDING

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

EXISTING ELEVATIONS

LISTED EXISTING ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

QUANTITIES CARRIED TO GENERAL NOTES SUBSUMMARY ON SHEET 51

CALCULATED
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GENERAL NOTES

FRA-70-13.11

33
1151

SUMMARY OF BIG BUILD 4A PART 1 / 4H PART 2 / 6A PART 3 / 4B PART 4 / 1301R PART 5 MOT SEQUENCING			
STEP	MOT PHASE	*COORDINATION OF OVERLAP WORK	MOT SCHEMATIC PLAN SHEET # (SEE PART # PLANS FOR DETAILS)
1	4A PART 1 PHASE 1		67/1151
2	4A PART 1 PHASE 2	STRUCTURE 1405C (PART 2)	68/1151
3	4A PART 1 PHASE 3		69/1151
4	6A PART 3 PHASE 1		102/702 - 103/702
5	6A PART 3 PHASE 2	STRUCTURES 1322L (PART 3), 1323C (PART 3) AND 1301L (PART 5)	125/702 - 126/702
	1301 PART 5 (1301L)		12/137
6	6A PART 3 PHASE 3		168/702 - 169/702
7	1301 PART 5 (1301R)		12/137
8	4B PART 4 PHASE 1		41/855 , 78/855 , 79/855
9	4B PART 4 PHASE 2		41/855 , 80/855
10	4B PART 4 PHASE 3		41/855 , 81/855 , 82/855 , 83/855
11	4B PART 4 PHASE 4		41/855 , 84/855 , 85/855
12	4B PART 4 PHASE 5		41/855

* ORIGINAL MOT PHASING BASED ON FOLLOWING PROJECT ORDER - PROJECT 4A-4H / 6A / 1301 / 4B - OVERLAP AREAS IDENTIFIED IN TABLE

I-70 EB AVAILABILITY CLAUSE

PHYSICAL CONSTRUCTION WORK FOR THE PART 1 MAINTENANCE OF TRAFFIC PHASE 1 PLAN PAGES 67 SCHEMATIC AND PAGES 98-112 WHERE I-70 EB AND I-71 NB TRAFFIC ARE MAINTAINED ONTO RAMP C5/C6 CANNOT START UNTIL JUNE 1, 2024. IN ADDITION, I-70 EB STRUCTURES 1321 R, 1358 R, AND 1373 R ALSO CANNOT START UNTIL JUNE 1, 2024. AFTER JUNE 1, 2024, THE CURRENT ONGOING PROJECT PID 105523 WILL HAVE TRAFFIC INTO THAT PROJECT'S PHASE 4 MOT SCHEME AS DESIGNED ON PID 105523'S PH. 4R PLAN PAGES 175-183. THESE RESTRICTIONS INCLUDE MAINTENANCE OF TRAFFIC INSTALLATIONS IN EXCESS OF 24 HOURS. DATA COLLECTION INCLUDING BUT NOT LIMITED TO FIELD SURVEYS AND GEOTECHNICAL INVESTIGATIONS ARE PERMITTED UPON SIGNED CONTRACT SUBJECT TO ENVIRONMENTAL AND THIRD-PARTY RESTRICTIONS.

I-70 WB AVAILABILITY CLAUSE

PHYSICAL CONSTRUCTION WORK FOR THE PART 3 MAINTENANCE OF TRAFFIC PHASE 2 I-70 WB BRIDGES CONSTRUCTION PLAN PAGES 125 SCHEMATIC AND PAGES 133-151 CANNOT START UNTIL NOVEMBER 1, 2025. AFTER NOVEMBER 1, 2025, THE CURRENT ONGOING PROJECT PID 105523 WILL HAVE TRAFFIC INTO THAT PROJECT'S PHASE 3B MOT SCHEME AS DESIGNED ON PID 105523'S PH. 6R PLAN PAGES 236-246 WHERE THE I-70 WB MOVEMENT TO I-71 SB WILL BE ON THE 15.03L STRUCTURE. THESE RESTRICTIONS INCLUDE MAINTENANCE OF TRAFFIC INSTALLATIONS IN EXCESS OF 24 HOURS. DATA COLLECTION INCLUDING BUT NOT LIMITED TO FIELD SURVEYS AND GEOTECHNICAL INVESTIGATIONS ARE PERMITTED UPON SIGNED CONTRACT SUBJECT TO ENVIRONMENTAL AND THIRD-PARTY RESTRICTIONS.

MOT CLOSURE NOTES, REFERENCES AND TABLES

PARTS 1 AND 2: SEE SHEETS 54/1151 - 63/1151
PART 3: SEE SHEETS 44/702 - 54/702
PART 4: SEE SHEETS 41/855 - 48/855
PART 5: SEE SHEETS 12/137

NO.	DESCRIPTION	REV. BY	DATE
1	ADDED NOTES	CWL	10-2-23

ITEM 614 - MAINTAINING TRAFFIC

1. CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY ODOT PERSONNEL. THE PROJECT ENGINEER SHALL APPROVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR CONDITION AND LOCATION BEFORE THE CONTRACTOR WILL BE ALLOWED TO BEGIN WORK. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, HIS PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

2. ALL SIGNS, BARRICADES, SIGN SUPPORTS, DRUMS, FLAGGERS, WORK ZONE TRAFFIC SIGNALS AND INCIDENTALS FOR TRAFFIC CONTROL SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN CONFORMANCE WITH THE MOST RECENT REVISIONS, CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD). ALL SIGNS USED FOR THE MAINTENANCE OF TRAFFIC SHALL BE NEW OR LIKE NEW CONDITION SUBJECT TO THE APPROVAL OF THE ENGINEER. DEVICES USED TO MAINTAIN TRAFFIC SHALL BE REMOVED IMMEDIATELY AFTER THE TERMINATION OF SAID WORK. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

3. FOR WORK WHICH IS CONFINED TO THE SHOULDER, TRAFFIC CONTROL SHALL CONFORM TO FIGURES TA-1, TA-3, TA-4, AND TA-6 OF THE OMUTCD AND SCD MT-95.45. IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS AND PROVISIONS OF THE OMUTCD AND FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER HAS THE AUTHORITY TO SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

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

NOTIFICATION OF CONSTRUCTION INITIATION

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT D06.PIO@DOT.OHIO.GOV, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT D06.MOT@DOT.OHIO.GOV AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION VIA EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

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

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

PERMITTED LANE CLOSURES ON FREEWAYS, RAMPS AND CITY STREETS

THE EXISTING NUMBER OF LANES IN EACH DIRECTION ON ALL FREEWAYS SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS. THE EXISTING NUMBER OF LANES IN EACH DIRECTION ON ALL RAMPS AND CITY STREETS SHALL BE MAINTAINED FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS.

IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING, TAPER AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE.

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

ALL WORK ZONE AND TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, APPLICABLE STANDARD DRAWINGS, AND THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES (CURRENT EDITION).

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

COORDINATION WITH ADJACENT PROJECTS

THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS.

COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AN EXCUSABLE, COMPENSABLE DELAY PER 108.06.D. ON PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE, NOR SHALL THE COMPLETION DATE BE EXTENDED.

ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT AND WORKSITE TRAFFIC SUPERVISOR (WTS), AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

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

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

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

PRE-MAINTENANCE OF TRAFFIC MEETING

A PRE-MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD (MINIMUM OF 10 WORK DAYS) PRIOR TO WORK BEGINNING OR ANY CHANGE OF PHASING. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER (d06.mot@dot.ohio.gov) AS WELL AS THE CONTRACTOR AND ANY OF HIS SUB-CONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL. FOR COLUMBUS SECTIONS OF ROADWAY, ALSO INCLUDE THE TEMPORARY CONTROL COORDINATOR (614-645-6269 OR 614-645-5845) FROM THE CITY OF COLUMBUS TRANSPORTATION DIVISION.

WEEKLY MAINTENANCE OF TRAFFIC MEETING

AFTER THE INITIAL PRE-MAINTENANCE OF TRAFFIC MEETING, THE CONTRACTOR SHALL MEET WITH THE PROJECT ENGINEER ON A WEEKLY BASIS TO GO OVER A DETAILED MAINTENANCE OF TRAFFIC REPORT OF AT LEAST 7 CALENDAR DAYS. THIS MEETING SHOULD BE HELD ON THE SAME DAY AND TIME OF EACH WEEK.

THE CONTRACTOR WILL PROVIDE TO THE PROJECT ENGINEER A WRITTEN DETAIL OF THE INFORMATION REQUIRED BY THE NOTIFICATION OF TRAFFIC RESTRICTIONS NOTE PRIOR TO THE MEETING.

IN ADDITION TO THE DETAILED MAINTENANCE OF TRAFFIC REPORT THE CONTRACTOR SHALL GIVE A GENERAL LOOK AHEAD OF AN ADDITIONAL 2 WEEKS OF UPCOMING WORK ACTIVITIES. THIS WILL INCLUDE ANY NOTIFICATION REQUIREMENTS FOR RESTRICTIONS THAT HAVE A DURATION GREATER THAN 12 HOURS.

ITEM 614 - MAINTAINING TRAFFIC (ESTIMATED QUANTITIES)

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B
200 CU. YD.

MAINTENANCE OF FIRE LANE

THE FIRE LANE JUST SOUTH OF I-70/I-71 BETWEEN SHORT STREET AND SECOND STREET SHALL NOT BE UTILIZED FOR CONSTRUCTION EQUIPMENT, ACTIVITIES, OR CONSTRUCTION TRAFFIC. IT SHALL REMAIN CLEAR FOR FIRE DEPARTMENT USE AT ALL TIMES.

WORK APPROVAL

IF THE CONTRACTOR WANTS TO PERFORM ANY WORK OUTSIDE OF THE CURRENT MOT PHASE THIS WILL REQUIRE THE PROJECT ENGINEER'S APPROVAL.

THE CONTRACTOR SHALL PROVIDE TO THE PROJECT ENGINEER A WRITTEN DETAIL OF THE INTENDED WORK TO BE ADDED TO THE CURRENT MOT PHASE FOR APPROVAL. THE INTENDED WORK SHALL NOT BEGIN UNTIL WRITTEN APPROVAL IS PROVIDED.

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NO.	DESCRIPTION	REV. BY	DATE
1	ADDED TABLE	B&N	10-2-23

BRIDGE DESCRIPTION	STRUCTURE #	WORK TYPE	DAYS	CLOSURE/DETOUR TIME***	# TIMES ALLOWED	DETOUR DETAILS ON SHEETS		
HIGH ST. BRIDGE WESTERN HALF	FRA-70-1405C	DEMOLITION	WEEKEND *	FRI 10PM - MON 5 AM	1**			
HIGH ST. BRIDGE WESTERN HALF IN CONJUNCTION WITH WEST CAP		BEAM ERECTION	WEEKEND *	FRI 10PM - MON 5 AM	1**			
HIGH ST. BRIDGE WESTERN HALF		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1			
HIGH ST. BRIDGE WEST CAP		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1			
HIGH ST. BRIDGE EASTERN HALF		DEMOLITION	WEEKEND *	FRI 10PM - MON 5 AM	1**			
HIGH ST. BRIDGE EASTERN HALF IN CONJUNCTION WITH WEST CAP		BEAM ERECTION	WEEKEND *	FRI 10PM - MON 5 AM	1**			
HIGH ST. BRIDGE EASTERN HALF		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1			
HIGH ST. BRIDGE EAST CAP		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1			
*		THE CONTRACTOR MAY CHOOSE TO COMPLETE THIS WORK OVER THE COURSE OF NIGHTLY						
**		IF WORK IS PERFORMED VIA NIGHTLY CLOSURES, THE NUMBER OF CLOSURES REQUIRED SHALL BE						
***	DISCINCENTIVES WILL BE ASSESSED PER LANE PER MINUTE AT THE RATES SHOWN IN THE LANE VALUE CONTRACT TABLE FOR ANY CLOSURE OUTSIDE OF THE CLOSURE/DETOUR TIMES							

MAINTENANCE OF TRAFFIC NOTES

FRA - 70 - 13.11

CALCULATED
EMW
CHECKED
RMK

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.
2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF, AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.
3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.
4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.
5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.
6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.
7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TTC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.
8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.
9. ON A CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.
11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:

- A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).
- B. DAILY TTC SETUP AND REMOVAL.
- C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.

- D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.
- E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.
- F. ALL OTHER EMERGENCY TTC NEEDS.

12. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN #1) AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORKDAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.

B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.

C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY PREQUALIFIED WTS.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1. SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.

2. SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.

3. PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.

4. SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

- A. COLLABORATE WITH ODOT AND SAFETY FORCES;
- B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND
- C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.

5. CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6. CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

- A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:
 - I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL
 - II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN
 - III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN
 - IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN
 - V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN
 - VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE
- B. FOLLOWING AN INCIDENT/CRASH:
 - I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
 - II. RECOMMEND ROADWAY REPAIR NEEDS.
 - III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
 - IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

THE TRAFFIC MANAGEMENT CENTER (TMC) CONTACT PERSONNEL ARE THE AM SUPERVISOR TODD SEITER AND PM SUPERVISOR DOMINIC DELCOL. THEY CAN BE REACHED AT 614-387-2438 OR 800-884-4030.

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (I23-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:
- CLOSURE OF 315SB TO 70EB FOR 4 YEARS IN TOTAL (3 YEARS FOR 77372 AND 1 YEAR PREVIOUSLY FOR 105523)
- CLOSURE OF 70WB TO 315NB FOR 6 MONTHS IN TOTAL
- MONITOR TRAFFIC CONDITIONS FOR POSSIBLE CONFIGURATION ADJUSTMENTS AT THE 670EB TO 715B DETOUR RAMP

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER AND CITY OF COLUMBUS AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 01/24/2023 FOR PID 77372" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

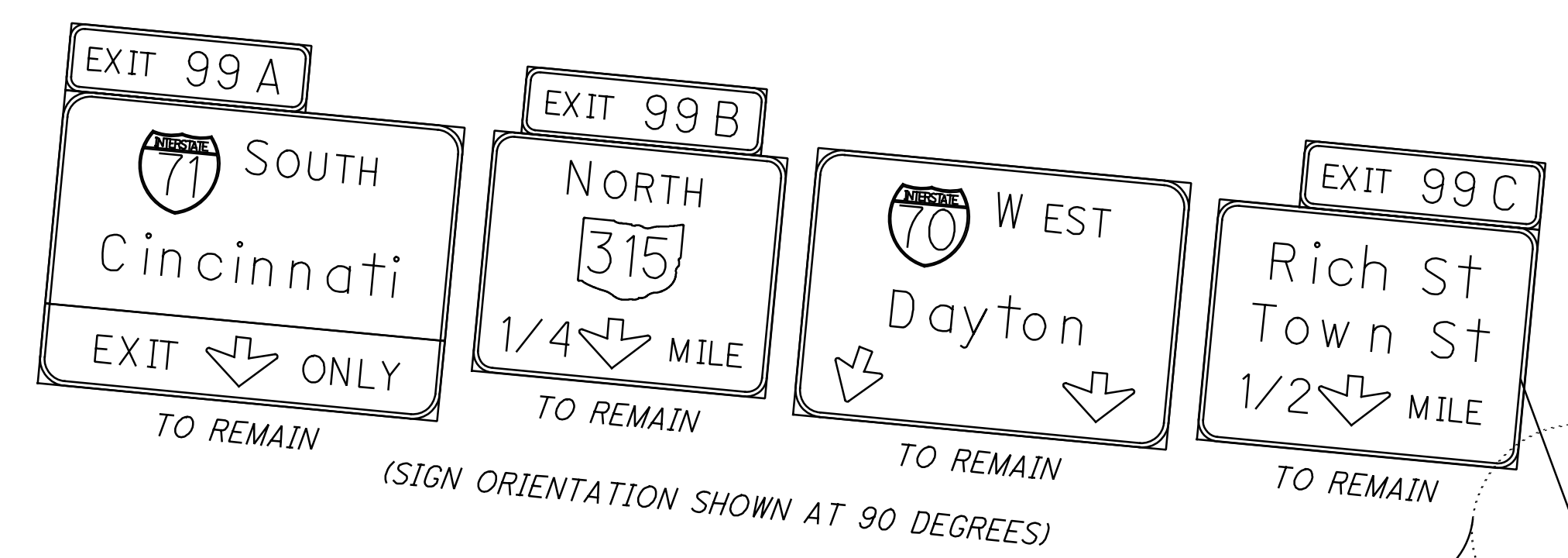
ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED, THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

NOTIFICATIONS DURING CLOSURE REQUIRED
A DESIGNATED ON-SITE POINT OF CONTACT SHOULD COMMUNICATE WITH THE TMC AS THE STATUS OF THE CLOSURE CHANGES.
CONTACT THE TMC:
- IF THE CLOSURE IS POSTPONED OR CANCELLED
- AT THE TIME THE CLOSURE IS IMPLEMENTED
- AT THE TIME THE CLOSURE IS REMOVED AND ALL LANES RESTORED
- IF THE CLOSURE WILL NOT BE OPENING ON TIME

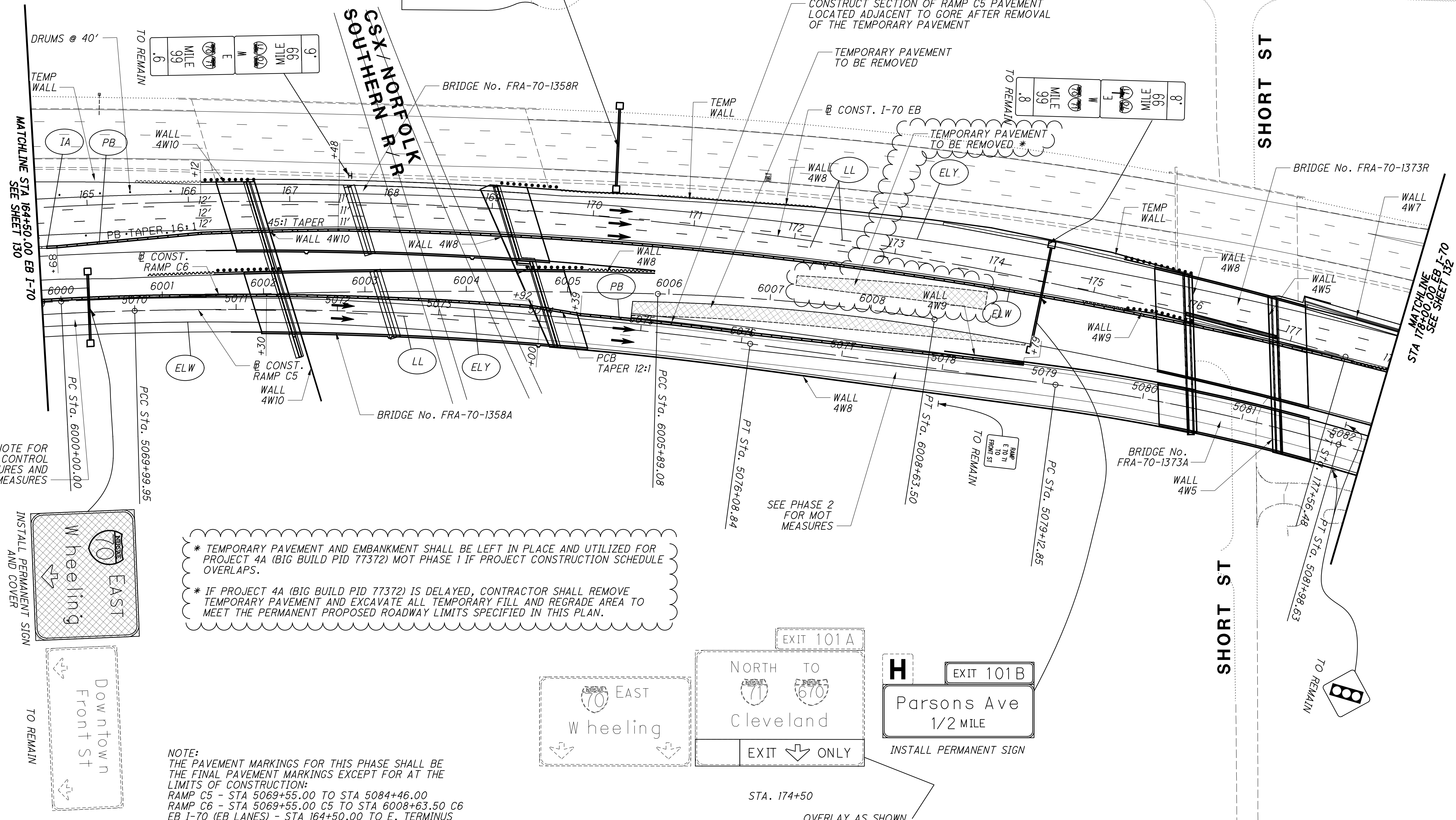
CONTACT CAN BE MADE WITH THE TMC IN THE FOLLOWING WAYS:
- PHONE: 1-614-387-2438 OR 1-800-884-4030
- EMAIL: STATEWIDETMC@DOT.OHIO.GOV
- RADIO: XDOT MAIN

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED NOTE	B&N	10-2-23

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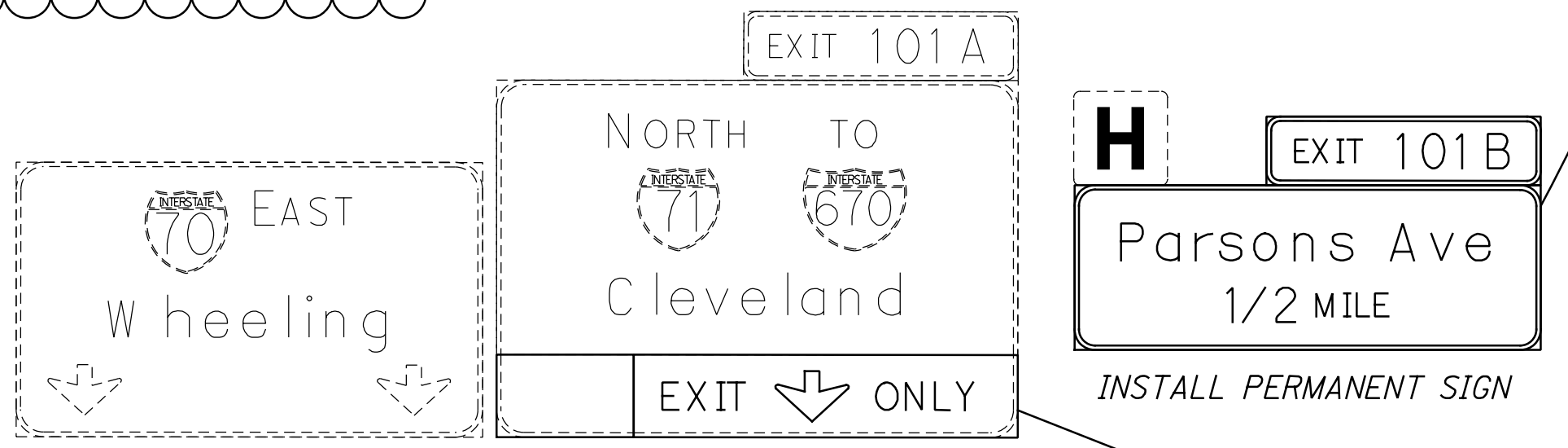


NEW TRAFFIC CONTROL MEASURES (I.E. DRUMS, PCB, PAVEMENT MARKINGS, ETC) INSTALLED FOR THIS PHASE ARE LABELED. TRAFFIC CONTROL MEASURES INSTALLED IN PREVIOUS PHASE(S) TO REMAIN ARE NOT LABELED.



* TEMPORARY PAVEMENT AND EMBANKMENT SHALL BE LEFT IN PLACE AND UTILIZED FOR PROJECT 4A (BIG BUILD PID 77372) MOT PHASE I IF PROJECT CONSTRUCTION SCHEDULE OVERLAPS.
 * IF PROJECT 4A (BIG BUILD PID 77372) IS DELAYED, CONTRACTOR SHALL REMOVE TEMPORARY PAVEMENT AND EXCAVATE ALL TEMPORARY FILL AND REGRADE AREA TO MEET THE PERMANENT PROPOSED ROADWAY LIMITS SPECIFIED IN THIS PLAN.

NOTE:
 THE PAVEMENT MARKINGS FOR THIS PHASE SHALL BE THE FINAL PAVEMENT MARKINGS EXCEPT FOR AT THE LIMITS OF CONSTRUCTION:
 RAMP C5 - STA 5069+55.00 TO STA 5084+46.00
 RAMP C6 - STA 5069+55.00 C5 TO STA 6008+63.50 C6
 EB I-70 (EB LANES) - STA 164+50.00 TO E. TERMINUS



STA. 174+50
 OVERLAY AS SHOWN

MIRANOVA PL

S CIVIC CENTER DR

SHORT ST

SHORT ST



MAINTENANCE OF TRAFFIC PHASE 3A
 EB I-70 STA 164+50.00 TO STA 178+00.00

FRA-70-13.11

131
 1151

LAST REVISED: RFI-365 9-13-23

SHEET NUMBER								PARTICIPATION						ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED CJC	CHECKED CWL	
P1/158	P2/37	P3/188	P4/152	P5/13				01/IMS/04	02/IMS/11	05/IMS/14	06/MPO/04	07/NHS/04/COL	08/ENH/04/COL									
LS	LS		LS	LS				LS	LS						201	11000	LS		CLEARING AND GRUBBING	P1,P2,P4		
1		1	2					4							202	20010	4	EACH	HEADWALL REMOVED			
32580	3886	21016	43428					100910							202	23000	100910	SY	PAVEMENT REMOVED			
	9050	3016	18064					30130							202	30000	30130	SF	WALK REMOVED			
	9							9							202	30200	9	FT	STEPS REMOVED			
		114						114							202	30600	114	SY	CONCRETE MEDIAN REMOVED			
1406		5525	3687					10618							202	30700	10618	FT	CONCRETE BARRIER REMOVED			
175								175							202	30701	175	FT	CONCRETE BARRIER REMOVED, AS PER PLAN "4A"	P1		
		1280						1280							202	30701	1280	FT	CONCRETE BARRIER REMOVED, AS PER PLAN "6A"	P3		
2870	1001	5724	4809	2230				14404	1820	410					202	32000	16634	FT	CURB REMOVED			
		271						271							202	32500	271	FT	CURB AND GUTTER REMOVED			
		655						655							202	32800	655	SY	CONCRETE SLOPE PROTECTION REMOVED			
835	60	2324	2381	54				5600	54						202	35100	5654	FT	PIPE REMOVED, 24" AND UNDER			
4722		5283	1745	1647				11750	1222	425					202	38000	13397	FT	GUARDRAIL REMOVED			
1		4						5							202	47800	5	EACH	IMPACT ATTENUATOR REMOVED			
2		9	1					12							202	58000	12	EACH	MANHOLE REMOVED			
13	2	10	13	3				38	3						202	58100	41	EACH	CATCH BASIN REMOVED			
4		33	13					50							202	58200	50	EACH	INLET REMOVED			
		1						1							202	58201	1	EACH	INLET REMOVED, AS PER PLAN	P3		
			1					1							202	58400	1	EACH	INLET ABANDONED			
			3					3							202	58401	3	EACH	INLET ABANDONED, AS PER PLAN	P4		
1			1					2							202	58500	2	EACH	CATCH BASIN ABANDONED			
			4					4							202	58501	4	EACH	CATCH BASIN ABANDONED, AS PER PLAN	P4		
			323					323							SPECIAL	20270000	323	FT	FILL AND PLUG EXISTING CONDUIT, 12"	P4		
162			50					212							SPECIAL	20270000	212	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P1,P4		
126								126							SPECIAL	20270000	126	FT	FILL AND PLUG EXISTING CONDUIT, 18"	P1		
740	428	1156	1222					3546							202	75000	3546	FT	FENCE REMOVED			
2		1						3							202	75250	3	EACH	GATE REMOVED			
		1						1							202	75255	1	EACH	GATE REMOVED FOR REUSE, AS PER PLAN	P3		
			4					4							202	75610	4	EACH	VALVE BOX REMOVED			
		3						9							202	98100	9	EACH	REMOVAL MISC.: TRASH RECEPTACLES	P2,P4		
		2						2							202	98100	2	EACH	REMOVAL MISC.: INSPECTION WELL	P3		
1070		1272	428					2770							202	98200	2770	FT	REMOVAL MISC.: PORTABLE BARRIER	P1,P3,P4		
739								739							202	98200	739	FT	REMOVAL MISC.: PORTABLE BARRIER WITH VANDAL FENCE	P1		
		303						303							202	98200	303	FT	REMOVAL MISC.: CURB REMOVED FOR STORAGE	P2		
		100						100							202	98200	100	FT	REMOVAL MISC.: MISC CONDUIT	P3		
		101						101							202	98200	101	FT	REMOVAL MISC.: TRENCH DRAIN	P3		
		4845	307					5152							202	98400	5152	SF	REMOVAL MISC.: BRICK PAVERS REMOVED	P2,P4		
		7941						7941							203	02000	7941	CY	ENGINEERED FILL: LIGHTWEIGHT CELLULAR CONCRETE FILL, CLASS II	P3		
		555						555							203	02000	555	CY	ENGINEERED FILL: LIGHTWEIGHT CELLULAR CONCRETE FILL, CLASS III	P3		
19022	623	44689	44578	1149				108912	953	196					203	10000	110061	CY	EXCAVATION			
35175	7648	94130	45546	6658				182499	6658						203	20000	189157	CY	EMBANKMENT			
3977		24962		5561				28939	5561						203	20001	34500	CY	EMBANKMENT, AS PER PLAN	P1,P3,P5		
3360								3360							203	35000	3360	CY	GRANULAR EMBANKMENT			
4592								4592							203	35001	4592	CY	GRANULAR EMBANKMENT, AS PER PLAN	P1		
		3370						3370							203	35110	3370	CY	GRANULAR MATERIAL, TYPE B			
		3117						3117							203	98000	3117	CY	ROADWAY, MISC.: EPS GEOFOAM FILL	P3		
24495	4558	29583	6606					64994			248				204	10000	65242	SY	SUBGRADE COMPACTION			
250	975		1923					3148							204	13000	3148	CY	EXCAVATION OF SUBGRADE			
		172						172							204	13001	172	CY	EXCAVATION OF SUBGRADE, AS PER PLAN	P3		
250	975		1923					3148							204	30010	3148	CY	GRANULAR MATERIAL, TYPE B			
28	4	12	32	4				74	4		2				204	45000	80	hour	PROOF ROLLING			
		1						1							204	45001	1	hour	PROOF ROLLING, AS PER PLAN	P3		
500	3868		6338					10501			205				204	50000	10706	SY	GEOTEXTILE FABRIC			
		1032						1032							204	50001	1032	SY	GEOTEXTILE FABRIC, AS PER PLAN	P3		
500	3868		6338					10501			205				204	51000	10706	SY	GEOGRID			

BIG BUILD MASTER GENERAL SUMMARY

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NO.	DESCRIPTION	REV. BY	DATE
1	REVISED PART 5	CWL	10-2-23

SHEET NUMBER							PARTICIPATION						ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED CJC	CHECKED CWL
P1/158	P2/37	P3/188	P3/189	P4/152	P5/13		01/IMS/04	02/IMS/11	05/IMS/14	06/MPO/04	07/NHS/04/COL	08/ENH/04/COL								
ROADWAY (CONTINUED)																				
432		380		1564	239		2376	239					206	10500	2615	TON	CEMENT			
14276		14684		51761	7902		80721	7902					206	11000	88623	SY	CURING COAT			
		14684			7902		14684	7902					206	15010	22586	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP			
14276				51761			66037						206	15020	66037	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP			
		7			3		7	3					206	20000	10	HOUR	TEST ROLLING			
LS		LS		LS	LS		LS	LS					206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS			
LS	LS	LS		LS			LS						208	14001	LS		VIBRATION CONTROL AND MONITORING, AS PER PLAN	P1,P2,P3,P4		
32							32						209	60201	32	STA	LINEAR GRADING, AS PER PLAN	P1		
3427		3063			985		6490	985					606	15050	7475	FT	GUARDRAIL, TYPE MGS			
1		3					4						606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	P1,P3		
3		1			1		4	1					606	26550	5	EACH	ANCHOR ASSEMBLY, MGS TYPE T			
		2					2						606	35000	2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1			
5		1			1		6	1					606	35002	7	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1			
2		5			1		7	1					606	35102	8	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2			
					1			1					606	60022	1	EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) (60 MPH, 48" WIDTH)			
2							2						606	60040	2	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL (60 MPH, 48" WIDTH)	P1		
		1					1						606	60041	1	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL, AS PER PLAN "A" (62 MPH, 69.0" WIDTH)	P3		
		1					1						606	60041	1	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL, AS PER PLAN "A" (62 MPH, 90.0" WIDTH)	P3		
		1					1						606	60041	1	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL, AS PER PLAN (62 MPH, 24.0" WIDTH)	P3		
627		1434		549			1434				549		607	23000	1983	FT	FENCE, TYPE CLT			
				571			627						607	23001	627	FT	FENCE, TYPE CLT, AS PER PLAN "A"	P1		
													607	23001	571	FT	FENCE, TYPE CLT, AS PER PLAN "B"	P4		
			2				2						607	61111	2	EACH	GATE REBUILT, AS PER PLAN	P3		
				2							2		607	61201	2	EACH	GATE, TYPE CLT, AS PER PLAN "A"	P4		
				1							1		607	61201	1	EACH	GATE, TYPE CLT, AS PER PLAN "B"	P4		
		228					228						607	98000	228	FT	FENCE, MISC.: 6' CHAIN LINK FENCING	P3		
			159									159	607	98000	159	FT	FENCE, MISC.: IRON LA-R/W FENCE, GROUND MOUNTED, AS PER PLAN	P3		
			32				32						607	98000	32	FT	FENCE, MISC.: WOOD FENCE	P3		
		1					1						607	98100	1	EACH	FENCE, MISC.: 30' INDUSTRIAL GATE	P3		
	17762	4638	30128				47375				5153		608	10000	52528	SF	4" CONCRETE WALK			
	182		1207				1106				283		608	15000	1389	SF	8" CONCRETE WALK			
	9						9						608	41001	9	FT	CONCRETE STEPS, TYPE B, AS PER PLAN	P2		
5133		7032					12165						608	98000	12165	SF	WALKWAY, MISC.: 6" X 6" CONCRETE PAVERS	P1,P3		
	6250		3358								9608		608	98000	9608	SF	WALKWAY, MISC.: BRICK PAVER CROSSWALK	P2,P4		
	3195		1446								1575	3066	608	98000	4641	SF	WALKWAY, MISC.: BRICK PAVER WALK	P2,P4		
		1385										1385	608	98000	1385	SF	WALKWAY, MISC.: GRANITE COBBLES, AS PER PLAN	P3		
	14		12				26						608	98200	26	EACH	WALKWAY, MISC.: COLUMBUS CURB RAMP, TYPE A	P2,P4		
			257				257						622	10060	257	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B			
			279				279						622	10100	279	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1			
			50				50						622	10121	50	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN	P3		
132			1782				1914						622	10140	1914	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1			
			535				535						622	10141	535	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN, "A"	P3		
1551		2729	4198	592			8478	592					622	10160	9070	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D			
		669					669						622	10161	669	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	P3		
		3					3						622	10200	3	EACH	BARRIER TRANSITION	P3		
		1					1						622	24841	1	EACH	CONCRETE BARRIER END SECTION, TYPE B, AS PER PLAN	P3		
1			10				11						622	25000	11	EACH	CONCRETE BARRIER END SECTION, TYPE D			
			1				1						622	25005	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B, AS PER PLAN	P3		
			4				4						622	25006	4	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1			
			1				1						622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN "A"	P3		
4			13				17						622	25014	17	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1			
1				8			1						622	25015	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN "4A"	P1		
							8						622	25015	8	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN "4B"	P4		
							2						622	25015	2	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN "6A"	P3		
19		75	35	6			129	6					622	25050	135	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D			
1							1						622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "4A"	P1		
							1						622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "A"	P3		

BIG BUILD MASTER GENERAL SUMMARY

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NO.	DESCRIPTION	REV. BY	DATE
1	REVISED F-1 AND PART 5	CWL	10-2-23

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SHEET NUMBER						PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P1/161	P2/39	P3/191	P4/156	P5/14		01/IMS/04	02/IMS/11	05/IMS/14	06/MPO/04	08/ENH/04/COL						
															PAVEMENT	
150						150					251	01020	150	SY	PARTIAL DEPTH PAVEMENT REPAIR (442)	P1
		1791				1791					252	01500	1791	FT	FULL DEPTH PAVEMENT SAWING	
		121				121					253	01001	121	SY	PAVEMENT REPAIR, AS PER PLAN	P3
				464				464			254	01000	464	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AVERAGE DEPTH 4.33"	
		170				170					254	01000	170	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 0.25" DEPTH	
		827				827					254	01000	827	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" DEPTH	
	410					370			40		254	01000	410	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" AVG DEPTH	
4717						4717					254	01000	4717	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" AVG DEPTH	
938						938					254	01000	938	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25" AVG DEPTH	
		1406				1406					254	01000	1406	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH	
		238				238					254	01010	238	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, 1.25" DEPTH	
				11000			11000				256	10000	11000	SF	BONDED PATCHING OF PORTLAND CEMENT CONCRETE PAVEMENT, TYPE A	
10392		11503	15017	2272		36912	2215	57			302	56000	39184	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
6591	759		9740	1327		17048	1298	29	42		304	20000	18417	CY	AGGREGATE BASE	
		87				87					304	20000	87	CY	AGGREGATE BASE, 4"	
		7154				7154					304	20000	7154	CY	AGGREGATE BASE, 6"	
		7				7					304	20000	7	CY	AGGREGATE BASE, 8"	
		331				331					304	20001	331	CY	AGGREGATE BASE, AS PER PLAN, 12"	P3
		36				36					304	20001	36	CY	AGGREGATE BASE, AS PER PLAN, 6"	P3
		781				781					305	10010	781	SY	6" CONCRETE BASE, CLASS QC 1P	
		176	5			181					305	11010	181	SY	7" CONCRETE BASE, CLASS QC 1P	
		947	293			1240					305	12010	1240	SY	8" CONCRETE BASE, CLASS QC 1P	
	1709	805	4095			6360			249		305	13010	6609	SY	9" CONCRETE BASE, CLASS QC 1P	
20	149	172	317			637			21		407	13900	658	GAL	TACK COAT, 702.13	
6291	101	7695	8726	1426		22796	1344	82	17		407	20000	24239	GAL	NON-TRACKING TACK COAT	
		83				83					441	50000	83	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
		75	154			218			11		441	50101	229	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	P2,P4
		9				9					441	50200	9	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
	88	46	215			336			13		441	50300	349	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
95						95					441	70801	95	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	P1
2482		3551	2977	442		9010	398	44			442	00100	9452	CY	ANTI-SEGREGATION EQUIPMENT	
1732		2215	2054	342		6001	305	37			442	10001	6343	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (446), AS PER PLAN, PG70-22M	P1,P3,P4,P5
		325				325					442	10001	325	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (446), AS PER PLAN "B", PG76-22M	P3
2174		2114	2496	409		6784	366	43			442	10080	7193	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
71						71					442	22100	71	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449)	
		163				163					451	13010	163	SY	8" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
	274		215			489					SPECIAL	45130000	489	FT	PRESSURE RELIEF JOINT, TYPE A	P2,P4
242		977				1219					452	09010	1219	SY	4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
			113			113					452	12050	113	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	
	167		12			179					452	14011	179	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	P2,P4
	1247		862			2109					452	15010	2109	SY	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
1748		439		1491		2187	1070	421			609	24510	3678	FT	CURB, TYPE 4-C	
167						167					609	50000	167	SY	4" CONCRETE TRAFFIC ISLAND	
	497		406			903					609	98000	903	FT	CURB, MISC.: COLUMBUS 18" CONCRETE CURB	P2,P4
	402		1222							1624	609	98000	1624	FT	CURB, MISC.: COLUMBUS 18" GRANITE CURB "A"	P2,P4
			456							456	609	98000	456	FT	CURB, MISC.: COLUMBUS 18" GRANITE CURB "B"	P4
	168									168	609	98000	168	FT	CURB, MISC.: COLUMBUS 18" GRANITE CURB "C"	P2
		68				68					609	98000	68	FT	CURB, MISC.: COMBINATION CURB & GUTTER, TYPE MOUNTABLE, AS PER PLAN	P3
		318				318					609	98000	318	FT	CURB, MISC.: COMBINATION CURB & GUTTER, TYPE SPECIAL 8", AS PER PLAN	P3
		555				555					609	98000	555	FT	CURB, MISC.: STRAIGHT 18" CONCRETE CURB, AS PER PLAN	P3
	468		900			1368					SPECIAL	69098100	1368	FT	SAWING AND SEALING CONCRETE JOINTS	P2,P4
		3				3					826	10600	3	CY	ASPHALT CONCRETE SURFACE COURSE, 442 12.5MM, (448), FIBER TYPE A	
14107		23840	22749	587		60696		587			872	10000	61283	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)	P3

BIG BUILD MASTER GENERAL SUMMARY

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CALCULATED
CJC
CHECKED
CWL

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED PART 5	CWL	10-2-23

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SHEET NUMBER							PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED CJC	CHECKED CWL
P1/371	P2/111	P3/193	P4/407	P4/408	P5/14		01/IMS/04	02/IMS/11	05/IMS/14										
TRAFFIC CONTROL (CONTINUED)																			
		571			68		571	68				644	00700	639	FT	TRANSVERSE/DIAGONAL LINE			
337			400				737				644	00720	737	FT	CHEVRON MARKING				
	48		80				128				644	01200	128	FT	PARKING LOT STALL MARKING				
	12		20				32				644	01300	32	EACH	LANE ARROW				
2			2				4				644	01350	4	EACH	LANE REDUCTION ARROW				
	7		8				15				644	01630	15	EACH	BIKE LANE SYMBOL MARKING				
	7						7				644	19000	7	EACH	SHARED LANE MARKING				
		14					14				644	30000	14	FT	REMOVAL OF PAVEMENT MARKING				
	2		1				3				644	50100	3	EACH	PAVEMENT MARKING, MISC.: BIKE DETECTOR MARKING	P2,P4			
	299		505				804				644	50300	804	FT	PAVEMENT MARKING, MISC.: BIKE LANE DOTTED LINE, 5"	P2,P4			
	706		584				1290				644	50300	1290	FT	PAVEMENT MARKING, MISC.: CHANNELIZING LINE, 10"	P2,P4			
	126		205				331				644	50300	331	FT	PAVEMENT MARKING, MISC.: STOP LINE, 20"	P2,P4			
	575		244				819				644	50300	819	FT	PAVEMENT MARKING, MISC.: TRANSVERSE / DIAGONAL LINE, 20"	P2,P4			
	123						123				644	50300	123	FT	PAVEMENT MARKING, MISC.: DOTTED LINE, 5"	P2			
	0.67		0.93				1.60				644	50400	1.60	MILE	PAVEMENT MARKING, MISC.: EDGE LINE, 5"	P2,P4			
	0.57		0.92				1.49				644	50400	1.49	MILE	PAVEMENT MARKING, MISC.: LANE LINE, 5"	P2,P4			
	0.23						0.23				644	50400	0.23	MILE	PAVEMENT MARKING, MISC.: CENTER LINE, 5"	P2			
		0.05					0.05				644	50400	0.05	MILE	PAVEMENT MARKING, MISC.: CENTER LINE, DOUBLE SOLID, 5"	P3			
			0.31				0.31				645	90000	0.31	MILE	PAVEMENT MARKING, MISC.: EDGE LINE, 5", TYPE A1, WITH CONTRAST	P4			
	0.06		0.12				0.18				645	90000	0.18	MILE	PAVEMENT MARKING, MISC.: LANE LINE, 5", TYPE A1, WITH CONTRAST	P2,P4			
	0.05						0.05				645	90000	0.05	MILE	PAVEMENT MARKING, MISC.: CENTER LINE, 5", TYPE A1	P2			
	280		239				519				645	98000	519	FT	PAVEMENT MARKING, MISC.: CHANNELIZING LINE, 10", TYPE A1, WITH CONTRAST	P2,P4			
		316			204		316	204			646	10600	520	FT	TRANSVERSE/DIAGONAL LINE				
185							185				646	10620	185	FT	CHEVRON MARKING				
	15		6				21				646	20300	21	EACH	LANE ARROW				
		2					2				646	98000	2	EACH	PAVEMENT MARKING, MISC.: LANE REDUCTION ARROW WITH CONTRAST	P3			
	8			6			14				647	20610	14	EACH	LANE ARROW, TYPE B90				
				8			8				647	20910	8	EACH	BIKE LANE SYMBOL MARKING, TYPE B90				
	2						2				647	20940	2	EACH	SHARED LANE MARKING, TYPE B90				
				4			4				647	50100	4	EACH	PAVEMENT MARKING, MISC.: TURN QUEUE BOX, TYPE B90	P4			
				634			634				647	50120	634	FT	PAVEMENT MARKING, MISC.: DOTTED LINE, 5", TYPE B90	P4			
				16			16				647	50120	16	FT	PAVEMENT MARKING, MISC.: BIKE LANE DOTTED LINE, 5", TYPE B90	P4			
	252		199				451				647	50120	451	FT	PAVEMENT MARKING, MISC.: CROSSWALK LINE, 10", TYPE B90	P2,P4			
	57		45				102				647	50120	102	FT	PAVEMENT MARKING, MISC.: STOP LINE, 20", TYPE B90	P2,P4			
			618				618				647	60020	618	SF	GREEN COLORED PAVEMENT FOR BIKES, TYPE B90				
		2.03		0.06	0.46		3.82	0.27	0.19		807	12010	4.28	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"				
		0.76		0.12	0.23		2.03	0.13	0.10		807	12110	2.26	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"				
5007		4316					9323				807	12310	9323	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"				
351		1649					2000				807	12410	2000	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"				
4.75		5.96		4.00	0.53		14.71	0.15	0.38		807	14010	15.24	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"				
	2.14		4.76		0.27		12.60	0.07	0.20		807	14110	12.87	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"				
	0.11		0.11				0.22				807	14200	0.22	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CENTER LINE				
10284		12495		5427			28206				807	14310	28206	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"				
2816		3361		8414			14591				807	14410	14591	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"				
	6.99		10.91		0.8		27.59	0.22	0.58		850	10010	28.39	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)				
	2816		3361				14591				850	10110	14591	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)				
10284		12495		5427			28206				850	10130	28206	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)				
2.86		2.80		0.18	0.69		5.84	0.40	0.29		850	20010	6.53	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)				
351		1649					2000				850	20110	2000	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)				
	5007		4316				9323				850	20130	9323	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE)				

BIG BUILD MASTER GENERAL SUMMARY

FRA-70-13.11

152

1151

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED PART 5	CWL	10-2-23

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SHEET NUMBER							PARTICIPATION				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P1/65	P1/163	P2/40	P3/197B	P4/49	P4/158	01/IMS/04	02/IMS/11	03/NHS/10	04/NHS/10							
MAINTENANCE OF TRAFFIC (CONTINUED)																
LS				LS 4600		LS 4600				615	10000	LS		ROADS FOR MAINTAINING TRAFFIC		
			4032			4032				615	20000	4600	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		
1545				255		1800				615	20001	4032	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	P3	
100			100	200		400				615	25000	1800	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B		
50			50	200		300				615	25001	400	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 1	P1,P3,P4	
										615	25001	300	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 2	P1,P3,P4	
20			20	200		240				615	25001	240	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 3	P1,P3,P4	
20				200		220				615	25001	220	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 4	P1,P4	
325				550		875				616	10000	875	MGAL	WATER	P1	
			4			4				622	10201	4	EACH	BARRIER TRANSITION, AS PER PLAN	P3	
			7279			7279				622	41011	7279	FT	PORTABLE BARRIER, 50", AS PER PLAN	P3	
1				2		3				622	41050	3	EACH	PORTABLE BARRIER, "Y" CONNECTOR		
16790			11505			28295				622	41100	28295	FT	PORTABLE BARRIER, UNANCHORED		
				28884		28884				622	41101	28884	FT	PORTABLE BARRIER, UNANCHORED, AS PER PLAN	P4	
1030						1030				622	41110	1030	FT	PORTABLE BARRIER, ANCHORED		
72			288	48		408				808	18700	408	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	P1	
32						32				829	00100	32	SNMT	WORK ZONE EGRESS WARNING SYSTEM	P1	
108				48		156				896	00010	156	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS I	P1	
				48		48				896	00020	48	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN		
36						36				896	00021	36	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P1	
INCIDENTALS																
143000						143000				100	51100	143000	EACH	DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION BOARD		
LS						LS				108	10000	LS		CPM PROGRESS SCHEDULE		
7000						7000				SPECIAL	11110100	7000	EACH	DEPARTMENTS SHARE FACILITATED PARTNERING COSTS	P1	
LS			LS		LS	LS				614	11000	LS		MAINTAINING TRAFFIC		
LS	LS	LS	LS	LS	LS	LS				623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
LS	LS	LS	LS	LS	LS	LS				624	10000	LS		MOBILIZATION		
243000						81000	81000	81000		900	00100	243000	EACH	RAILROAD FLAGGING SERVICES		

NO.	DESCRIPTION	REV. BY	DATE
1	ADDED RR FLAGGING	CWL	10-2-23

BIG BUILD MASTER GENERAL SUMMARY

FRA-70-13.11

SHEET NUMBER							PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED CJC	CHECKED CWL		
OFFICE CALCS	51	52	164		168	304	R/W 6	01/IMS/04													
	LS							LS					201	11000	LS		CLEARING AND GRUBBING		33		
			1					1					202	20010	1	EACH	HEADWALL REMOVED				
	28		32552					32580					202	23000	32580	SY	PAVEMENT REMOVED				
			1406					1406					202	30700	1406	FT	CONCRETE BARRIER REMOVED				
			175					175					202	30701	175	FT	CONCRETE BARRIER REMOVED, AS PER PLAN "4A"		39		
			2870					2870					202	32000	2870	FT	CURB REMOVED				
			835					835					202	35100	835	FT	PIPE REMOVED, 24" AND UNDER				
			4722					4722					202	38000	4722	FT	GUARDRAIL REMOVED				
			1					1					202	47800	1	EACH	IMPACT ATTENUATOR REMOVED				
			2					2					202	58000	2	EACH	MANHOLE REMOVED				
			13					13					202	58100	13	EACH	CATCH BASIN REMOVED				
			4					4					202	58200	4	EACH	INLET REMOVED				
			1					1					202	58500	1	EACH	CATCH BASIN ABANDONED				
			162					162					SPECIAL	20270000	162	FT	FILL AND PLUG EXISTING CONDUIT, 15"		43		
			126					126					SPECIAL	20270000	126	FT	FILL AND PLUG EXISTING CONDUIT, 18"		43		
			740					740					202	75000	740	FT	FENCE REMOVED				
			2					2					202	75250	2	EACH	GATE REMOVED				
			1070					1070					202	98200	1070	FT	REMOVAL MISC.: PORTABLE BARRIER		39		
			739					739					202	98200	739	FT	REMOVAL MISC.: PORTABLE BARRIER WITH VANDAL FENCE		39		
					19022			19022					203	10000	19022	CY	EXCAVATION				
					35175			35175					203	20000	35175	CY	EMBANKMENT				
					3977			3977					203	20001	3977	CY	EMBANKMENT, AS PER PLAN		39		
					3360			3360					203	35000	3360	CY	GRANULAR EMBANKMENT				
					4592			4592					203	35001	4592	CY	GRANULAR EMBANKMENT, AS PER PLAN		39		
23954						541		24495					204	10000	24495	SY	SUBGRADE COMPACTION				
		250						250					204	13000	250	CY	EXCAVATION OF SUBGRADE				
		250						250					204	30010	250	CY	GRANULAR MATERIAL, TYPE B				
28								28					204	45000	28	hour	PROOF ROLLING				
		500						500					204	50000	500	SY	GEOTEXTILE FABRIC				
		500						500					204	51000	500	SY	GEOGRID				
432								432					206	10500	432	TON	CEMENT				
14276								14276					206	11000	14276	SY	CURING COAT				
14276								14276					206	15020	14276	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP				
LS								LS					206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS				
LS	LS							LS					208	14001	LS		VIBRATION CONTROL AND MONITORING, AS PER PLAN		47		
32								32					209	60201	32	STA	LINEAR GRADING, AS PER PLAN		38		
			3427					3427					606	15050	3427	FT	GUARDRAIL, TYPE MGS				
			1					1					606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)				38
			3					3					606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T				
			5					5					606	35002	5	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1				
			2					2					606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2				
			2					2					606	60040	2	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL (60 MPH, 48" WIDTH)				38
			627					627					607	23001	627	FT	FENCE, TYPE CLT, AS PER PLAN "A"		39		
1065			4068					5133					608	98000	5133	SF	WALKWAY, MISC.: 6" X 6" CONCRETE PAVERS		303		
132								132					622	10140	132	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1				
1551								1551					622	10160	1551	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D				
1								1					622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D				
4								4					622	25014	4	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1				
1								1					622	25015	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN "4A"		38		
19								19					622	25050	19	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D				
1								1					622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "4A"		38		
			1610					1610					622	41111	1610	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN		38		
								22					623	40500	22	EACH	REFERENCE MONUMENT, TYPE A				
								1					623	40520	1	EACH	RIGHT-OF-WAY MONUMENT, TYPE B				
LS								LS					SPECIAL	69098400	LS		EMERGENCY ACTION PLAN COORDINATION "4A"		34		
LS								LS					SPECIAL	69098400	LS		WCLPP R/W CONSTRUCTION CAMERA		34		
LS								LS					SPECIAL	69098400	LS		USACE SURVEY AND AS-BUILTS		34		
LS								LS					SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION		34		
LS								LS					878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS		34		

4A PART 1 GENERAL SUMMARY

FRA-70-13.11

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NO.	DESCRIPTION	REV. BY	DATE
1	REVISED F-1 & R/W SHEET #	CWL	10-2-23

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SHEET NO.	202		202		202		202		202		202		202		202		202		202		202		202		202		SPECIAL		
	PAVEMENT REMOVED		PAVEMENT REMOVED, ASPHALT		REMOVAL MISC.: PORTABLE BARRIER WITH VANDAL FENCE		REMOVAL MISC.: PORTABLE BARRIER		CONCRETE BARRIER REMOVED		FENCE REMOVED		GATE REMOVED		CURB REMOVED		GUARDRAIL REMOVED		IMPACT ATTENUATOR REMOVED		CONCRETE BARRIER REMOVED, AS PER PLAN		PIPE REMOVED, 24" AND UNDER		HEADWALL REMOVED		FENCE, TYPE CLT, AS PER PLAN "A"		FILL AND PLUG EXISTING CONDUIT, 18"
	SY	SY	SY	SY	FT	FT	FT	FT	FT	FT	EACH	EACH	FT	FT	FT	FT	EACH	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	FT	FT	FT
169	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04
173					443	296	642	428											1										
174											444	296	1	1															
175																	2833	1889							1				
178																													
179	6441	4294	13090	8727					844	562					1722	1148					105	70					122		
TOTALS CARRIED TO GENERAL SUMMARY	6441	4294	13090	8727	443	296	642	428	844	562	444	296	1	1	1722	1148	2833	1889	1		105	70	428	285	122	1			
SHEET NO.	202		202		202		202		SPECIAL		608		606		606		606		606		606		622		626*		626*		
	MANHOLE REMOVED		CATCH BASIN REMOVED		INLET REMOVED		CATCH BASIN ABANDONED		FILL AND PLUG EXISTING CONDUIT, 15"		WALKWAY, MISC.: 6" X 6" CONCRETE PAVERS		GUARDRAIL, TYPE MGS		ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)		ANCHOR ASSEMBLY, MGS TYPE T		MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL		PORTABLE BARRIER, ANCHORED, AS PER PLAN		BARRIER REFLECTOR, TYPE 1, ONE-WAY		BARRIER REFLECTOR, TYPE 2, ONE-WAY
	EACH	EACH	EACH	EACH	FT	SF	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH		
169	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04	01/IMS/04		
172	1	1	8	5	2	2				2441	1627																		
173							97	65				2056	1371	1		2	1	3	2	1	1				48	32	43	29	
TOTALS CARRIED TO GENERAL SUMMARY	1	1	8	5	2	2	1	97	65	2441	1627	2056	1371	1	2	1	3	2	1	1	1	1	966	644	68	45	43	29	

* QUANTITY CARRIED TO TRAFFIC CONTROL GENERAL SUMMARY ON SHEET 371

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED F-1	CWL	10-2-23

CALCULATED CJC
 CHECKED CWL
ROADWAY SUBSUMMARY
FRA-70-13.11
 164
 1151

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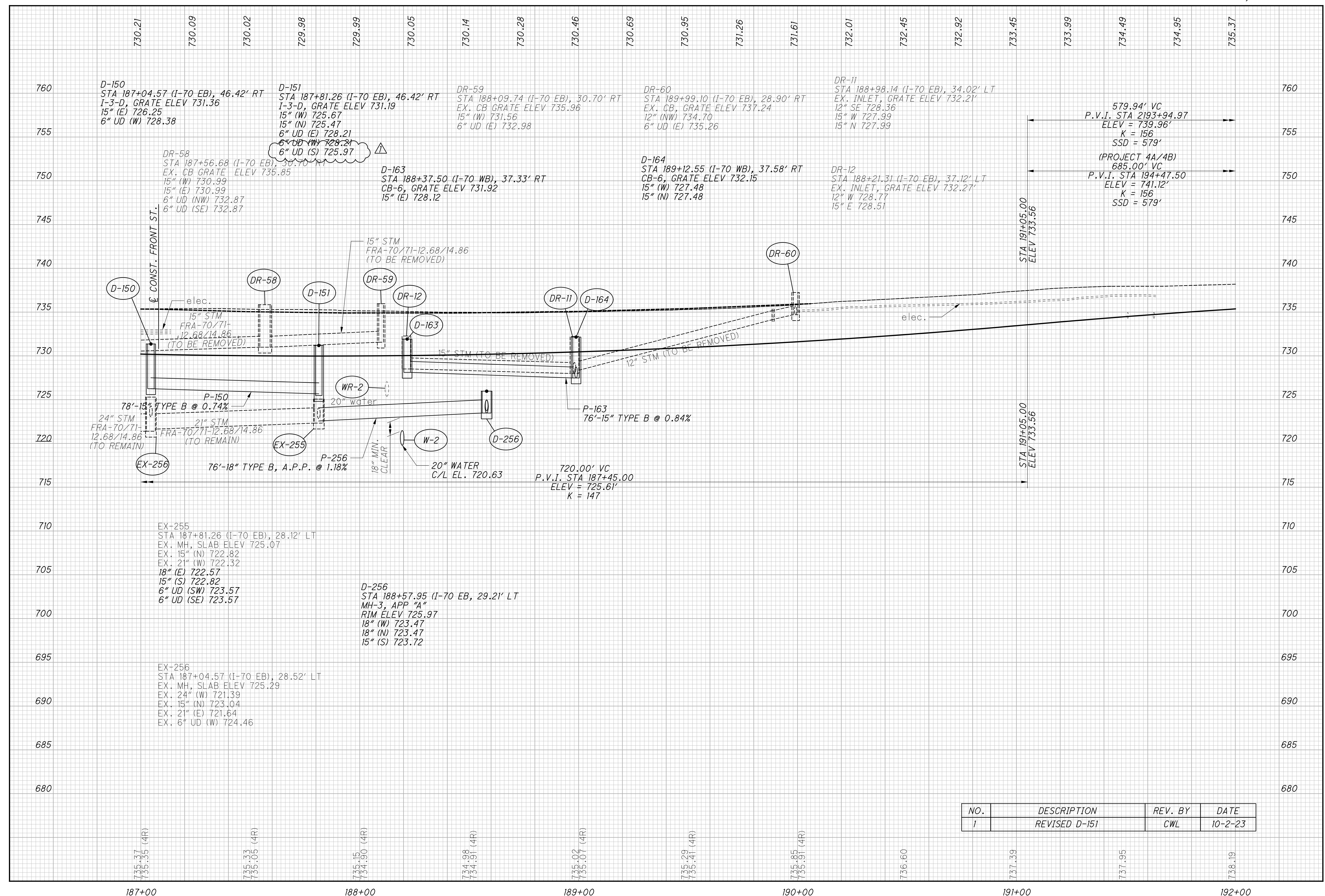
REF. NO.	SHEET NO.	STATION		SIDE	606		606		606		606		202		202		626		626		SPECIAL		607		SPECIAL		
		FROM	TO		FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	
F-1	301, 302	15+01.74 (BIKE DETOUR)	20+90.02 (BIKE DETOUR)	RT	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	01/IMS/0 4	
FP-1	215	HR-1	DR-61																		126						
FP-2	215	DR-61	DR-62																						100		
FP-3	215	DR-62	DR-63																						62		
FR-1	301	13+78.34 (BIKE DETOUR)	14+26.99 (BIKE DETOUR)	LT										52													
FR-2	301	14+26.99 (BIKE DETOUR)	14+50.99 (BIKE DETOUR)	LT												1											
FR-3	301	14+29.99 (BIKE DETOUR)	14+53.99 (BIKE DETOUR)	RT												1											
FR-4	301, 302	14+50.99 (BIKE DETOUR)	21+46.63 (BIKE DETOUR)	LT										688													
G-1	185	144+49.80 (I-70 EB)	145+00.00 (I-70 EB)	LT	37.50				1																		
G-2	191, 193	158+37.54 (I-70 EB)	166+49.92 (I-70 EB)	RT	775.02		1		1																		
G-3	213, 215	263+12.50 (I-71 NB)	272+55.79 (I-71 NB)	LT	962.40				1																		
G-4	213, 215	265+50.32 (I-71 NB)	270+82.56 (I-71 NB)	RT	437.50		1				1																
G-5	219, 221	45+08.00 (RAMP B5)	148+04.21 (I-70 EB)	LT	266.43		1				1																
G-6	219	45+08.00 (RAMP B5)	45+32.01 (RAMP B5)	RT	12.50																						
G-7	223, 225	6005+64.05 (RAMP C6)	175+82.03 (I-70 EB)	RT	499.29		1																				
G-8	205, 207	193+30.16 (RAMP C6)	197+89.59 (I-70 EB)	RT	434.70		1		1																		
REFLECTORS																											
			G-1	LT																							
			G-2	RT			169+60.23 (I-70 EB)											7									
			G-3	LT																							
			G-4	RT/RT			158+39.56 (I-70 EB)																				
			G-5	LT/LT			162+25.01 (I-70 EB)																				
			G-6	RT																							
			G-7	RT			177+37.03 (I-70 EB)																				
				LT			181+17.28 (I-70 EB)																				
				RT			183+10.00 (I-70 EB)																				
				LT			193+60.69 (I-70 EB)																				
			G-8	RT																							
				RT			2197+88.13 (I-70 EB)																				
				RT			2199+27.89 (I-70 EB)																				
TOTALS CARRIED TO SUBSUMMARY ON SHEETS 164					2056	1371	3	2	1	1	2	1	1	444	296	1	1	48	32	43	29	76	50	376	251	97	65

627

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED F-1	CWL	10-2-23

CALCULATED
 ATR
 CHECKED
 CWL
ESTIMATED QUANTITIES
FRA-70-13.11
 173
 1151

CALCULATED
CWL
CHECKED
TMT



PROFILE - I-70 EASTBOUND
STA. 187+00.00 TO STA. 192+00.00


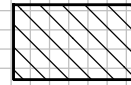
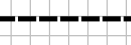

FRA-70-13.11

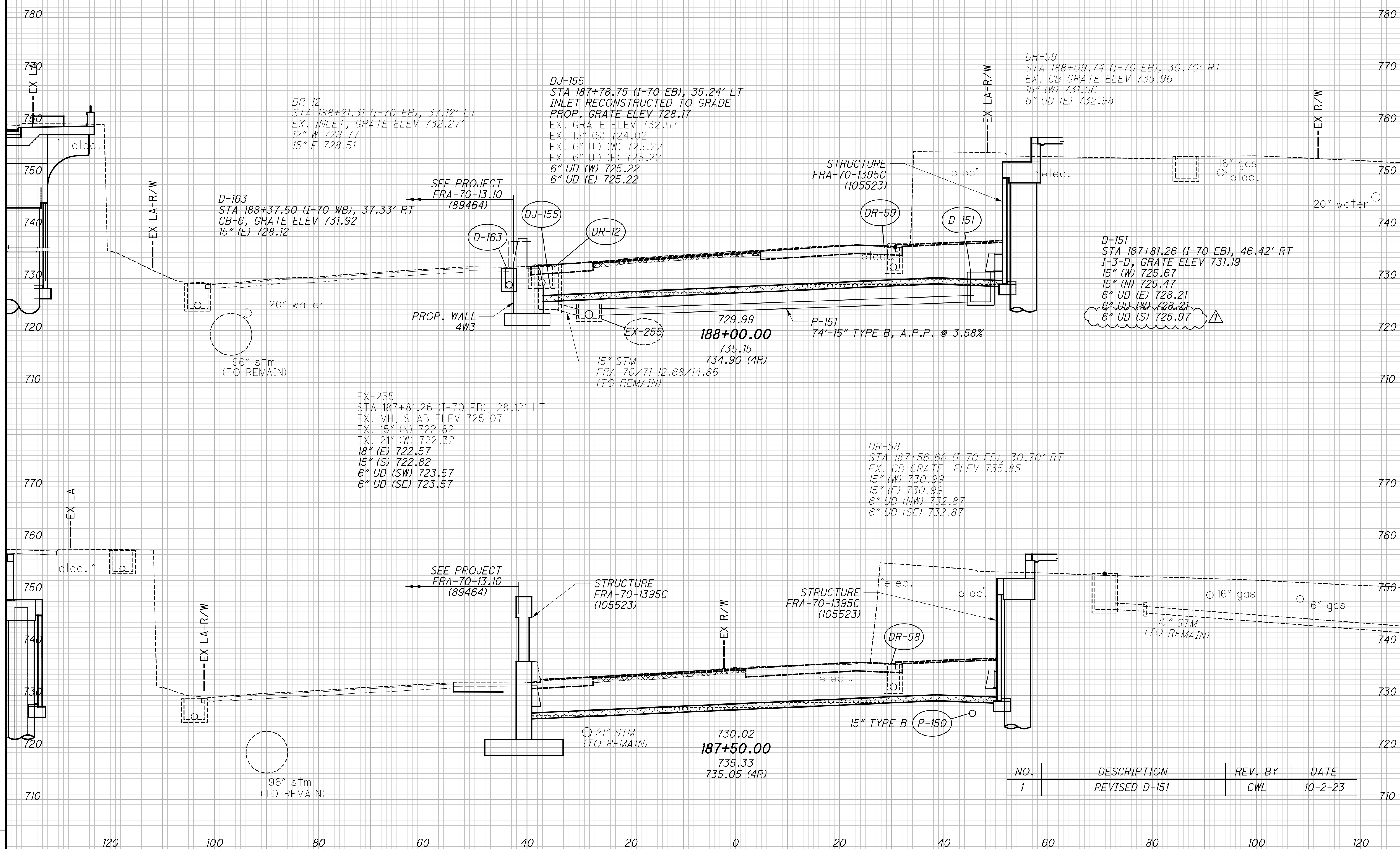
NO.	DESCRIPTION	REV. BY	DATE
1	REVISED D-151	CWL	10-2-23

01:2012\2012048\FRA7013.11\ROADWAY\SHETS\773725\F015.DGN
 10/2/2023
 9:30:17 AM
 CDDTV61STD_USER

SEEDING
END SO.
WIDTH YDS.

END AREA VOLUME
CUT FILL CUT FILL
CALCULATED
ATR
CHECKED
CWL

-  ITEM 202 - PAVEMENT REMOVED
-  ITEM 202 - PAVEMENT REMOVED, ASPHALT
-  FRA-70/71-12.68/14.86 (4R-105523)
-  ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP



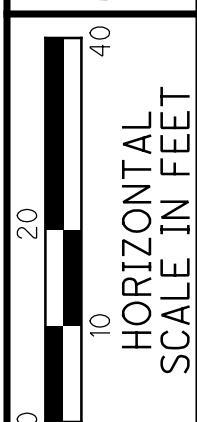
END AREA	VOLUME	CALCULATED	ATR	CHECKED	CWL
CUT	FILL				
902	19				
487	7				
905	8				
490	2				
1807	27				

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED D-151	CWL	10-2-23

**CROSS SECTIONS I-70 EASTBOUND
STA. 187+50.00 TO STA. 188+00.00**

FRA-70-13.11

254
1151

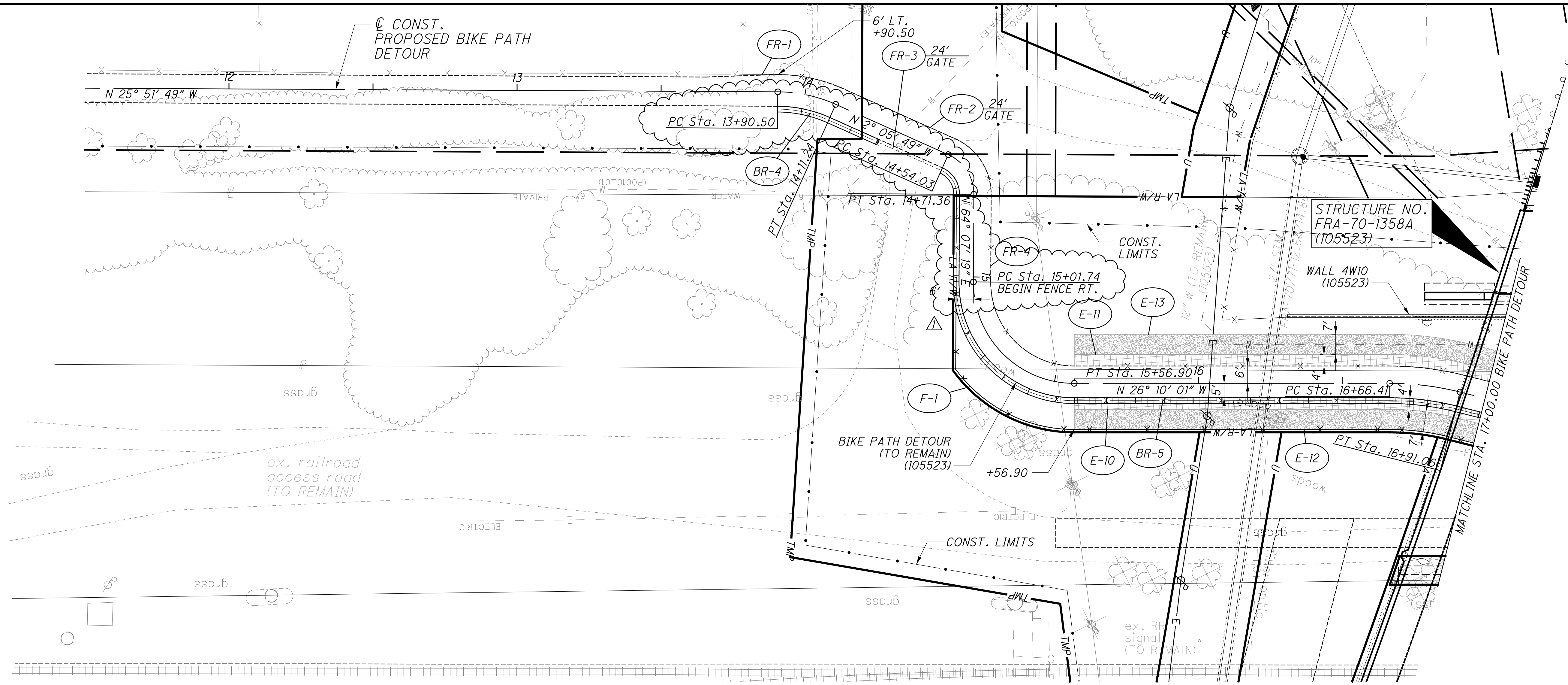


CALCULATED CJC
CHECKED CWL

**PLAN BIKE PATH DETOUR
STA. 11+50.00 TO STA. 17+00.00**

FRA-70-13.11

301
1151



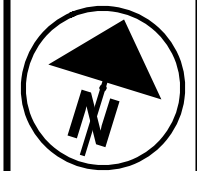
NOTE: EXISTING FENCE (LT) AND PORTABLE BARRIER W/VANDAL FENCE (RT) TO REMAIN UNTIL 1358R (EB-70) AND 1358L (WB-70) FULLY CONSTRUCTED

FOR ESTIMATED QUANTITIES, SEE SHEETS 169 -178

- PROJECT 4R (105523)
- [Cross-hatch pattern] ITEM 608 - WALKWAY MISC.: 6"x6" CONCRETE PAVERS
- [Stippled pattern] ITEM 601 - RIP RAP, WITH GROUT, AS PER PLAN

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED F-1	CWL	10-2-23

01:2012:2012048\FRA\77372\ROADWAY SHEETS\77372GP103.DGN
 10/2/2023 10:05:47 AM
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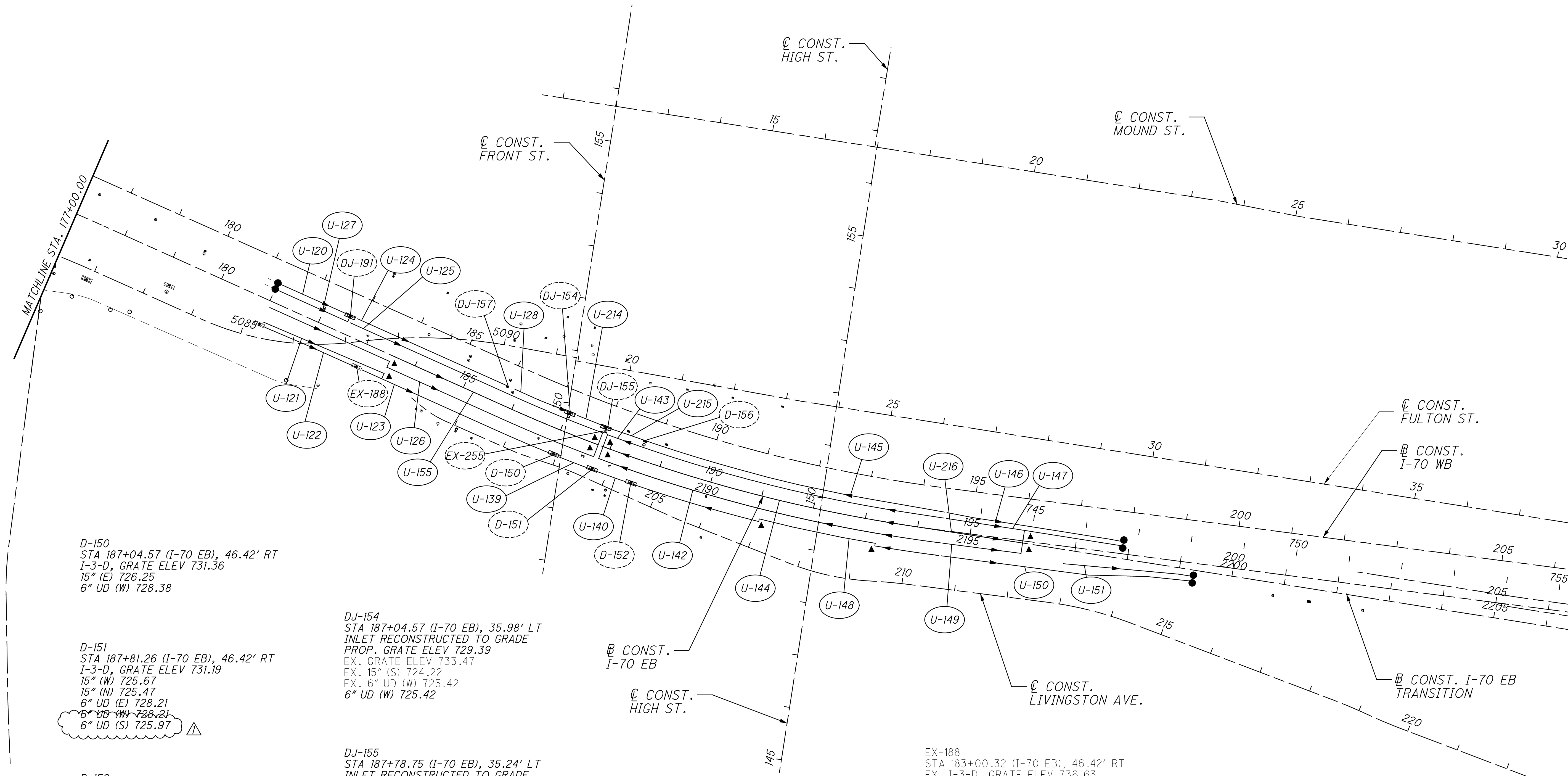
HORIZONTAL SCALE IN FEET

CALCULATED TMT CHECKED CWL

UNDERDRAIN DETAILS

FRA-70-13.11

308
1151



D-150
 STA 187+04.57 (I-70 EB), 46.42' RT
 I-3-D, GRATE ELEV 731.36
 15" (E) 726.25
 6" UD (W) 728.38

D-151
 STA 187+81.26 (I-70 EB), 46.42' RT
 I-3-D, GRATE ELEV 731.19
 15" (W) 725.67
 15" (N) 725.47
 6" UD (E) 728.21
 6" UD (W) 728.21
 6" UD (S) 725.97

D-152
 STA 188+57.95 (I-70 EB), 46.42' RT
 I-3-D, GRATE ELEV 731.39
 15" (N) 726.12
 6" UD (E) 728.41

D-156
 STA 188+57.95 (I-70 EB), 36.99' LT
 CB-6, A.P.P., GRATE ELEV 728.35
 18" (S) 724.39
 6" UD (E) 725.24

DJ-154
 STA 187+04.57 (I-70 EB), 35.98' LT
 INLET RECONSTRUCTED TO GRADE
 PROP. GRATE ELEV 729.39
 EX. GRATE ELEV 733.47
 EX. 15" (S) 724.22
 EX. 6" UD (W) 725.42
 6" UD (W) 725.42

DJ-155
 STA 187+78.75 (I-70 EB), 35.24' LT
 INLET RECONSTRUCTED TO GRADE
 PROP. GRATE ELEV 728.17
 EX. GRATE ELEV 732.57
 EX. 15" (S) 724.02
 EX. 6" UD (W) 725.22
 EX. 6" UD (E) 725.22
 6" UD (W) 725.22
 6" UD (E) 725.22

DJ-157
 STA 185+75.04 (I-70 EB), 36.28' LT
 CB RECONSTRUCTED TO GRADE
 PROP. GRATE ELEV 730.23
 EX. GRATE ELEV 735.16
 EX. 24" (N) 720.75
 EX. 24" (SE) 720.75
 EX. 6" UD (W) 727.14
 6" UD (W) 727.14

DJ-191
 STA 182+49.95 (I-70 EB), 34.95' LT
 INLET ADJUSTED TO GRADE
 PROP. GRATE ELEV 737.39
 EX. GRATE ELEV 737.89
 EX. 15" (SE) 732.16
 EX. 6" UD (W) 734.44
 EX. 6" UD (S) 733.44
 6" UD (W) 734.44
 6" UD (S) 733.44

EX-188
 STA 183+00.32 (I-70 EB), 46.42' RT
 EX. I-3-D, GRATE ELEV 736.63
 EX. 18" (W) 732.97
 EX. 18" (N) 732.97
 EX. 6" UD (W) 733.65
 6" UD (W) 733.65

EX-255
 STA 187+81.26 (I-70 EB), 28.12' LT
 EX. MH, SLAB ELEV 725.07
 EX. 15" (N) 722.82
 EX. 21" (W) 722.32
 18" (E) 722.57
 15" (S) 722.82
 6" UD (SW) 723.57
 6" UD (SE) 723.57

FOR ESTIMATED QUANTITIES, SEE SHEETS 169 - 178

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED D-151	CWL	10-2-23

- CONNECT TO EXISTING UNDERDRAIN
- ▲ 6" TYPE B
- 6" TYPE F

01-2012-2012048 FRA70-13.11 DRAINAGE SHEETS 7372DP005.DGN
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SHEET NUMBER

PART.

ITEM

ITEM

GRAND

UNIT

DESCRIPTION

SEE SHEET NO.

CALCULATED
JAR
CHECKED
JML

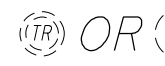






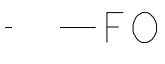

160	161	01/IMS/04	07/NHS/04/COL	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
					EXT	TOTAL			
	261	261		625	25802	261	FT	CONDUIT, CONCRETE ENCASED, 3"	159
	135	21	114	625	25920	135	FT	CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT BANK, 1-2", 1-1.5", TC-2, SCH 40	134,159
	19	19		625	25920	19	FT	CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT BANK, 2-2", 1-1.5", TC-2, SCH 40	134,159
58	122	180		625	25920	180	FT	CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT BANK, 4-3", 1-1.5", TC-2, SCH 40	134,159
58	537	481	114	625	29100	595	FT	TRENCH, 36" DEEP	
	2	2		625	30700	3	EACH	PULL BOX, 725.08, 18"	
2	1	2	1	625	31600	3	EACH	PULL BOX, MISC.: 32" ROUND CONCRETE (725.08)	130
	2	2		625	32000	2	EACH	GROUND ROD	
	1	1		625	34000	1	EACH	POWER SERVICE	
	175	175		632	29901	175	FT	MESSENGER WIRE, 7 STRAND, 1/4" DIAMETER WITH ACCESSORIES, AS PER PLAN	136
	3	3		632	62820	3	EACH	INTERCONNECT, MISC.: MODIFIED CONDUIT RISER	146
1		1		632	62820	1	EACH	INTERCONNECT, MISC.: FIBER OPTIC SPLICE ENCLOSURE, CLAMSHELL, 288 SPLICE	135
1	3	4		632	62820	4	EACH	INTERCONNECT, MISC.: FIBER OPTIC SPLICE ENCLOSURE, DOME, 800 SPLICE	135
	1	1		632	62820	1	EACH	INTERCONNECT, MISC.: RELOCATE EXISTING AERIAL SPLICE ENCLOSURE	135
	332	332		804	15020	332	FT	FIBER OPTIC CABLE, 48 FIBER	
2112	1285	3397		804	15050	3397	FT	FIBER OPTIC CABLE, 288 FIBER	
112	866	838	140	804	32060	978	FT	DROP CABLE, 24 FIBER	
828	1345	2173		804	98000	2173	FT	FIBER OPTIC CABLE, MISC.: FIBER OPTIC CABLE, 144 FIBER	135
	3	3		804	98100	3	EACH	FIBER OPTIC CABLE, MISC.: RELOCATE EXISTING FIBER OPTIC CABLE, 144 FIBER	135
	1	1		804	98100	1	EACH	FIBER OPTIC CABLE, MISC.: RELOCATE EXISTING FIBER OPTIC CABLE, 288 FIBER	135

ITS GENERAL SUMMARY

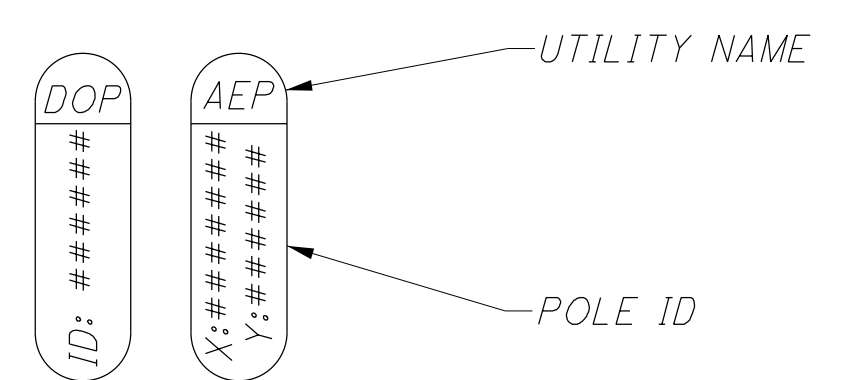
FRA - 70 - 14.05C

NO.	DESCRIPTION	REV. BY	DATE
1	SPECIFIED CONDUIT QUANTITIES BREAKDOWN	JML	9-29-23

EXISTING

-  OR  32" ROUND PULLBOX
-  36" ROUND PULLBOX
-  48" ROUND PULLBOX
-  48" SQUARE PULLBOX
-  OR  UTILITY POLE
-  -FO- EXISTING FIBER OPTIC CABLE
-  AERIAL SPLICE ENCLOSURE











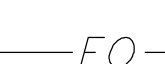
EXISTING OVERHEAD
UTILITY POLE MARKERS



ITEM 625 CONDUIT, CONCRETE ENCASED, 3"
 TOTAL LENGTH BORED = 0'
 TOTAL LENGTH IN TRENCH = 261'
 TOTAL LENGTH IN BARRIER = 0'

ITEM 625 CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT
 BANK (BY SIZE), SCH 40
 TOTAL LENGTH BORED = 0'
 TOTAL LENGTH IN TRENCH = 334'
 TOTAL LENGTH IN BARRIER = 0'

PROPOSED

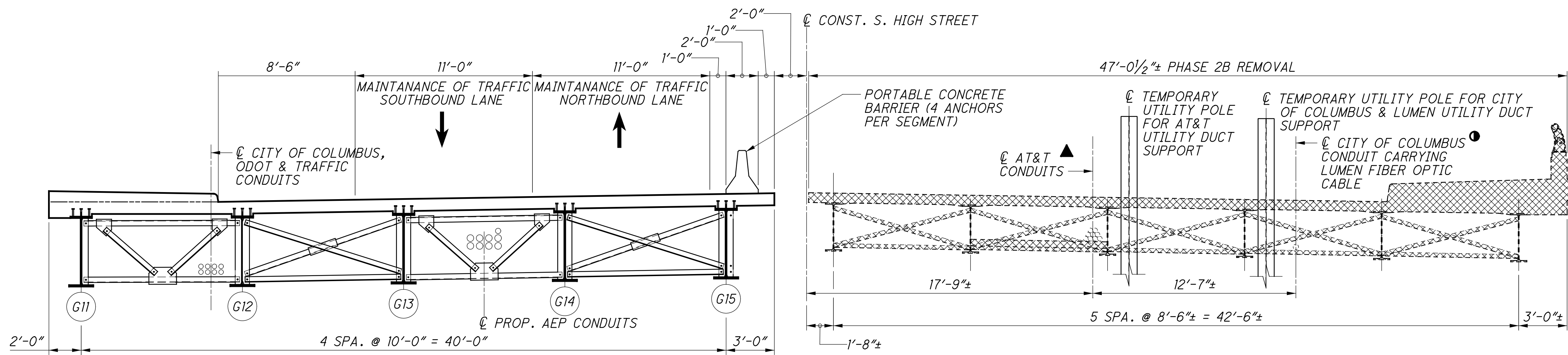
-  PULLBOX, 18", 725.08, ELECTRIC
-  PULLBOX, 32", 725.08, TRAFFIC*
-  MEDIAN JUNCTION BOX
-  PULLBOX, 48", 725.08, TRAFFIC*
-  ITS CABINET - GROUND MOUNTED
-  SIDE-FIRED RADAR DETECTOR
-  RADAR DETECTION ZONE
-  CCTV IP-CAMERA SYSTEM, DOME-TYPE
-  CCTV CONCRETE POLE WITH LOWERING UNIT, 70 FEET
-  TEMPORARY WOOD POLE, CLASS 4, 35'
-  -FO- FIBER OPTIC CABLE

**TRAFFIC SURVEILLANCE
PLAN LEGEND**

FRA - 70 - 14.05C

*32" AND 48" PULLBOXES LOCATED WITHIN ODOT L/A SHALL BE FITTED WITH CONCRETE COLLARS AND WILL BE CALLED OUT AS AN AS PER PLAN ITEM

NO.	DESCRIPTION	REV. BY	DATE
1	SPECIFIED CONDUIT QUANTITIES BREAKDOWN	JML	9-29-23

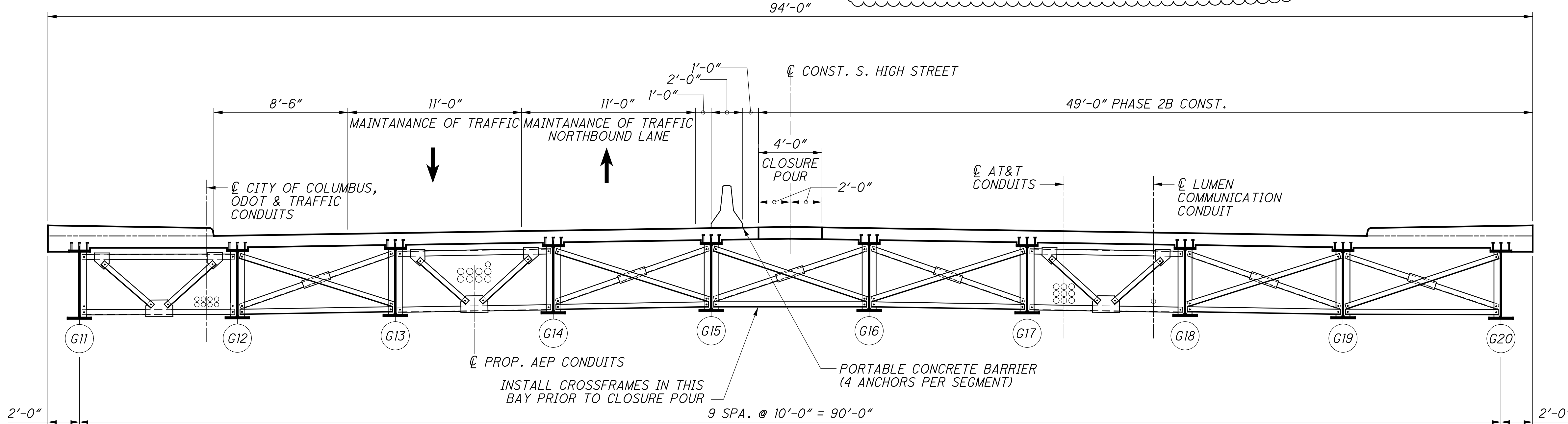


PHASE 2B REMOVAL

SUGGESTED CONSTRUCTION SEQUENCE:

PHASE 2B:

1. INSTALL PORTABLE CONCRETE BARRIER ON NEWLY CONSTRUCTED WORK AS SHOWN.
2. DIRECT HIGH STREET TRAFFIC TOWARD THE WESTERN PORTION OF THE NEW DECK.
3. REMOVE REMAINING EXISTING DECK, SIDEWALK & PARAPET AS SHOWN.
4. CONTRACTOR SHALL PROVIDE AT&T AND LUMEN A MINIMUM OF TWENTY (20) WORKING DAYS NOTICE TO SCHEDULE FOR THEIR REPRESENTATIVE TO BE ONSITE PRIOR TO THE INSTALLATION OF THE UTILITY POLES.
5. INSTALL TEMPORARY UTILITY POLES AT THE LOCATIONS SHOWN IN THE PLANS.
6. REMOVE REMAINING EXISTING APPROACH SLABS & PORTION OF ABUTMENTS AS PER THE PLANS.
7. CONTRACTOR SHALL CONTACT AND PROVIDE AT&T AND LUMEN WITH A MINIMUM OF TWENTY (20) WORKING DAYS PRIOR TO PROVIDING ACCESS TO THEM FOR THE WORK ZONE. AT&T AND LUMEN SHALL HAVE THIRTY (30) WORKING DAYS TO COMPLETE THE FOLLOWING WORK.
8. AT&T AND LUMEN ARE TO REMOVE THE EXISTING TELECOMMUNICATION LINES FROM THE EXISTING CONDUIT AND TRANSFER THE LINES TO POLE SUPPORT. AT&T AND LUMEN ARE TO INSTALL ALL NECESSARY MESSENGER WIRE, LASHING, GROUND ANCHORS, GUYS, ETC. TO SAFELY SUPPORT THE LINES AND ENSURE THAT THE LINES REMAIN ABOVE THE EXISTING BOTTOM OF STEEL ELEVATION SO ROADWAY VERTICAL CLEARANCE IS NOT RESTRICTED.
9. REMOVE REMAINING EXISTING STRUCTURAL STEEL AS SHOWN IN PHASE 2B REMOVAL.
10. INSTALL EXCAVATION BRACING AT THE APPROXIMATE LOCATIONS SHOWN ON THE PLANS.
11. REMOVE EXISTING PIERS TO THE EAST OF THE LONGITUDINAL DECK JOINT.
12. INSTALL TANGENT DRILLED SHAFTS AT THE FORWARD ABUTMENT LOCATION AND CONSTRUCT THE REMAINING PORTION OF THE ABUTMENTS & PIER FOR PHASE 1B CONSTRUCTION.
13. FINISH PHASE 2B EMBANKMENT CONSTRUCTION UP TO THE LEVEL OF THE BEAM SEATS.
14. ERECT THE STEEL GIRDERS, CROSSFRAMES AND UTILITY SUPPORTS.
15. CONTRACTOR SHALL CONTACT AND PROVIDE AT&T AND LUMEN WITH A MINIMUM OF TWENTY (20) WORKING DAYS PRIOR TO PROVIDING ACCESS TO THEM FOR THE WORK ZONE. AT&T SHALL HAVE THIRTY (30) WORKING DAYS TO INSTALL NEW SPLIT DUCT CONDUIT ON THE EXISTING TELECOMMUNICATION LINES AND PLACE THEM ON THE NEW SUPPORTS PROVIDED. LUMEN SHALL HAVE THIRTY (30) DAYS TO TRANSFER THEIR ACTIVE CABLE TO THE NEW DUCT PROVIDED FOR THEIR USE.
16. CONTRACTOR IS TO REMOVE THE TEMPORARY UTILITY POLES AND TEMPORARY SOLDIER PILES TO TWO (2) FEET BELOW FINISH GRADE.
17. COMPLETE ABUTMENT CONSTRUCTION AND CONSTRUCT NEW DECK (EXCEPT FOR THE CLOSURE POUR) AND SIDEWALK AS SHOWN IN THE PHASE 2B CONSTRUCTION.
18. ERECT CROSSFRAMES IN CLOSURE BAY AND PLACE CLOSURE POUR.
19. SEAL LONGITUDINAL JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) PER 511.19.
20. REMOVE PORTABLE CONCRETE BARRIERS. FILL ANCHOR HOLES WITH GROUT PER CMS 705.20.
21. RESUME NORMAL TRAFFIC.



PHASE 2B CONSTRUCTION

LEGEND:

- ▲ EXISTING AT&T CONDUIT TO BE TEMPORARILY SUPPORTED DURING CONSTRUCTION AND INCORPORATED INTO NEW STRUCTURE ON NEW SUPPORT MEMBERS
- EXISTING LUMEN FIBER OPTIC COMMUNICATION LINE TO BE TEMPORARILY SUPPORTED DURING CONSTRUCTION AND INCORPORATED INTO NEW CONDUIT ON NEW STRUCTURE

NOTES:

1. FOR PHASE 2A CONSTRUCTION DETAILS AND SEQUENCE, SEE SHEET [7/55].
2. FOR TEMPORARY UTILITY POLE DETAILS, SEE SHEET [7/55].
3. FOR PORTABLE CONCRETE BARRIER DETAILS, SEE STD. DWG. PCB-91.

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED NOTICES	CWL	10-2-23

G:\2012\20120416\FRA\105596\STRUCTURES\FRA070_1_465C\SHEET\070_1_465CPC002.DGN
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DESIGN AGENCY
GPD GROUP*
 1800 Wilderness Drive, Suite 200, Columbus, OH 43215
 (614) 231-0751
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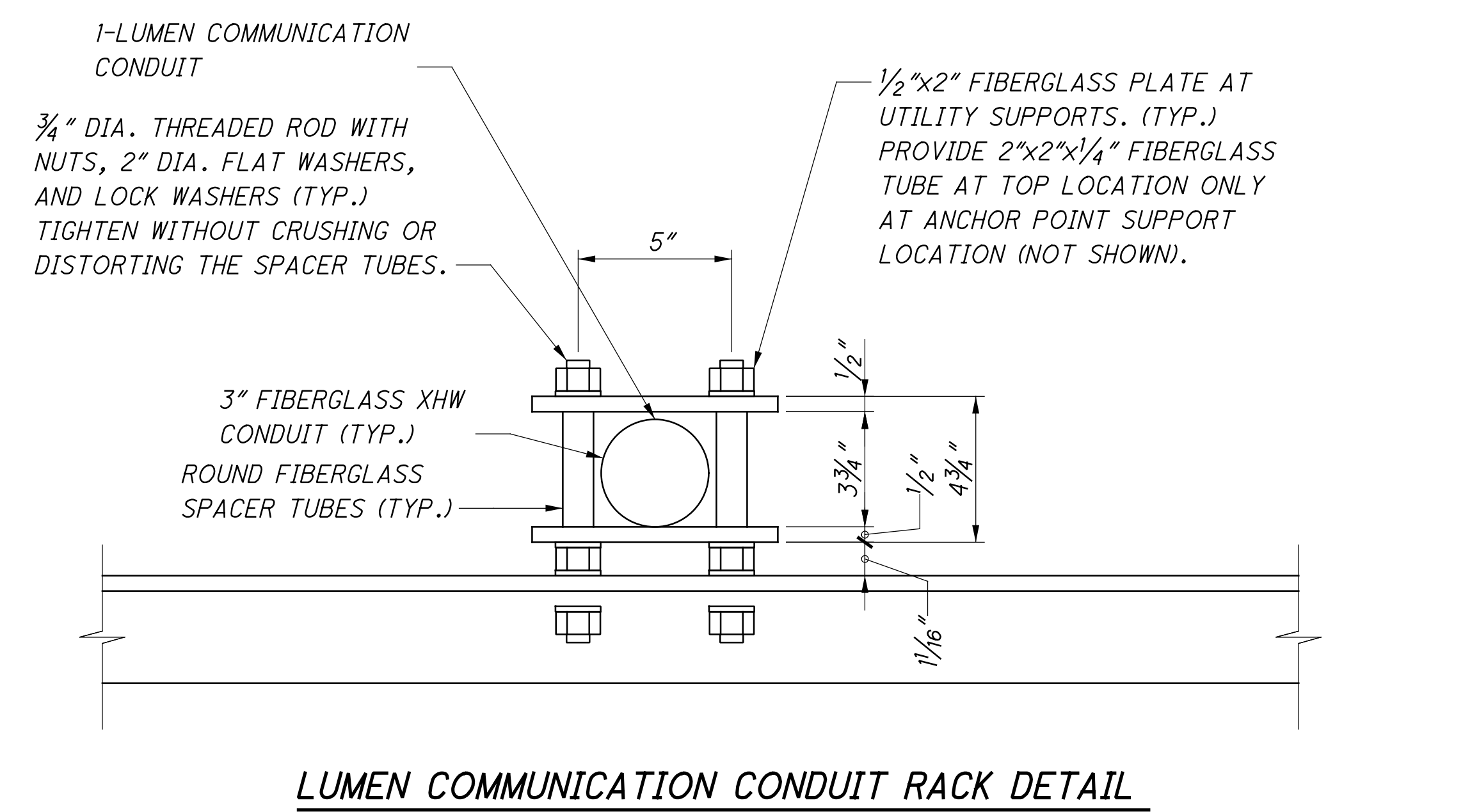
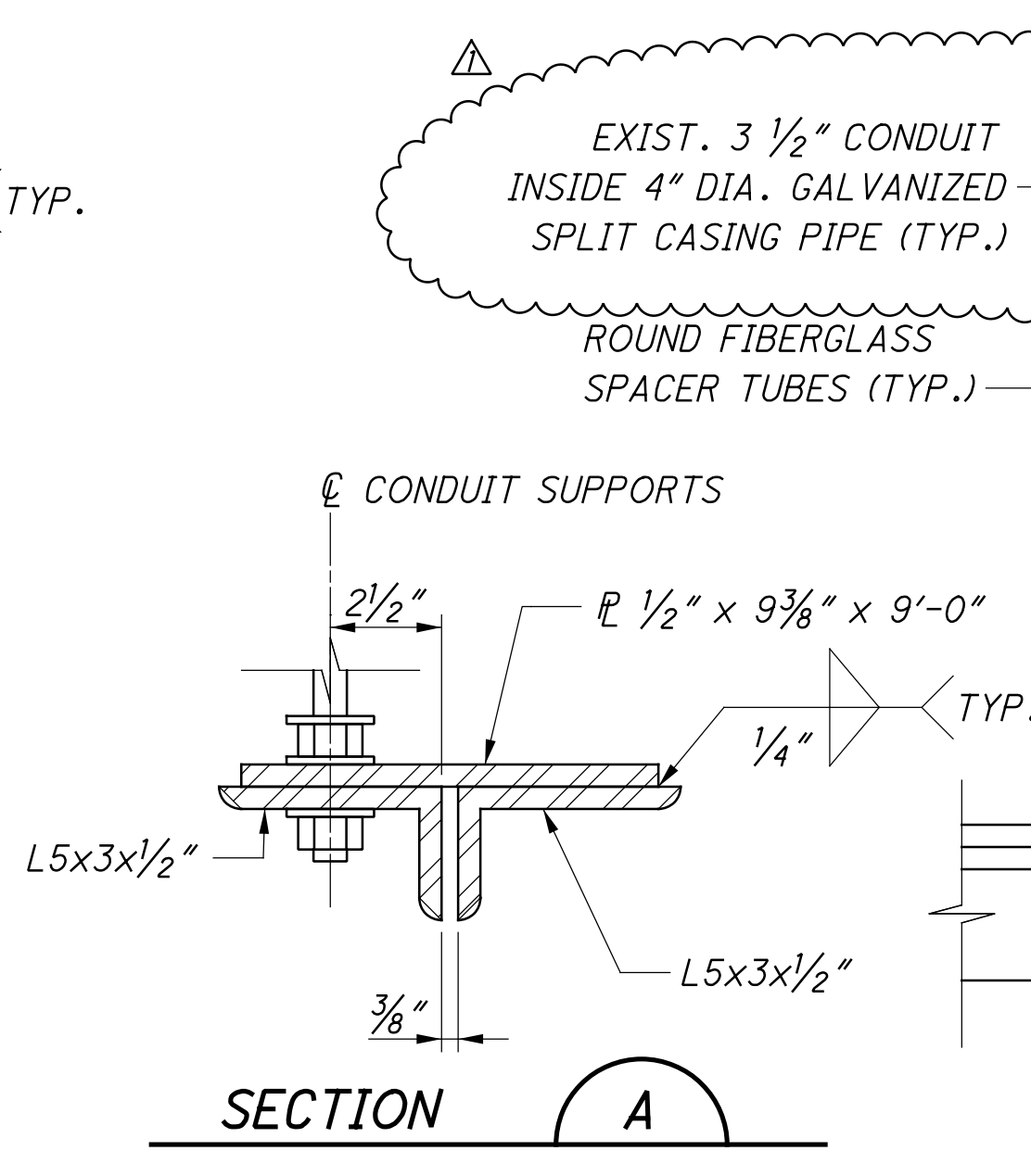
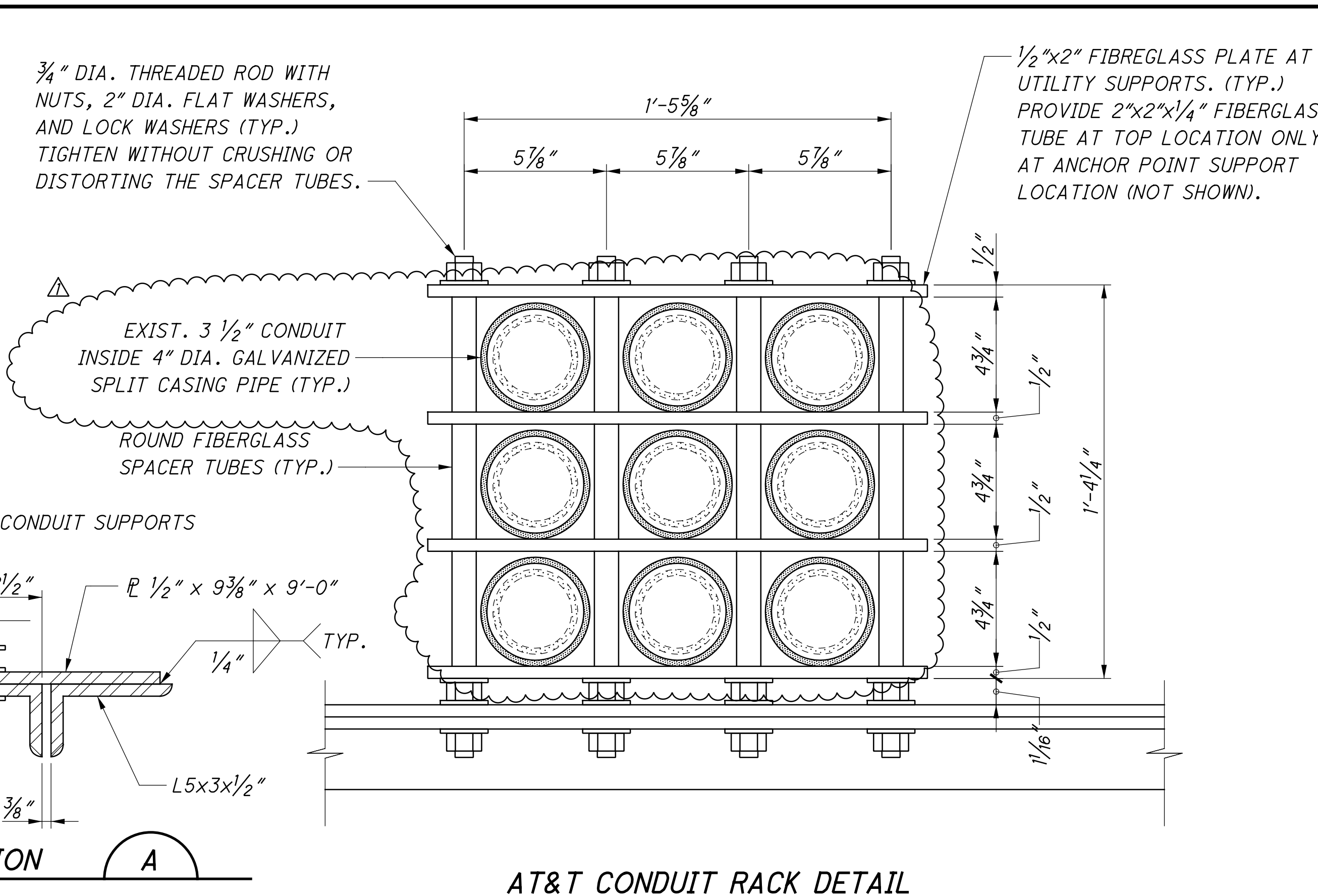
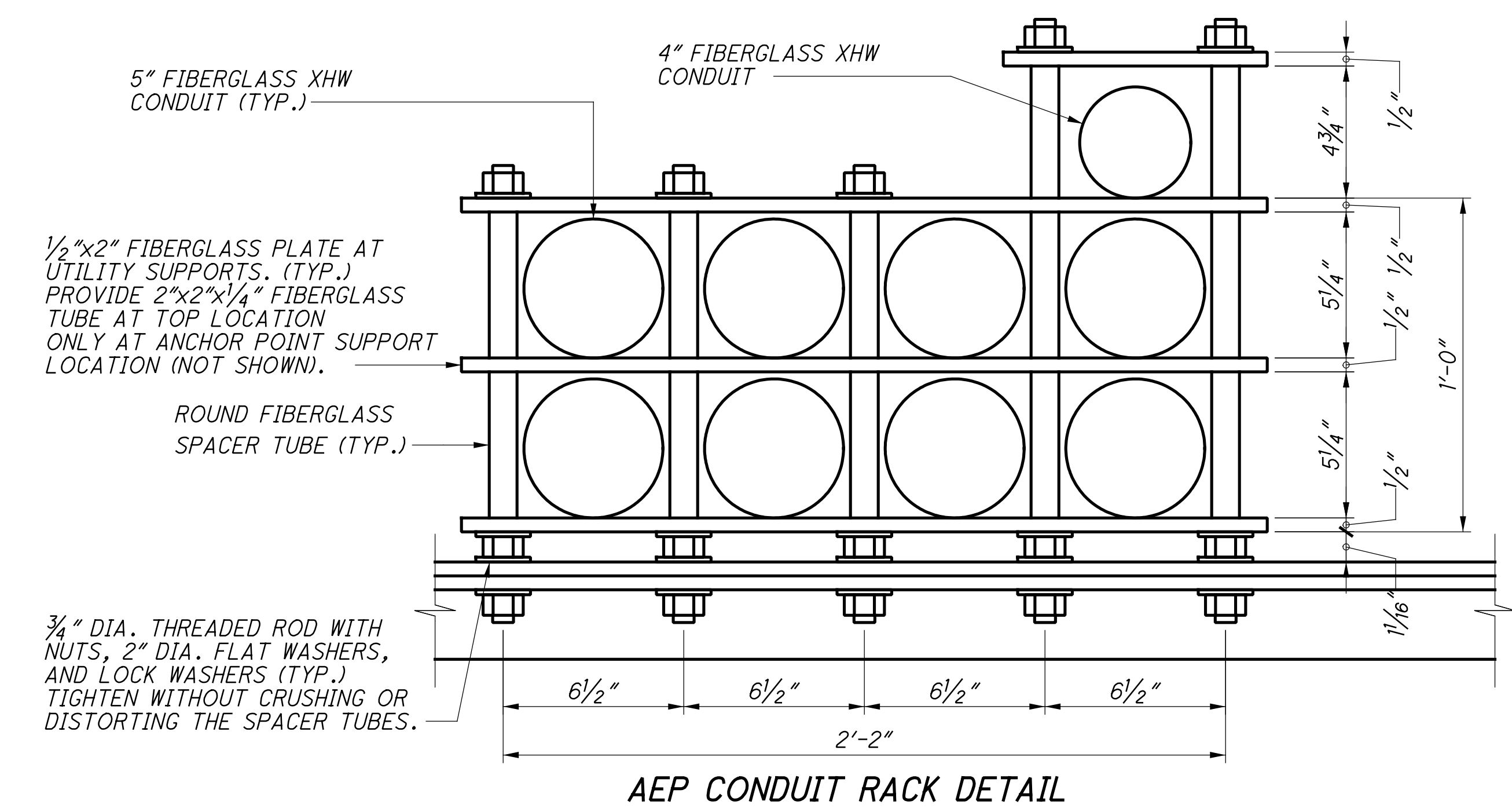
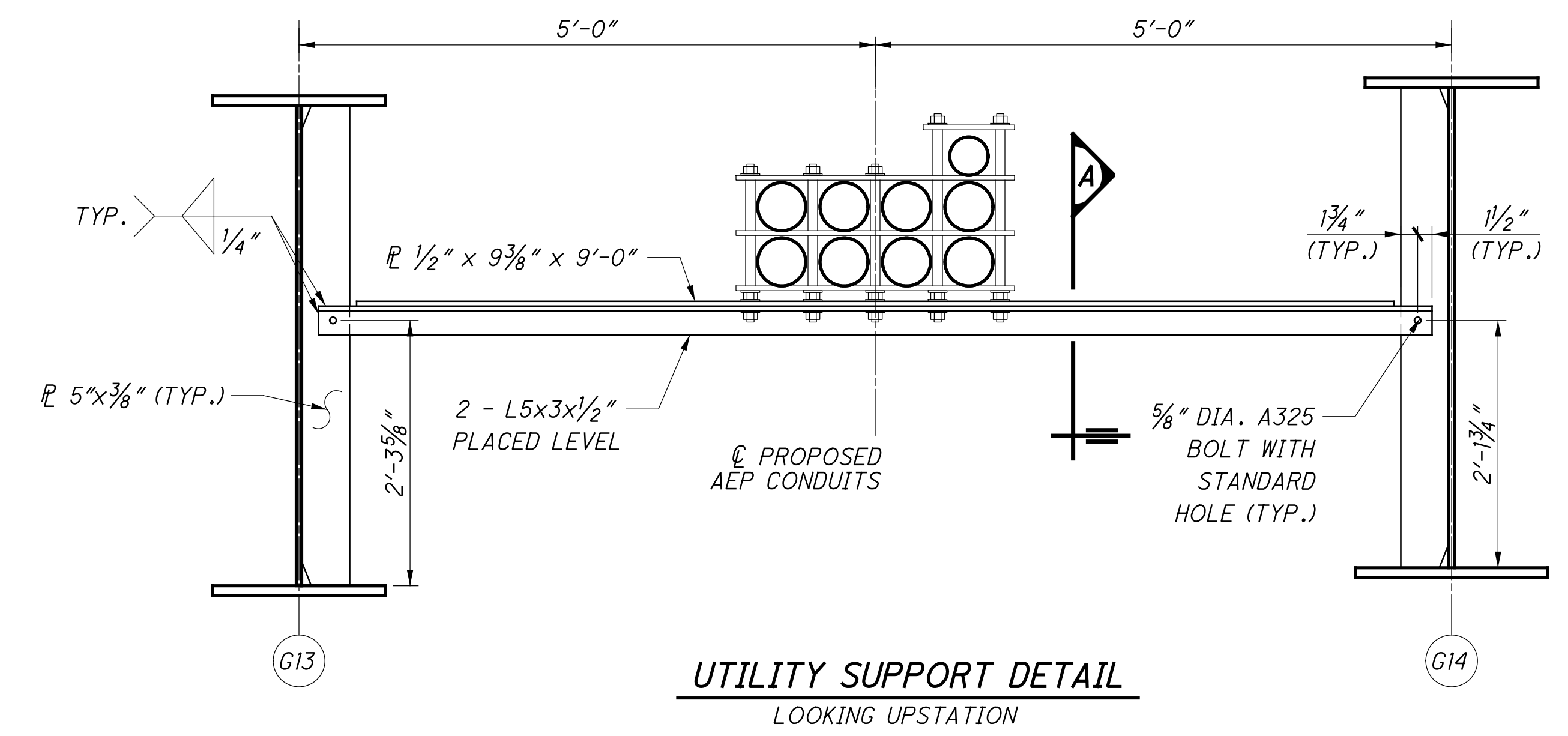
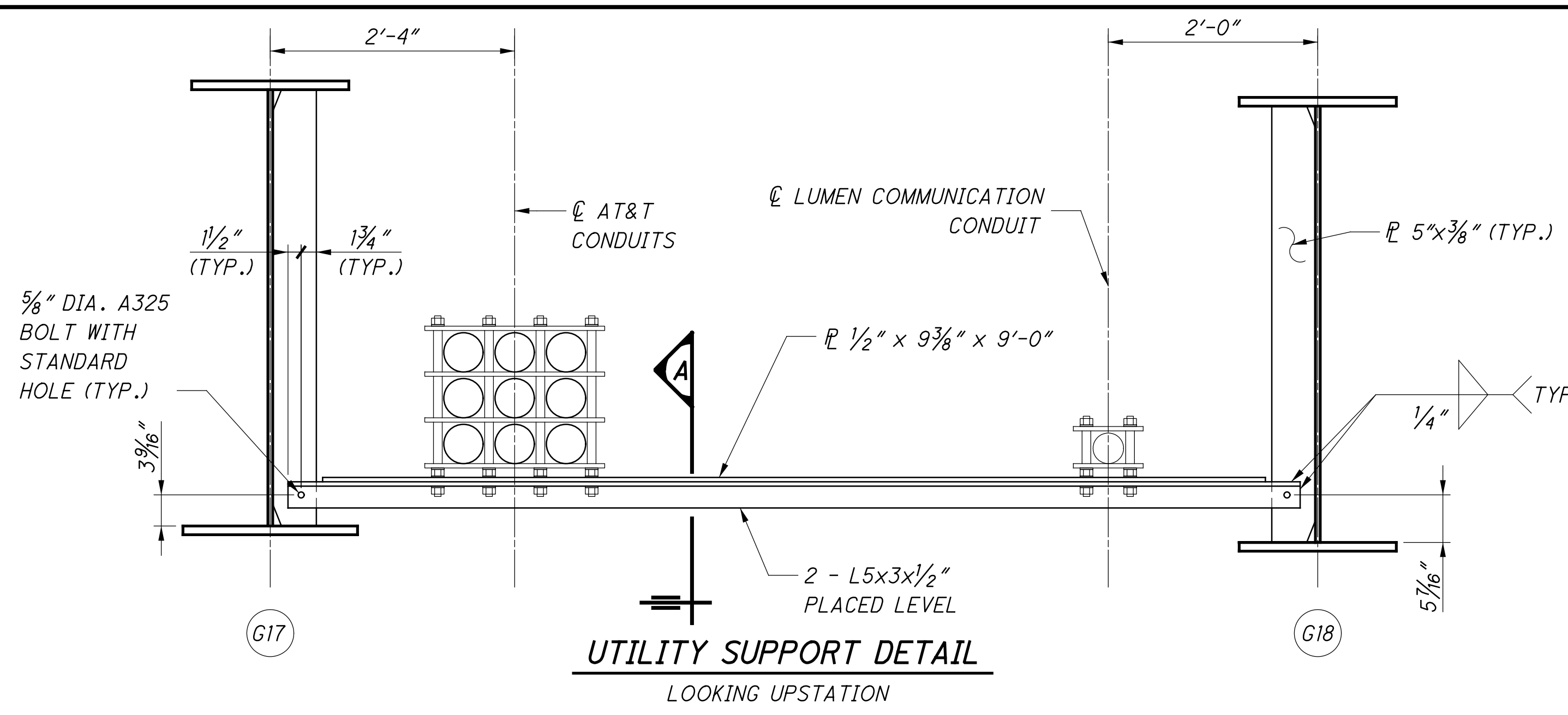
DATE 4-21-23
REVIEWED TJW
STRUCTURE FILE NUMBER 2510024
DESIGNED DGN
CHECKED RHC
DRAWN RPR
REVISED

PHASE CONSTRUCTION DETAILS
 BRIDGE NO. FRA-70-1405C
 S. HIGH STREET (U.S. 23D) OVER I-70/71

FRA-70-14.05C
PID No. 105596

8 / 55
 209
 395

01-2012-2012048 VFR1-105596 STRUCTURES-FRA70-1-1405C SHEET S.070-1.405CSD009.DGN
 10/2/2023 12:20:45 PM
 ODOT\B1STD_USER



- NOTES:**
- STANDARD HOLES SHALL BE USED FOR ALL BOLTS AND THREADED RODS.
 - FOR STIFFENER PLATE WELD DETAILS, SEE SHT. NO. 36/55.

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED AT&T RACK	CWL	10-2-23

DESIGN AGENCY
GPD GROUP
 1000 Westwood Drive, Suite 700, Co. (PH 425) 854-2025
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BRIDGE NO. FRA-70-1405C
S. HIGH STREET (U.S. 23D) OVER I-70/71

UTILITY SUPPORT DETAILS

FRA-70-14.05C
PID No. 105596

DESIGNER: MOJ
 CHECKED: RHC
 DRAWN: MOJ
 REVISED: RHC
 REVIEWED: MOJ
 DGN: 2510024
 DATE: 4-21-23
 STRUCTURE FILE NUMBER: 2510024

37/55
 238
 395

SHEET NUMBER							PARTICIPATION				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	40	159	160	165	178	R/W 2	01/IMS/04	06/MPO/04	07/NHS/04/COL	08/ENH/04/COL						
	LS						LS				201	11000	LS	CLEARING AND GRUBBING	26	
		2					2				202	20010	2	EACH	HEADWALL REMOVED	
		43428					43428				202	23000	43428	SY	PAVEMENT REMOVED	
		18064					18064				202	30000	18064	SF	WALK REMOVED	
		3687					3687				202	30700	3687	FT	CONCRETE BARRIER REMOVED	
		4809					4809				202	32000	4809	FT	CURB REMOVED	
		2381					2381				202	35100	2381	FT	PIPE REMOVED, 24" AND UNDER	
		1745					1745				202	38000	1745	FT	GUARDRAIL REMOVED	
		1					1				202	58000	1	EACH	MANHOLE REMOVED	
		13					13				202	58100	13	EACH	CATCH BASIN REMOVED	
		13					13				202	58200	13	EACH	INLET REMOVED	
		1					1				202	58400	1	EACH	INLET ABANDONED	
		3					3				202	58401	3	EACH	INLET ABANDONED, AS PER PLAN	34
		1					1				202	58500	1	EACH	CATCH BASIN ABANDONED	
		4					4				202	58501	4	EACH	CATCH BASIN ABANDONED, AS PER PLAN	34
		323					323				SPECIAL	20270000	323	FT	FILL AND PLUG EXISTING CONDUIT, 12"	34
		50					50				SPECIAL	20270000	50	FT	FILL AND PLUG EXISTING CONDUIT, 15"	34
		1222					1222				202	75000	1222	FT	FENCE REMOVED	
		4					4				202	75610	4	EACH	VALVE BOX REMOVED	
	6						6				202	98100	6	EACH	REMOVAL MISC.: TRASH RECEPTACLES	27
		428					428				202	98200	428	FT	REMOVAL MISC.: PORTABLE BARRIER	27
		307					307				202	98400	307	SF	REMOVAL MISC.: BRICK PAVERS REMOVED	27
				44578			44578				203	10000	44578	CY	EXCAVATION	
				45546			45546				203	20000	45546	CY	EMBANKMENT	
	6338				268		6436		170		204	10000	6606	SY	SUBGRADE COMPACTION	
					1923		1923				204	13000	1923	CY	EXCAVATION OF SUBGRADE	
					1923		1923				204	30010	1923	CY	GRANULAR MATERIAL, TYPE B	
	32						31		1		204	45000	32	hour	PROOF ROLLING	
	6338						6168		170		204	50000	6338	SY	GEOTEXTILE FABRIC	
	6338						6168		170		204	51000	6338	SY	GEOGRID	
	1564						1564				206	10500	1564	TON	CEMENT	
	51761						51761				206	11000	51761	SY	CURING COAT	
	51761						51761				206	15020	51761	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
	LS						LS				206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	
	LS						LS				208	14001	LS		VIBRATION CONTROL AND MONITORING, AS PER PLAN	37
			549						549		607	23000	549	FT	FENCE, TYPE CLT	
			571						571		607	23001	571	FT	FENCE, TYPE CLT, AS PER PLAN "B"	30
			2						2		607	61201	2	EACH	GATE, TYPE CLT, AS PER PLAN "A"	30
			1						1		607	61201	1	EACH	GATE, TYPE CLT, AS PER PLAN "B"	30
			30128				28277		1851		608	10000	30128	SF	4" CONCRETE WALK	
			1207				1106		101		608	15000	1207	SF	8" CONCRETE WALK	
	3358								450	3358	608	98000	3358	SF	WALKWAY, MISC.: BRICK PAVER CROSSWALK	260
			1446							996	608	98000	1446	SF	WALKWAY, MISC.: BRICK PAVER WALK	259
			12				12				608	98200	12	EACH	WALKWAY, MISC.: COLUMBUS CURB RAMP, TYPE A	29
	1782						1782				622	10140	1782	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	
	4198						4198				622	10160	4198	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
	13						13				622	25014	13	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1	
	8						8				622	25015	8	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN "4B"	29
	35						35				622	25050	35	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
			929						929		622	41101	929	FT	PORTABLE BARRIER, UNANCHORED, AS PER PLAN	30
							2				623	38500	2	EACH	MONUMENT ASSEMBLY, TYPE C	
	LS						LS				SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	27

4B PART 4 GENERAL SUMMARY

FRA-70-14.05

152
855

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED R/W SHEET #	CWL	10-2-23

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ITS NOTES

THESE SPECIFICATIONS, TOGETHER WITH THE ACCOMPANYING PLANS ARE INTENDED TO DESCRIBE THE TYPE, SIZE AND LOCATION OF THE PRODUCTS AND MATERIALS TO BE PROVIDED AND INSTALLED UNDER THE VARIOUS BID ITEMS RELATED TO ITS.

THE CONTRACTOR SHALL FURNISH AND INSTALL ITS DEVICES AND RELATED MATERIALS IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS, AS WELL AS:

- 2018 CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS AND ITS SUPPLEMENTAL SPECIFICATIONS
- 2019 OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AND ITS SUPPLEMENTAL SPECIFICATIONS
- STANDARD CONSTRUCTION DRAWINGS ISSUED BY THE OHIO DEPARTMENT OF TRANSPORTATION
- STANDARD CONSTRUCTION DRAWINGS ISSUED BY THE CITY OF COLUMBUS

THESE SPECIFICATIONS SET FORTH ARE THE MINIMUM PERFORMANCE AND OPERATIONS REQUIREMENTS OF THE ITS ITEMS REFERRED TO HEREIN.

PROTECTION OF EXISTING CTSS FACILITIES

EXISTING CTSS FIBER OPTIC CABLES AND CONDUIT FACILITIES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION AS PER CITY OF COLUMBUS SUPPLEMENTAL SPECIFICATION 1620 AND AS STATED BELOW. WHERE EXCAVATION OR OTHER WORK MAY AFFECT AREAS IN CLOSE PROXIMITY (LESS THAN 3 FT HORIZONTAL DISTANCE) TO THESE FACILITIES, THE CONTRACTOR MUST EXPOSE, MAINTAIN, AND PROTECT THESE FACILITIES USING CONSTRUCTION METHODS APPROVED BY THE ENGINEER.

ITEM 809 MAINTAINING ITS DURING CONSTRUCTION

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AND RESTORE AS NECESSARY THE FUNCTIONALITY OF ALL ITS FIBER AND EQUIPMENT IN ACCORDANCE WITH THE 'ITS DEVICE DOWNTIME SECTION' OF THIS SUPPLEMENTAL SPECIFICATION, AS WELL AS MAINTAINING THE INITIAL ITS FIELD LOCATE THAT ODOT PERFORMS, WITHIN THE PROJECT AREA.

EQUIPMENT NOT DAMAGED OR DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL REMAIN OPERATIONAL BY PROVIDING SOME TYPE OF TEMPORARY CONNECTION BETWEEN THE PIECES OF EQUIPMENT AND AN ADJACENT OPERATIONAL CABINET. THIS MAY BE ACCOMPLISHED VIA AERIAL CONNECTION OR THROUGH AND EXISTING/NEW CONDUIT AND FIBER CABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONNECTIONS AND WORK SHALL NOT BE ACCEPTABLE UNTIL REVIEWED AND INSPECTED BY THE PROJECT ENGINEER AND ITS PERSONNEL. SERVICE TO ALL ITS DEVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

ITEM 625 LIGHTING, MISC.: STEP-DOWN TRANSFORMER AND SUPPORT

FURNISH AND INSTALL A TRANSFORMER AND SUPPORT AS PER THE DETAILS ON ODOT STANDARD CONSTRUCTION DRAWING ITS-50.II.

THIS ITEM OF WORK INCLUDES THE TRANSFORMER, SUPPORT AND FOUNDATIONS, GROUND RODS, CONDUIT, AND ALL INCIDENTALS SHOWN IN THE DETAILS ON THE STANDARD CONSTRUCTION DRAWING AND REQUIRED FOR A STEP-DOWN TRANSFORMER AND SUPPORT, COMPLETE AND IN SERVICE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE CONTRACT UNIT BID FOR ITEM 625 - LIGHTING, MISC.: STEP-DOWN TRANSFORMER AND SUPPORT, EACH, INSTALLED, IN PLACE, FULLY FUNCTIONAL, TESTED AND ACCEPTED.

ITEM 625 CONDUIT, CONCRETE ENCASED, 3"

TOTAL LENGTH BORED = 0'
TOTAL LENGTH IN TRENCH = 24'
TOTAL LENGTH IN BARRIER = 0'

DOWNTIME DISINCENTIVES FOR ODOT ITS DEVICES

DAMAGE INCURRED TO THE EXISTING OR PROPOSED FIBER OPTIC COMMUNICATIONS NETWORKS MAY RESULT IN THE LOSS OF USE OF VARIOUS ITS DEVICES THAT MAKE UP THE COLUMBUS FREEWAY MANAGEMENT SYSTEM. ADDITIONALLY, THESE FIBER OPTIC NETWORKS ARE USED FOR THE DATA COMMUNICATIONS OF OTHER AGENCIES AS WELL. IT IS IMPERATIVE THAT ALL EFFORTS BE MADE TO AVOID UNPLANNED INTERRUPTION OF THEIR SERVICE.

TO MITIGATE PROLONGED OR UNNECESSARY SYSTEM OUTAGES ODOT HAS IMPOSED DOWNTIME DISINCENTIVES FOR ITS DEVICES AND COMMUNICATIONS NETWORKS. DETAILS REGARDING MAXIMUM ALLOWABLE DOWNTIME PERIODS FOR SPECIFIC DEVICES, MONETARY DAMAGES, AND PLANNED DOWNTIME NOTIFICATION PROCEDURES ARE DESCRIBED IN ODOT SUPPLEMENTAL SPECIFICATIONS SECTION 809.14.

ITEM 625 MEDIAN JUNCTION BOX, AS PER PLAN

THE CONTRACTOR SHALL SUPPLY THE MEDIAN BARRIER JUNCTION PULL BOXES THAT MEET THE FOLLOWING SPECIFICATIONS:

SHALL BE OF TYPE POLYMER-CONCRETE
SIZE: 17 INCHES (HEIGHT) X 30 INCHES (LENGTH)
MINIMUM WALL THICKNESS: 0.5 INCH
MINIMUM LID THICKNESS: 2 INCHES
ANSI TIER 22 RATING WITH A MINIMUM DESIGN LOAD OF 22,000 POUNDS
LID SHALL BE MARKED "TRAFFIC"
THE MEDIAN JUNCTION BOX SHALL BE SECURED IN THE MEDIAN BARRIER WALL USING DOWELS. (NON-SHRINK GROUT MAY BE USED WHEN NECESSARY).

ITEM 625 TRACING WIRE, AS PER PLAN

TRACING WIRE SHALL BE NO SMALLER THAN #10 AWG WIRE. THE WIRE SHALL BE INSULATED, ORANGE IN COLOR, AND CONSTRUCTED OF COPPER CLAD STEEL (STRANDED). TRACING WIRE JACKET SHALL BE HDPE OR HMWPE. TRACING WIRE SHALL BE INSTALLED THROUGH ALL CONDUITS AND DUCT BANKS WHICH CONTAIN FIBER OPTIC CABLE BUT ARE NON-METALLIC AND CONTAIN NO METALLIC OR OTHERWISE "TRACEABLE" COMPONENTS.

TRACING WIRE SHALL BE INSTALLED ALONG WITH FIBER OPTIC CABLE IN THE FOLLOWING LOCATIONS:

- THROUGH A 1-1/2 INCH CONDUIT WITHIN IN A DUCT BANK
- THROUGH A SINGLE NEWLY INSTALLED COMMUNICATIONS CONDUIT, GIVEN CONDUIT IS NOT PART OF A DUCT BANK AND IS 3" OR GREATER DIAMETER
- THROUGH EXISTING CONDUIT PATH WHERE NEW FIBER IS BEING INSTALLED AS PART OF THIS PROJECT, EXCLUDING LOCATIONS WITH EXISTING FUNCTIONAL TRACING WIRE AS DETERMINED BY THE ENGINEER.

APPROXIMATELY 10 FT. OF SLACK OF THE TRACING WIRE SHALL BE LEFT INSIDE THE ADJACENT PULL-BOXES CONNECTING THE CONDUIT RUNS.

IN SITUATIONS WHERE A TYPE 2 FIBER OPTIC CABLE MARKER IS TO BE INSTALLED IN CONJUNCTION WITH THE TRACING WIRE, THE TRACING WIRE SHALL BE RUN THROUGH THE MARKER AND CONNECTED TO TERMINALS AT THE TOP OF THE MARKER.

ITEM 625 CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT BANK (BY SIZE), SCH 40

TOTAL LENGTH BORED = 0'
TOTAL LENGTH IN TRENCH = 30'
TOTAL LENGTH IN BARRIER = 0'

ITEM 625 TRACING WIRE, AS PER PLAN (CONT'D)

LABEL AND TERMINATE TRACING WIRE TO TERMINAL BLOCKS IN PULL BOXES APPROXIMATELY EVERY 1000 FT. (MAX). MOISTURE DISPLACEMENT CONNECTORS SHALL BE USED AT ALL CONNECTION POINTS. 3M DBR CONNECTORS, COPPERHEAD SNAKEBITE CONNECTORS, OR APPROVED EQUAL SHALL BE USED. AFTER ALL CONNECTIONS ARE COMPLETED THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR A LOCATE OR CONDUCTIVITY TEST.

THE TRACING WIRE SHALL ENTER A PULL BOX ON ONE SIDE AND BE ROUTED AROUND THE INSIDE PERIMETER OF THE PULL BOX TO THE OTHER SIDE AND THEN EXIT THE OPPOSING SIDE. THE TRACING WIRE SHALL BE CONTINUOUSLY RUN BETWEEN PULL BOXES (ABSOLUTELY NO SPLICES EXCEPT IN A PULL BOX). CONDUIT THAT BRANCHES OFF THE MAIN CONDUIT RUN SHALL HAVE ITS TRACING WIRE TERMINATED IN A PULL BOX OR CONTROLLER CABINET. THE WIRE SHALL BE TAGGED AS "TRACING WIRE", COILED (10 FEET IN LENGTH) AND LEFT DISCONNECTED AT EACH END (OPEN CIRCUIT).

IF RIGID GALVANIZED STEEL CONDUIT IS USED TO JACK UNDER A ROADWAY, TRACING WIRE SHALL BE CONNECTED TO EACH END OF THE CONDUIT USING A HEAVY DUTY WIRE LUG BUSHING APPROVED BY ENGINEER SO THE CONDUIT WILL ACT AS A CONDUCTOR COMPLETING THE TRACING WIRE CIRCUIT.

PAYMENT FOR ALL TRACING WIRE SHALL BE INCLUDED IN THE CONDUIT AND FIBER BID ITEMS.
9/1/15

ITEM 632 INTERCONNECT, MISC.: FIBER OPTIC SPLICE ENCLOSURE, DOME, 800 SPLICE

FIBER OPTIC CABLE SPLICES SHALL BE PERFORMED IN SPLICE ENCLOSURES AS SHOWN ON THE PLANS. THE SPLICE ENCLOSURES SHALL BE CORROSION RESISTANT, RODENT PROOF, RE-ENTERABLE, AND MANUFACTURER CERTIFIED FOR UNDERGROUND INSTALLATION.

THE 800 DOME SPLICE ENCLOSURES SHALL BE INSTALLED IN 48" PULL BOXES OR MOUNTED AERIALLY AS DIRECTED IN THE PLANS. CONTRACTOR SHALL ADVISE THE ENGINEER IN THE EVENT THAT CABLES CANNOT ENTER THE SPLICE ENCLOSURE PERPENDICULARLY TO CABLE PORT ENTRY PLATE, OR IF CABLE BENDS EXCEED MINIMUM INSTALLATION BEND RADIUS RATING AT THE ENCLOSURE ENTRY DUE TO EXISTING FIELD CONDITIONS SUCH AS INADEQUATE SPACE IN PULL BOX OR OTHER OBSTRUCTIONS. ADDITIONALLY, CONTRACTOR SHALL ADVISE THE ENGINEER PRIOR TO BEGINNING SPLICING IF PLANNED NUMBER OF SPLICES CANNOT BE NEATLY AND SECURELY CONTAINED IN THE TYPE OF SPLICE ENCLOSURE CALLED OUT IN THE PLANS.

FOR UNDERGROUND INSTALLATION, SPLICE ENCLOSURE SLACK CABLE MUST FIT WITHIN PULL BOX TO AVOID DAMAGE TO THE ENCLOSURE OR CABLE UPON CLOSING THE PULL BOX LID.

FOR AERIAL INSTALLATION, EXTENDED STRENGTH BRACKET SHALL BE INSTALLED WITH THE SPLICE ENCLOSURE TO ENSURE CABLE ENTRIES REMAIN PERPENDICULAR AND SECURELY FASTENED TO THE PORT ENTRY PLATE. AERIAL MOUNTED SLACK STORAGE RACKS ARE TO BE USED FOR ALL INSTALLATIONS WHERE CABLES ARE LOOPED OR BENT 180 DEGREES. THE COST OF THE STRAIN RELIEF HARDWARE, STRENGTH BRACKETS, TIES OR OTHER INSTALLATION HARDWARE IS CONSIDERED INCIDENTAL TO THIS PAY ITEM.

ALL BUFFER TUBES NOT SHOWN AS BEING SPLICED IN THE PLANS ARE TO BE SECURELY COILED WITHIN THE SPLICE ENCLOSURE.

FIBER OPTIC CABLE SPLICE ENCLOSURES SHALL HAVE A ONE SECTION, 7 PORT END PLATE. EACH CABLE ENTERING THE ENCLOSURE SHALL BE SEALED WITH THE APPROPRIATELY SIZED GROMMET. GROMMETS, PLUG KITS AND BRACKETS SHALL BE INCIDENTAL TO THE PAY ITEM. ANY PROPOSED EQUIVALENT MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. FIBER OPTIC CABLE SPLICE ENCLOSURES MUST MEET THE REQUIREMENTS LISTED UNDER BELLCORE TESTING REQUIREMENT GR-771-CORE AND UL 1863.

THE WORK AS DESCRIBED WILL BE MEASURED AS ONE UNIT FOR EACH OF THE INSTALLATIONS SPECIFIED. AND SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND INCIDENTALS, COMPLETE IN PLACE. TERMINATIONS, CONNECTIONS, AND OTHER MISCELLANEOUS ITEMS AND MATERIALS SHALL BE INCIDENTAL TO THIS WORK AND NO SEPARATE PAYMENT WILL BE MADE.
4/1/16-MOD

FIBER OPTIC CABLE MARKER

FIBER OPTIC CABLE MARKERS SHALL BE FURNISHED AND INSTALLED ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATIONS 804 AND 904 AND AS DIRECTED BY THE ODOT ENGINEER AND/OR AT EVERY PULL BOX CONTAINING FIBER OPTIC CABLE AND SHALL BE ONE OF TWO TYPES:

TYPE 1 - COTTMARK 511, FRICK FLEXPOST, OR CARSONITE CURV-FLEX MARKER

TYPE 2 - COTT BIGFINK, FRICK TESTPOST, OR RHINODOME TEST STATION

THE FIBER OPTIC CABLE MARKERS SHALL BE 6 FEET IN LENGTH AND SHALL BE SECURELY PLACED IN THE GROUND AT A DEPTH OF 2 FEET. CARE SHALL BE TAKEN DURING INSTALLATION NOT TO DAMAGE ANY UNDERGROUND CONDUIT IN THE VICINITY. THE CONTRACTOR SHALL USE A TYPE 2 MARKER WHEN THE PATH OF THE FIBER CROSSES UNDERNEATH A ROADWAY AND WHEN CAPABLE SHALL PLACE A MARKER ON BOTH SIDES OF THE ROADWAY AT CROSSING. THE CONTRACTOR SHALL CONNECT TRACER WIRE TO TERMINAL AT TOP OF TYPE 2 MARKER. TYPE 1 MARKERS SHALL ONLY BE PLACED ON STRAIGHT FIBER RUNS BETWEEN PULL BOXES IN THE SHOULDER, AND THE CONTRACTOR SHALL BE LIMITED TO THE USE OF TYPE 1 MARKERS SO THAT A TYPE 2 MARKER SHALL BE PLACED BETWEEN ANY TWO TYPE 1 MARKERS. TYPE 1 MARKERS SHALL NOT BE PLACED IN SUCCESSION DOWN A FIBER PATH. THE MARKERS SHALL BE ORANGE IN COLOR AND SHALL HAVE THE FOLLOWING INFORMATION LOCATED ON THE UPPER PORTION OF THE MARKER IN A READABLE FORMAT:

WARNING
CONTACT OUPS 48 HRS BEFORE DIGGING
ODOT OFFICE OF TRAFFIC OPERATIONS FIBER OPTIC CABLE
CENTRAL OFFICE ITS LAB, 614-387-4113,
CEN.ITS.LAB@OHIO.DOT.GOV

PAYMENT FOR ALL FIBER OPTIC CABLE MARKERS SHALL BE INCLUDED IN THE BID ITEM FOR THE FIBER OPTIC CABLE PAY ITEM.

ITEM 804 FIBER OPTIC CABLE, MISC.: RELOCATE EXISTING FIBER OPTIC CABLE, <BY NUMBER> FIBER

UNDER THIS ITEM, BOTH EXISTING FIBER OPTIC INTERCONNECT CABLES, 144 AND 288 FIBER SHALL BE RELOCATED FROM THE EXISTING PULL BOX IN THE NORTHEAST CORNER OF THE HIGH ST/LIVINGSTON AVE INTERSECTION TO THE PROPOSED ITS CABINET VIA EXISTING CONDUITS PLACED AS PART OF PROJECT 4H AND PROPOSED CONDUITS PLACED AS PART OF THIS PROJECT. EXCESS CABLE WAS COILED WITH PROJECT 4H FOR FUTURE CONNECTION TO PROPOSED ITS CABINET.

PRIOR TO RELOCATION, THE CONTRACTOR AND THE ENGINEER SHALL INSPECT THE CABLE TO DOCUMENT ANY EXISTING DAMAGE. ANY DAMAGE IDENTIFIED AFTER THE RELOCATION PROCESS AND NOT PREVIOUSLY DOCUMENTED WILL BE PRESUMED TO HAVE BEEN CAUSED BY THE CONTRACTOR.

IF CABLES ARE DAMAGED, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL REPLACE THE ENTIRE RUN OF CABLE BETWEEN EXISTING TERMINATION POINTS AT THE CONTRACTOR'S EXPENSE. NO SPLICES WILL BE PERMITTED EXCEPT WHERE NOTED IN THE PLANS.

ESTABLISHING FULL COMMUNICATION CAPABILITIES FOR THE RELOCATED CABLE SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK. RELOCATED CABLE SHALL BE SUBJECT TO THE TESTING REQUIREMENTS LISTED IN SUPPLEMENTAL SPECIFICATION 1620.

PAYMENT SHALL BE AT THE LUMP SUM BID AMOUNT FOR ALL CABLE RELOCATED, TESTED, AND ACCEPTED.

ITEM 890 CONDUIT, 4", MULTICELL, HDPE WITH 4-1" INNERDUCTS

TOTAL LENGTH BORED = 0'
TOTAL LENGTH IN TRENCH = 294'
TOTAL LENGTH IN BARRIER = 4878'

NO.	DESCRIPTION	REV. BY	DATE
1	SPECIFIED CONDUIT QUANTITIES BREAKDOWN	JML	9-29-23

SHEET NUMBER

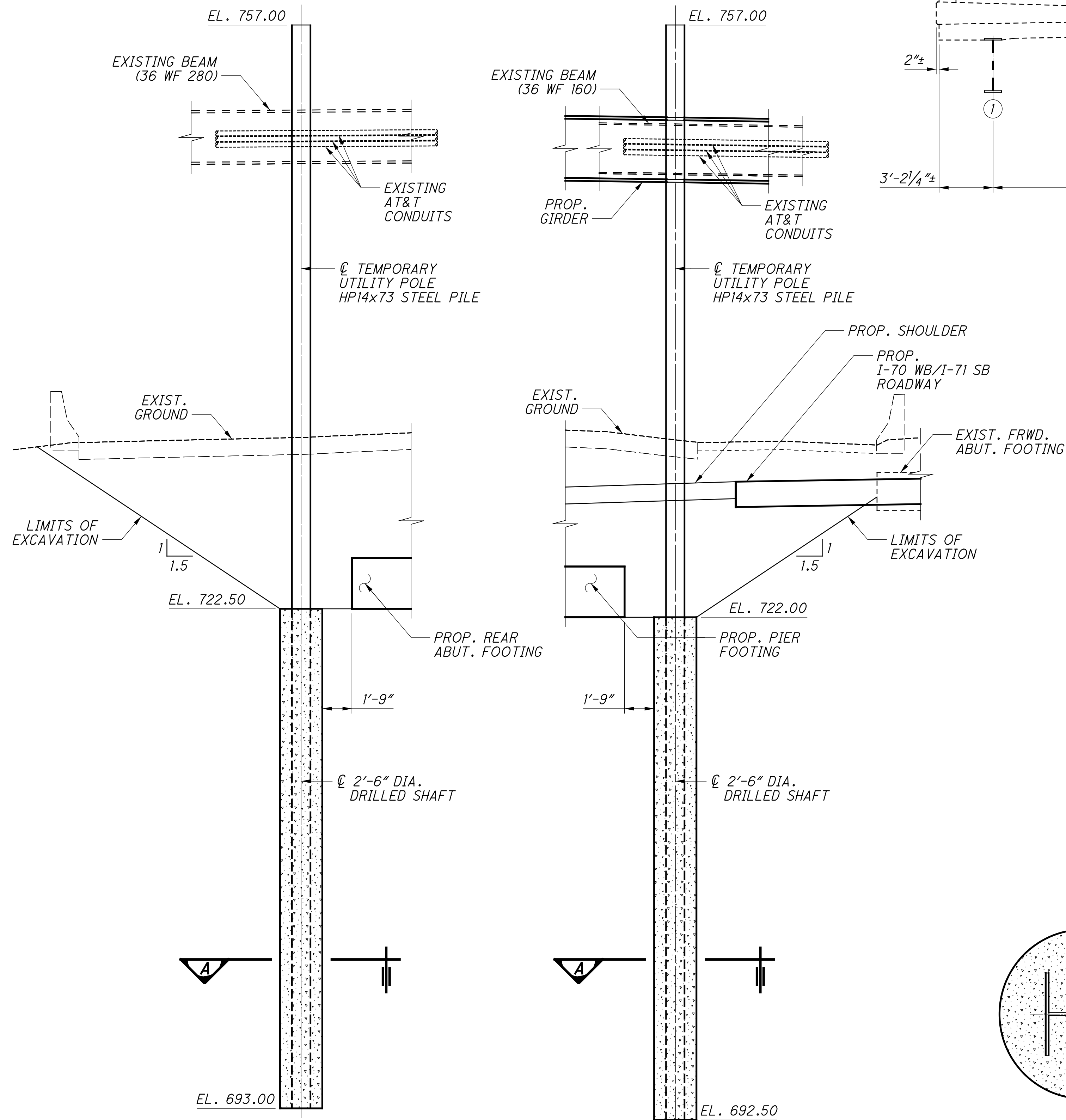
SHEET NUMBER										PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
473	474	475	476	01/IMS/04	EXT	EXT	TOTAL									
				24			24	625	25802	24	FT	CONDUIT, CONCRETE ENCASED, 3"	470			
				30			30	625	25920	30	FT	CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT BANK, 4-3", 1-1.5", TC-2, SCH 40	447,470			
				201			201	625	29100	201	FT	TRENCH, 36" DEEP	470			
				2	3		5	625	29931	5	EACH	MEDIAN JUNCTION BOX, AS PER PLAN	470			
				4			4	625	32000	4	EACH	GROUND ROD				
				1			1	625	34000	1	EACH	POWER SERVICE				
				1			1	625	98000	1	EACH	LIGHTING, MISC.: STEP-DOWN TRANSFORMER AND SUPPORT	470			
				1			1	632	62820	1	EACH	INTERCONNECT, MISC.: FIBER OPTIC SPLICE ENCLOSURE, DOME, 800 SPLICE	470			
				328			328	632	68300	328	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG				
				1			1	633	67100	1	EACH	CABINET FOUNDATION				
				834	2095	1105	890	4924	804	15050	4924	FT	FIBER OPTIC CABLE, 288 FIBER			
				87			87	804	32060	87	FT	DROP CABLE, 24 FIBER				
				1			1	804	98100	1	EACH	FIBER OPTIC CABLE, MISC.: RELOCATE EXISTING FIBER OPTIC CABLE, 144 FIBER	470			
				1			1	804	98100	1	EACH	FIBER OPTIC CABLE, MISC.: RELOCATE EXISTING FIBER OPTIC CABLE, 288 FIBER	470			
				1378	3794		5172	809	24500	5172	FT	CONDUIT, 4", MULTICELL, HDPE WITH 4-1" INNERDUCTS	470			
				1			1	809	60000	1	EACH	CCTV IP-CAMERA SYSTEM, DOME-TYPE				
				1			1	809	61002	1	EACH	CCTV CONCRETE POLE, 70 FEET				
				1			1	809	65000	1	EACH	ITS CABINET - GROUND MOUNTED				
				1			1	809	68900	1	EACH	SIDE-FIRED RADAR DETECTOR				

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ITS GENERAL SUMMARY
FRA - 70 - 14.05

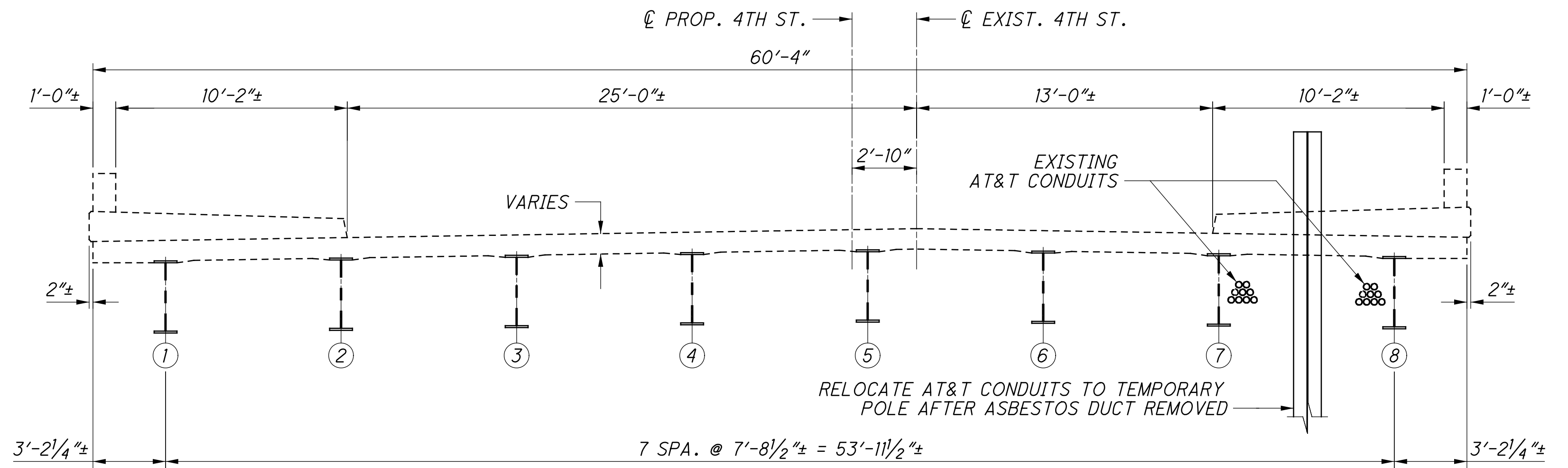
NO.	DESCRIPTION	REV. BY	DATE
1	SPECIFIED CONDUIT QUANTITIES BREAKDOWN	JML	9-29-23

471
855

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED NOTICES	CWL	10-2-23



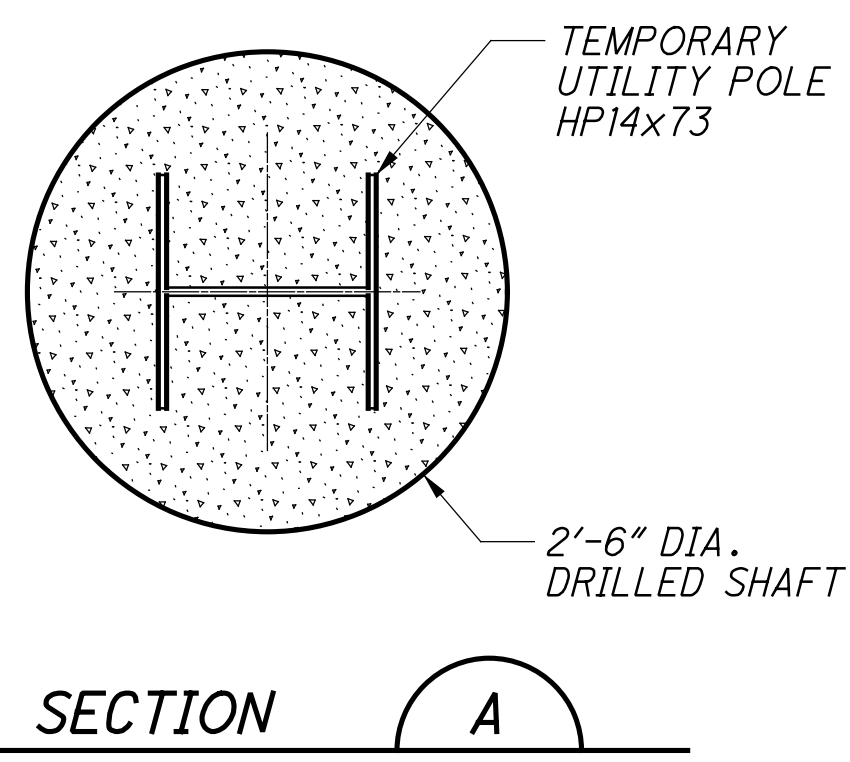
TEMPORARY UTILITY POLE ELEVATION



EXISTING TRANVERSE SECTION

CONSTRUCTION SEQUENCE FOR TEMPORARY UTILITY SUPPORTS

1. INSTALL UNDERDECK PROTECTION AND REMOVE CONCRETE DECK.
2. CONTRACTOR SHALL PROVIDE AT&T A MINIMUM OF TWENTY (20) WORKING DAYS NOTICE TO SCHEDULE FOR THEIR REPRESENTATIVE TO BE ONSITE PRIOR TO THE INSTALLATION OF THE UTILITY POLES. INSTALL TEMPORARY UTILITY POLES AT THE LOCATIONS INDICATED IN THE PLANS.
3. COORDINATE WITH AT&T TO REMOVE ASBESTOS DUCTS FROM EXISTING TELECOMMUNICATION LINES.
4. REMOVE STEEL CROSSFRAMES BETWEEN EXISTING BEAMS 7 AND 8.
5. CONTRACTOR SHALL CONTACT AND PROVIDE AT&T WITH A MINIMUM OF TWENTY (20) WORKING DAYS PRIOR TO PROVIDING ACCESS TO THEM FOR THE WORK ZONE. AT&T SHALL HAVE THIRTY (30) WORKING DAYS TO COMPLETE THE FOLLOWING WORK. COORDINATE WITH AT&T TO TRANSFER THE EXISTING LINES TO POLE SUPPORTS. AT&T TO INSTALL ALL NECESSARY MESSENGER WIRE, LASHING, GROUND ANCHORS, GUYS, ETC. TO SAFELY SUPPORT THE LINES AND ENSURE THAT THE LINES REMAIN ABOVE THE EXISTING BOTTOM OF STEEL ELEVATION SO ROADWAY VERTICAL CLEARANCE IS NOT RESTRICTED.
6. REMOVE EXISTING STEEL GIRDERS.
7. REMOVE EXISTING PIER #2 AND EXISTING FORWARD ABUTMENT.
8. CONSTRUCT FORWARD ABUTMENT DRILLED SHAFT WALL. COORDINATE WITH AT&T TO MOVE AND PROTECT LINE DURING DRILLED SHAFT CONSTRUCTION. THE EXISTING LINE WILL BE SHIFTED USING THE EXISTING SLACK IN THE LINE TO ALLOW FOR SHAFT CONSTRUCTION.
9. CONSTRUCT THE C.I.P. GIRDER SEAT AND BACKWALL OF THE FORWARD ABUTMENT. PLACE THE EXISTING LINES THROUGH SPLIT CASING TUBES IN THE BACKWALL.
10. REMOVE EXISTING PIER #1.
11. CONSTRUCT THE REAR ABUTMENT AND PIER. PLACE THE EXISTING LINES THROUGH SPLIT CASING TUBES IN THE BACKWALL.
12. ERECT STEEL GIRDERS, CROSSFRAMES, AND UTILITY HANGERS.
13. CONTRACTOR SHALL CONTACT AND PROVIDE AT&T WITH A MINIMUM OF TWENTY (20) WORKING DAYS PRIOR TO PROVIDING ACCESS TO THEM FOR THE WORK ZONE. AT&T SHALL HAVE THIRTY (30) WORKING DAYS TO COMPLETE THE FOLLOWING WORK. COORDINATE WITH AT&T TO INSTALL NEW SPLIT DUCT CONDUIT ON THE EXISTING LINES AND HANG CONDUITS FROM THE HANGER BEAMS PROVIDED.



SECTION A

01-2015-2015370 FRA 96053 STRUCTURES FRA023-1075C SHEETS 023-1075CSD015.DGN
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TEMPORARY UTILITY SUPPORT DETAILS
 BRIDGE NO. FRA-23-1075C
 S. 4TH STREET (U.S. 23) OVER I-70/71

DESIGNED	RHC	CHECKED	RHC
DRAWN	JUB	REVISIONS	
REVIEWED	DGN	STRUCTURE FILE NUMBER	2502620
DATE	4-21-23		

FRA-70-14.05
 PID No. 96053

5 / 54
 643
 855

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 DESIGN AGENCY
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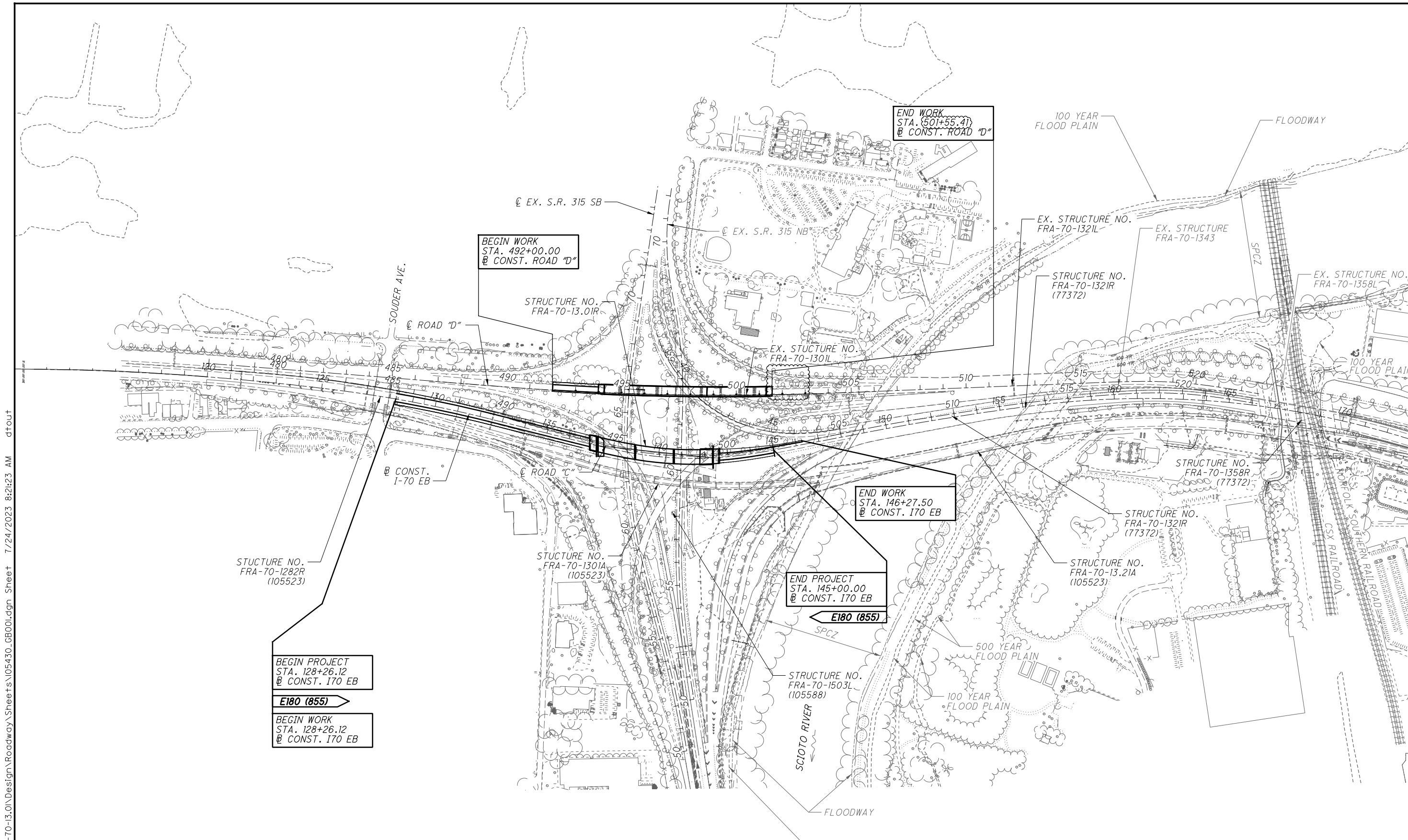
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HORIZONTAL SCALE IN FEET

CALCULATED
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SCHEMATIC PLAN

FRA-70-13.01

2
137



CATEGORY	PLAN SPLIT CODE	DESCRIPTION
INTERSTATE	02/IMS/11	STRUCTURE REPLACEMENT, NO ADDED CAPACITY (FRA-70-13.01R)
INTERSTATE	05/IMS/14	REPLACE DECK ON STRUCTURE FRA-70-13.01L (EXISTING WIDTH)

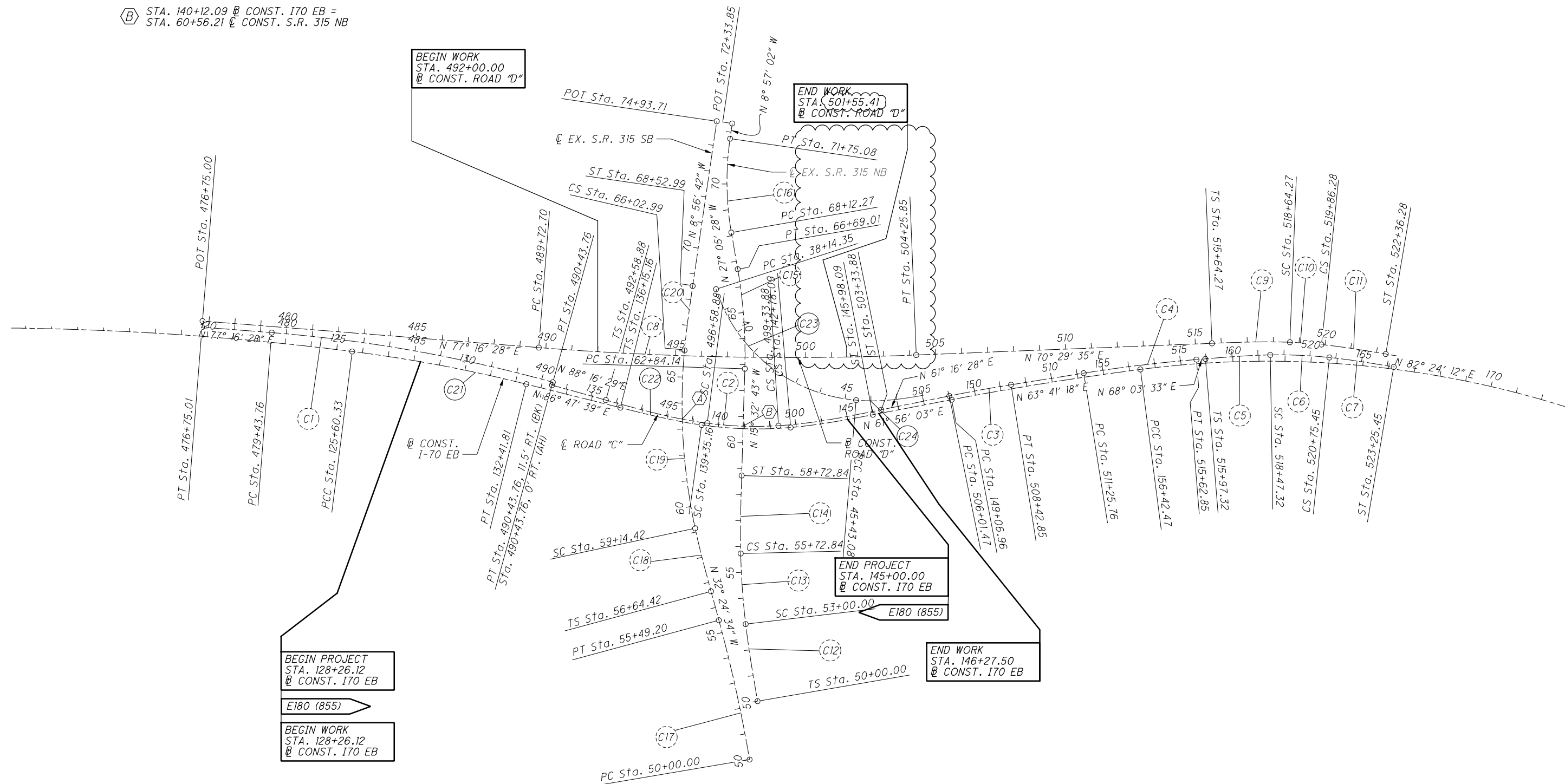
FOR PROJECT CONTROL AND REFERENCE POINTS, SEE PROJECT 4A, PART 1 FRA-70-13.11.

N:\03\60\08353\05430_FRA-70-13.01\Design\Roadway\Sheets\05430_GB001.dgn Sheet 7/24/2023 8:21:23 AM dtout

N:\03\60\08353\05430_FRA-70-13.0\Design\Roadway\Sheets\05430_GB002.dgn Sheet 7/25/2023 11:38:00 AM dftout

A STA. 138+20.83 @ CONST. 170 EB =
STA. 63+15.54 @ CONST. S.R. 315 SB

B STA. 140+12.09 @ CONST. 170 EB =
STA. 60+56.21 @ CONST. S.R. 315 NB



BEGIN PROJECT
STA. 128+26.12
@ CONST. 170 EB

E180 (855)

BEGIN WORK
STA. 128+26.12
@ CONST. 170 EB

BEGIN WORK
STA. 492+00.00
@ CONST. ROAD "D"

END WORK
STA. 501+55.41
@ CONST. ROAD "D"

END PROJECT
STA. 145+00.00
@ CONST. 170 EB

END WORK
STA. 146+27.50
@ CONST. 170 EB

CALCULATED
GAN
CHECKED
CWB

0 100 200 400
HORIZONTAL
SCALE IN FEET

GEOMETRIC PLAN

FRA-70-13.01

FOR PROJECT CONTROL AND
REFERENCE POINTS,
SEE PROJECT 4R, PART 1.

FOR CURVE DATA, SEE SHEET 4

LEGEND - PROPOSED

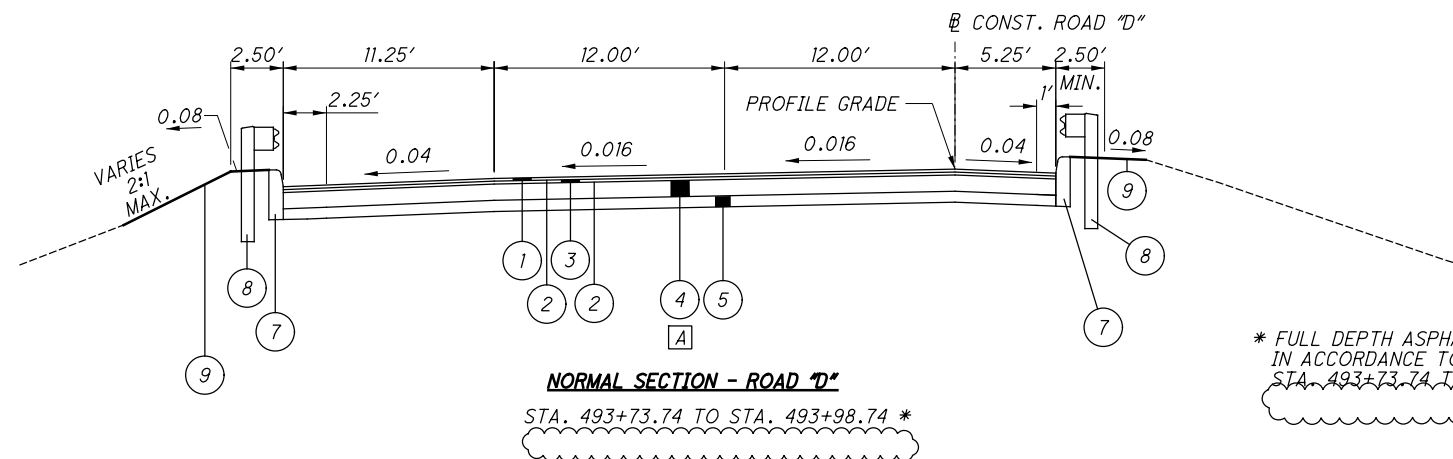
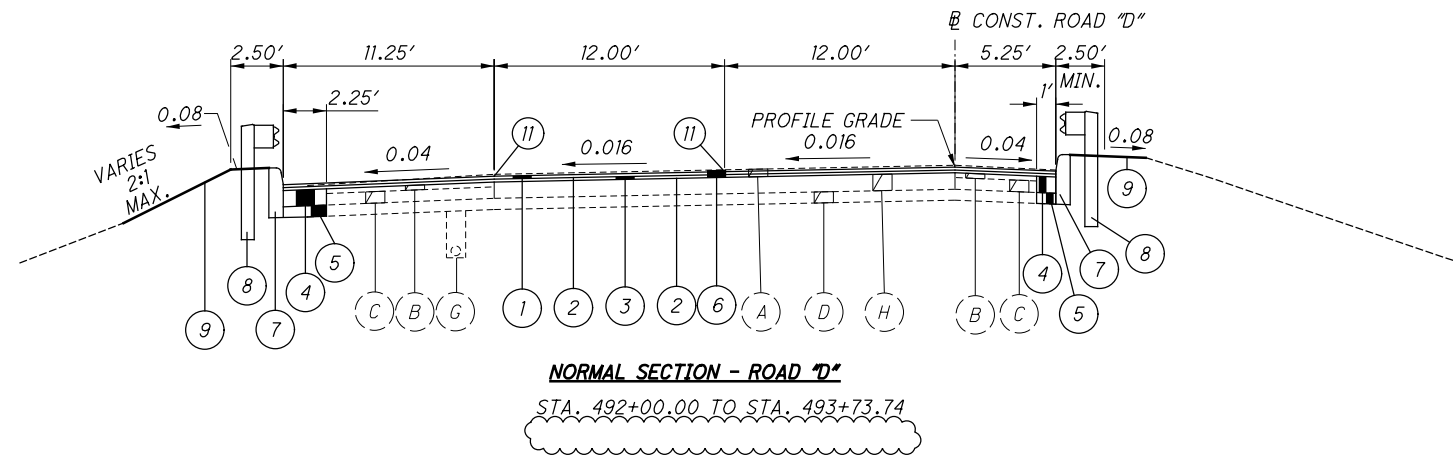
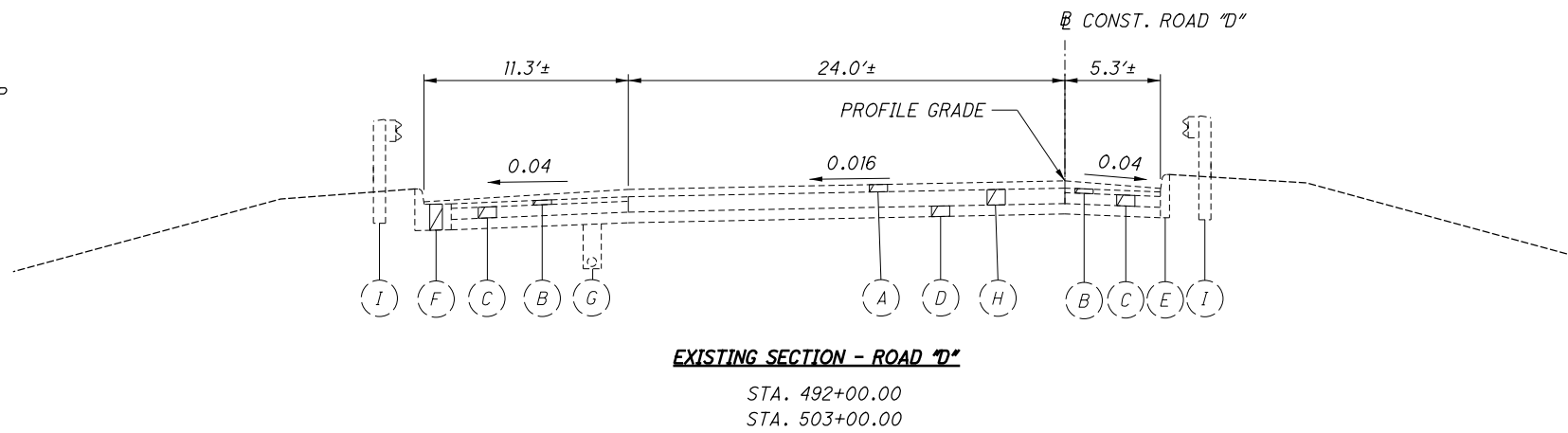
- ① ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), APP
- ITEM 442 - ANTI-SEGREGATION EQUIPMENT (LANES ONLY)
- ② ITEM 407 - NON-TRACKING TACK COAT
- ③ ITEM 442 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)
- ITEM 442 - ANTI-SEGREGATION EQUIPMENT (LANES ONLY)
- ④ ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (DEPTH VARIES SEE NOTE 1)
- ⑤ ITEM 304 - 6" AGGREGATE BASE
- ⑥ ITEM 254 - PAVEMENT PLANING, VARIABLE DEPTH, AVG 4.33"
- ⑦ ITEM 609 - CURB, TYPE 4-C
- ⑧ ITEM 606 - GUARDRAIL, TYPE MGS
- ⑨ ITEM 659 - SEEDING AND MULCHING
- ⑩ ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA
- ⑪ ITEM 872 - VOID REDUCING ASPHALT MEMBRANE (VRAM)

LEGEND - EXISTING

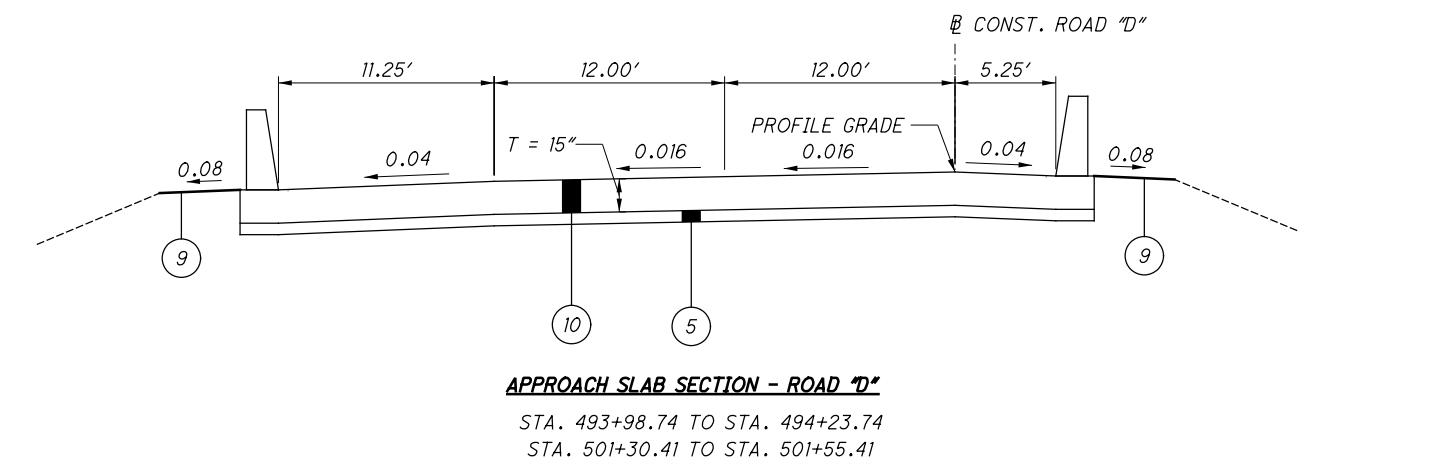
- Ⓐ ASPHALT CONCRETE (VARIABLE THICKNESS)
- Ⓑ BITUMINOUS AGGREGATE BASE
- Ⓒ POROUS BASE COURSE
- Ⓓ 6" SUBBASE
- Ⓔ STANDARD CONCRETE CURB, TYPE 6
- Ⓕ TYPE 2 CURB AND GUTTER MODIFIED
- Ⓖ UNDERDRAIN
- Ⓗ REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- Ⓘ EXISTING GUARDRAIL

NOTE 1: MATCH DEPTH TO EXISTING SUBBASE LAYER

- Ⓐ STA. 493+73.74 TO STA. 493+93.49 = 10.75" - 11.75"
- STA. 493+93.49 TO STA. 493+98.74 = 11.75"



* FULL DEPTH ASPHALT PAVEMENT TO BE PLACED IN ACCORDANCE TO SCD AS-2-15 FROM STA. 493+73.74 TO STA. 493+98.74



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SHEET NUM.								PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
9	12	15	15A	16	17	85	OFFICE CALCS	02/MS/11	05/MS/14						
ROADWAY															
LUMP		2,230						LUMP		201	11000	LS	CLEARING AND GRUBBING		
		54						1,820	410	202	32000	2,230	FT	CURB REMOVED	
		1,647						54		202	35100	54	FT	PIPE REMOVED, 24" AND UNDER	
		3						1,222	425	202	38000	1,647	FT	GUARDRAIL REMOVED	
								3		202	58100	3	EACH	CATCH BASIN REMOVED	
							1,149		196	203	10000	1,149	CY	EXCAVATION	
							6,658			203	20000	6,658	CY	EMBANKMENT	
5,561								5,561		203	20001	5,561	CY	EMBANKMENT, AS PER PLAN	9
			4					4		204	45000	4	HOUR	PROOF ROLLING	
			239					239		206	10500	239	TON	CEMENT	
								7,902		206	11000	7,902	SY	CURING COAT	
								7,902		206	15010	7,902	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
								3		206	20000	3	HOUR	TEST ROLLING	
							LUMP	LUMP		206	30000	LS	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS		
		985						985		606	15050	985	FT	GUARDRAIL, TYPE MGS	
		1						1		606	26550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
		1						1		606	35002	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
		1						1		606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
										606	60022	1	EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) (60 MPH, 48" WIDTH)	9
		592						592		622	10160	592	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
								6		622	25050	6	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
	1,800							1,800		622	41100	1,800	FT	PORTABLE BARRIER, UNANCHORED	
EROSION CONTROL															
						675		675		601	21000	675	SY	CONCRETE SLOPE PROTECTION	
				45				45		601	32200	45	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
								1		659	00100	1	EACH	SOIL ANALYSIS TEST	
	1							360	48	659	00300	408	CY	TOPSOIL	
	2,806							2,375	431	659	00510	2,806	SY	SEEDING AND MULCHING, CLASS 2	
	184							162	22	659	14000	184	SY	REPAIR SEEDING AND MULCHING	
	184							162	22	659	15000	184	SY	INTER-SEEDING	
	0.52							0.46	0.06	659	20000	0.52	TON	COMMERCIAL FERTILIZER	
	0.76							0.67	0.09	659	31000	0.76	ACRE	LIME	
	10							9	1	659	35000	10	MGAL	WATER	
	34							30	4	659	40000	34	MSF	MOWING	
					297			297		670	00720	297	SY	DITCH EROSION PROTECTION MAT, TYPE B	
								LUMP	LUMP	832	15000	LS	STORM WATER POLLUTION PREVENTION PLAN		
								LUMP	LUMP	832	15002	LS	STORM WATER POLLUTION PREVENTION INSPECTIONS		
								LUMP	LUMP	832	15010	LS	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
DRAINAGE															
				1				1		602	20000	1	CY	CONCRETE MASONRY	
					3,703			3,703		605	14020	3,703	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
					20			20		611	00510	20	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
				12				12		611	05900	12	FT	15" CONDUIT, TYPE B	
				69				69		611	06100	69	FT	15" CONDUIT, TYPE C	
				40				40		611	06700	40	FT	15" CONDUIT, TYPE F	
				1				1		611	98150	1	EACH	CATCH BASIN, NO. 3	
				1				1		611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
				4				4		611	99114	4	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	

GENERAL SUMMARY

FRA-70-13.01

CALCULATED
DNO
CHECKED
DLT

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REF NO.	SHEET NO.	STATION TO STATION					202	202	202	202			606	609	606	606	606	606	622	622						
							CURB REMOVED	GUARDRAIL REMOVED	PIPE REMOVED, 24" AND UNDER	CATCH BASIN REMOVED			GUARDRAIL, TYPE MGS	CURB, TYPE 4-C	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	ANCHOR ASSEMBLY, MGS TYPE T	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL)	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D						
				TO		FT	FT	FT	EACH			FT	FT	EACH	EACH	EACH	EACH	FT	EACH							
R1	18, 20	128+26.12	LT		136+89.35	LT	866																			
R2	18	135+00.00	LT		135+00.00	LT																				
R3	18	135+00.00	LT		128+65.00	LT																				
R4	18,20	130+39.84	LT		136+91.15	LT		653																		
R5	18	130+95.73	LT		130+95.73	LT			12	1																
R6	20	133+93.37	RT		137+00.60	RT	308																			
R7	20	135+11.19	RT		137+01.66	RT		191																		
R8	22, 24	142+45.30	RT		145+00.00	RT	258																			
R9	22, 24	142+49.37	LT		146+27.40	LT	378																			
R10	22, 24	142+49.64	LT		146+27.40	LT		378																		
R11	26	492+00.00	LT		494+07.09	LT	207																			
R12	26	492+00.00	LT		494+11.98	LT		211																		
R13	26	492+00.00	RT		494+12.91	RT	213																			
R14	26	492+00.00	RT		494+13.90	RT		214																		
B1	20	128+26.12	LT		135+50.00	LT												592	5							
B2	20	136+62.64	RT		136+97.99	RT													1							
C1	18, 20	128+26.12	RT		136+62.64	RT						835														
C2	22, 24	142+58.20	RT		144+91.14	RT						235														
C4	26	492+00.00	RT		494+11.25	RT						211														
C5	26	492+00.00	LT		494+10.61	LT						210														
G1	18, 20	128+26.12	RT		136+65.13	RT						760		1												
G2	22, 24	142+54.51	RT		144+91.14	RT						225			1	1	1	1								
TOTALS CARRIED TO GENERAL SUMMARY							2230	1647	54	3		985	1491	1	1	1	1	592	6							

CALCULATED
DNO
CHECKED
DLT

REMOVAL & ROADWAY SUBSUMMARY

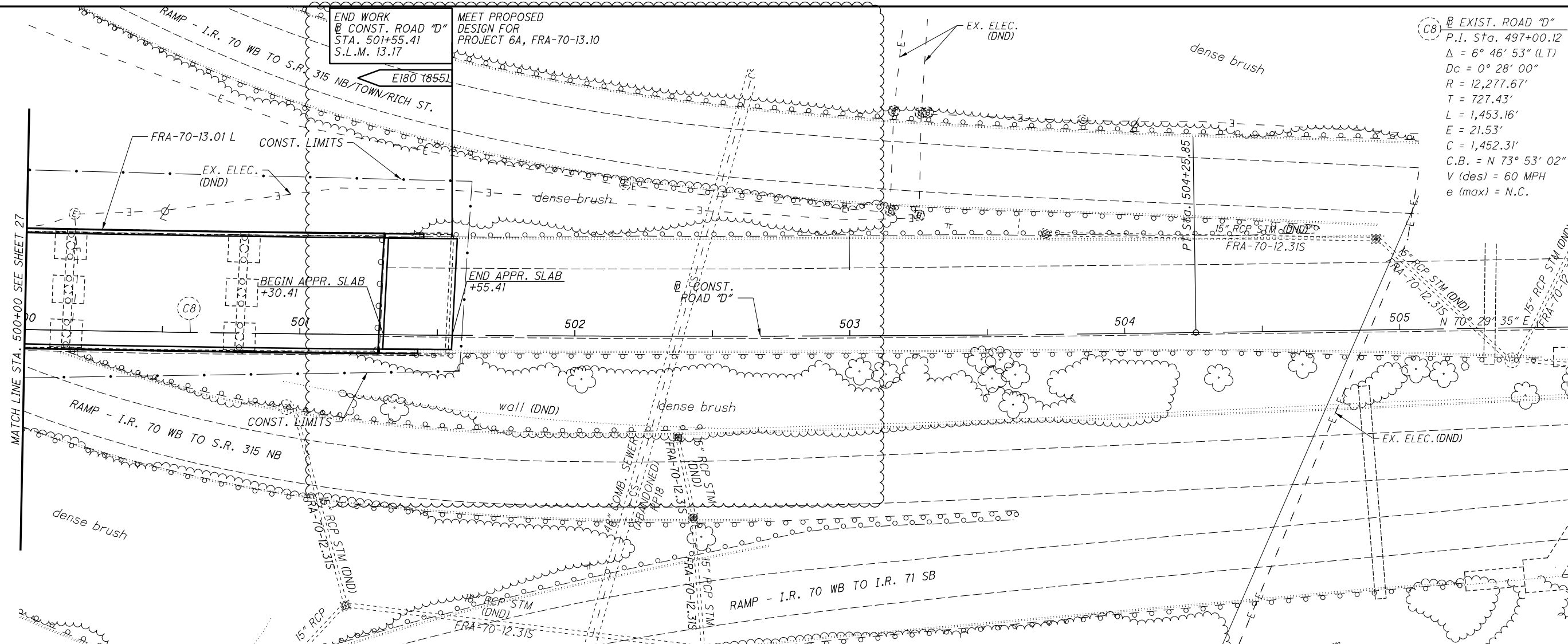
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15
137

ROUTE	STATION RANGE			SIDE	AVERAGE WIDTH (W) FT	DISTANCE (D) FT	SURFACE AREA (A) A=DxW/9 SY	CADD GENERATED AREA SY	204	206	206	206	254		302		304	407	442	442	442																								
									PROOF ROLLING HOUR	CEMENT TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP SY	PAVEMENT PLANING, ASPHALT CONCRETE, 4.33" AVG SY		ASPHALT CONCRETE BASE, PG64-22, (449) SY		AGGREGATE BASE, 6" CY	NON-TRACKING TACK COAT (0.06 GAL/SY) GAL	ANTI-SEGREGATION EQUIPMENT CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, 1.5" CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446), 1.75" CY																								
I-70 EB	128+26.12	TO	134+33.00	RT/LT	60.00	606.88	4045.87											242.75	101.15	168.58																									
	128+26.12	TO	134+33.00	RT/LT	62.17	606.88	4192.19												251.53	122.27				203.79																					
	128+26.12	TO	134+33.00	RT/LT	62.75	606.88	4231.30								1234.13				253.88																										
	128+26.12	TO	134+33.00	RT/LT	64.50	606.88	4349.31										724.88																												
	128+26.12	TO	134+33.00	RT/LT	66.50	606.88	4484.17		2.24	135.37	4484.17	4484.17																																	
	134+33.00	TO	135+29.82	RT/LT	60.00	96.82	645.47												38.73	16.14	26.89																								
	134+33.00	TO	135+29.82	RT/LT	62.17	96.82	668.81												40.13	19.51				32.51																					
	134+33.00	TO	135+29.82	RT/LT	62.75	96.82	675.05								196.89				40.50																										
	134+33.00	TO	135+29.82	RT/LT	64.50	96.82	693.88										115.65																												
	134+33.00	TO	135+29.82	RT/LT	66.50	96.82	715.39		0.36	21.60	715.39	715.39																																	
	135+29.82	TO	136+97.26	RT/LT	60.00	167.44	1116.27												66.98	27.91	46.51																								
	135+29.82	TO	136+97.26	RT/LT	62.17	167.44	1156.64												69.40	33.74				56.23																					
	135+29.82	TO	136+97.26	RT/LT	62.75	167.44	1167.43								340.50				70.05																										
	135+29.82	TO	136+97.26	RT/LT	64.50	167.44	1199.99																																						
	135+29.82	TO	136+97.26	RT/LT	66.50	167.44	1237.20		0.62	37.35	1237.20	1237.20																																	
	142+59.52	TO	145+00.00	RT/LT	52.82	240.48	1411.35												254.04	76.45	58.81			68.61																					
	142+59.52	TO	145+00.00	RT/LT	53.32	240.48	1424.71									415.54																													
	142+59.52	TO	145+00.00	RT/LT	53.82	240.48	1438.07																																						
	142+59.52	TO	145+00.00	RT/LT	54.82	240.48	1464.79		0.73	44.22	1464.79	1464.79																																	
	145+00.00	TO	145+34.06	RT/LT	6.76	34.06	25.58												4.60		1.07		1.24																						
145+00.00	TO	145+34.06	RT/LT	7.26	34.06	27.48									8.01																														
145+00.00	TO	145+34.06	RT/LT	7.76	34.06	29.37											4.89																												
145+34.06	TO	146+27.40	RT/LT	6.00	93.34	62.23												11.20		2.59		3.02																							
145+34.06	TO	146+27.40	RT/LT	6.50	93.34	67.41									19.66																														
145+34.06	TO	146+27.40	RT/LT	7.00	93.34	72.60												12.10																											
I-70 WB (ROAD "D")	492+00.00	TO	493+73.74	RT/LT	24	173.74	4169.76						463.31					55.60	38.61	19.30		22.52																							
	492+00.00	TO	493+73.74	RT/LT	16.5	173.74	2866.71												19.11		13.27		15.48																						
	492+00.00	TO	493+73.74	RT/LT	3.25	173.74	564.65								20.48		10.46																												
	493+73.74	TO	493+98.74	RT/LT	24	25.00	600.00								21.76		11.11	4.00	5.56	2.78		3.24																							
	493+73.74	TO	493+98.74	RT/LT	16.5	25.00	412.50								14.96		7.64	2.75		1.91		2.23																							
SUBTOTALS								3.95	238.53	7901.55	7901.55	463.31		2271.93		1326.41	1425.25	441.32	341.71	408.87																									
TOTALS CARRIED TO GENERAL SUMMARY								4	239	7902	7902	464		2272		1327	1426	442	342	409																									

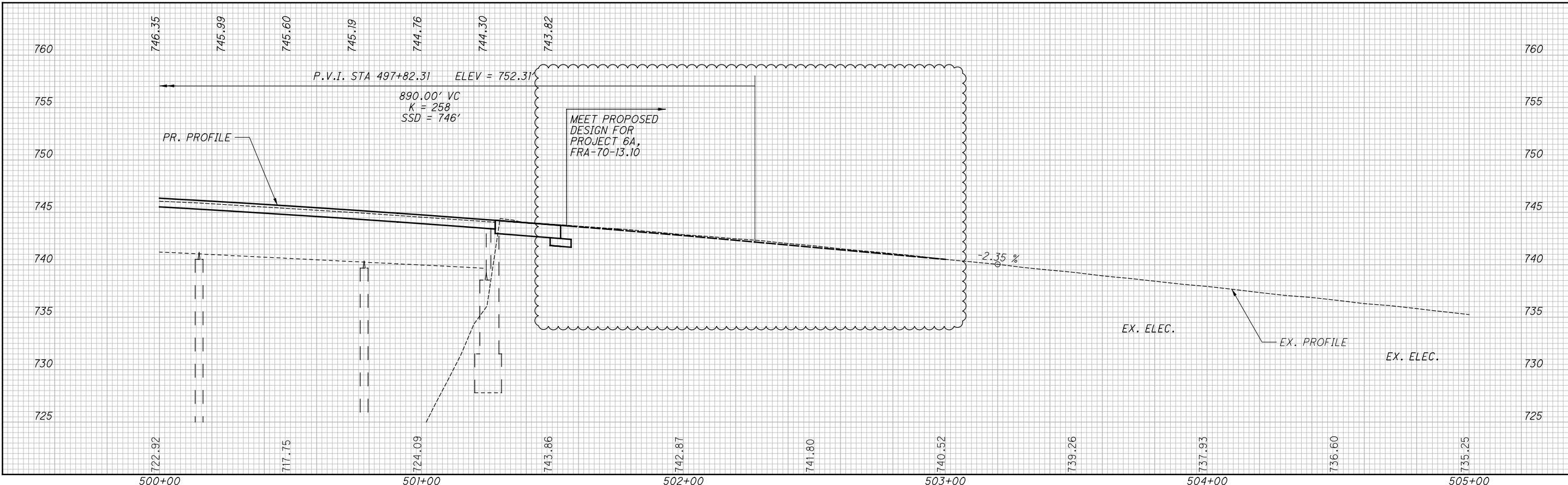
P A V E M E N T S U B S U M M A R Y	FRA - 70 - 13.01
CALCULATED	15A
DNO	137
CHECKED	
DLT	

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(C8) EXIST. ROAD "D"
 P.I. Sta. 497+00.12
 $\Delta = 6^\circ 46' 53''$ (LT)
 $D_c = 0^\circ 28' 00''$
 $R = 12,277.67'$
 $T = 727.43'$
 $L = 1,453.16'$
 $E = 21.53'$
 $C = 1,452.31'$
 $C.B. = N 73^\circ 53' 02'' E$
 V (des) = 60 MPH
 e (max) = N.C.

CALCULATED XXX
 CHECKED XXX
 HORIZONTAL SCALE IN FEET
 0 10 20 40



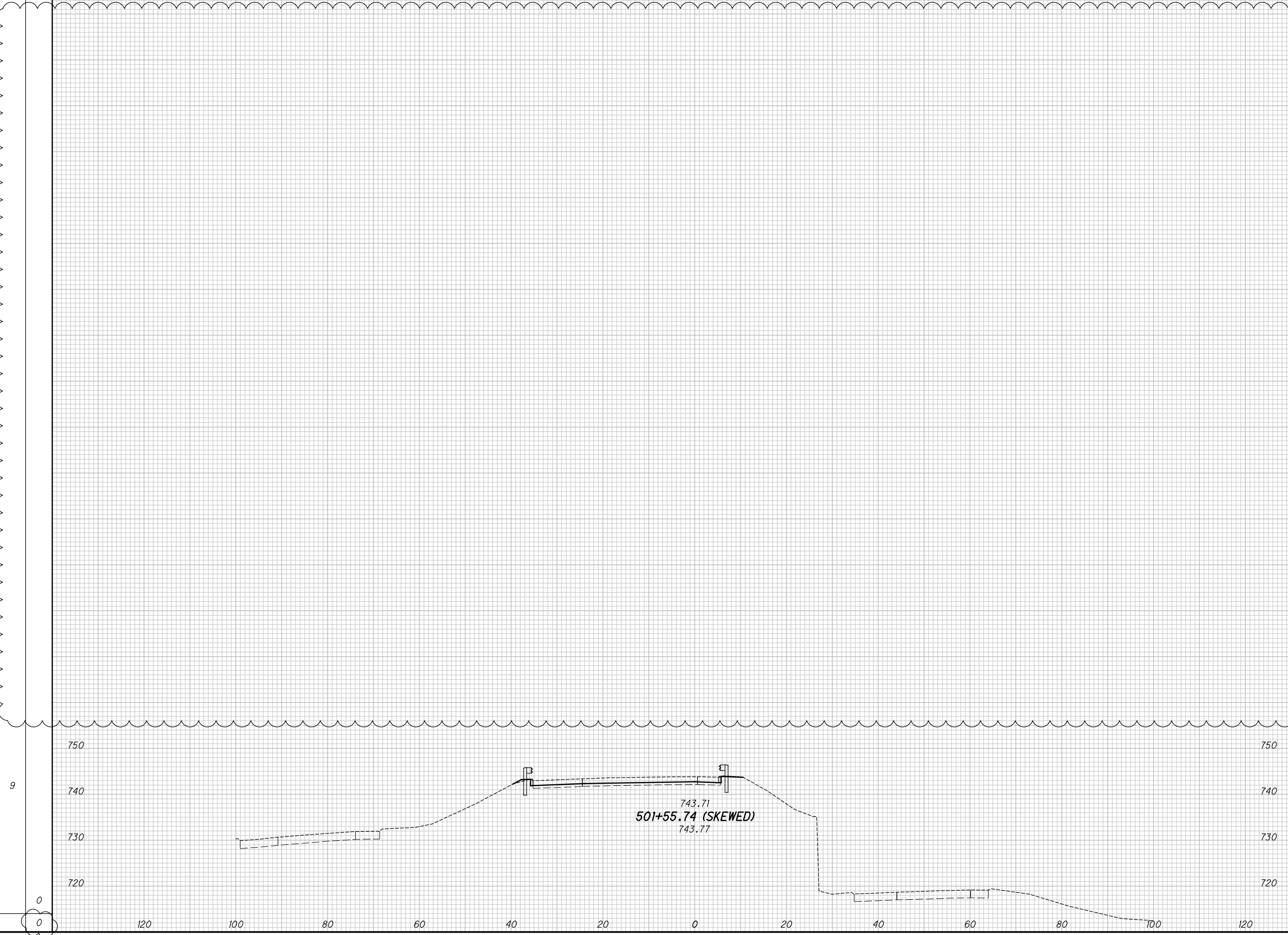
PLAN AND PROFILE - ROAD "D"
STA. 500+00 TO STA. 505+50

FRA-70-13.01

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SEEDING	
END WIDTH	SO. YDS.
0	0

END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL	XXX	XXX
47	1	0	0	41	137



CROSS SECTIONS ROAD "D"
STA. 501+55.74 TO STA. 502+50.00

FRA-70-13.01

41
137

SHEET NOT USED

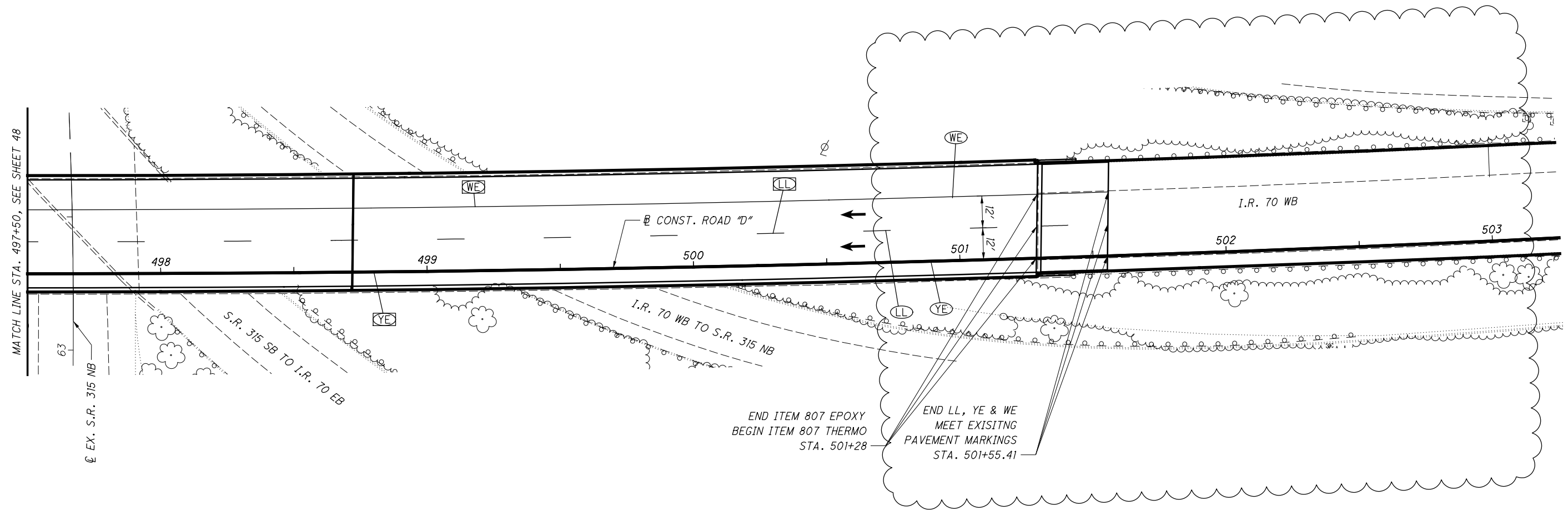
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SHEET NO.	LOCATION	STATION TO STATION	TO		ITEM DESCRIPTION																	
			FROM	TO	621	630	630	644	646	807	807	807	807	807	807	807	807	850	850			
					EACH	EACH	EACH	FT	FT	FT/MI	FT/MI	FT/MI	FT/MI	FT/MI	FT/MI	FT/MI	FT/MI	FT/MI				
45	1-70 EB	128+26 CL 128+26 CL 128+26 LT 128+26 LT	134+00 CL 134+00 RT 134+00 LT 134+00 LT		5					574			574				574					
46	1-70 EB	134+00 CL 134+00 LT 134+00 LT 134+00 RT 135+22 LT 137+22 LT 137+22 CL 137+22 RT	139+50 CL 137+22 LT 137+22 CL 137+22 RT 139+50 LT 139+50 CL 139+50 RT		5						322	322	322		68	102		228	228	228		
47	1-70 EB	139+50 CL 139+50 LT 139+50 CL 139+50 RT 139+50 LT 140+29 CL 142+35 LT 142+35 CL 142+35 RT	145+00 CL 142+35 LT 142+35 CL 142+35 RT 142+46 LT		5				80							102			285	285	285	
48	1-70 WB	492+00 CL 492+00 LT 492+00 LT 492+00 CL 494+23 LT 494+23 LT 494+23 CL	497+50 CL 494+23 LT 494+23 CL 497+50 LT 497+50 LT 497+50 CL		5	4	1			223		223							265	265	265	
49	1-70 WB	497+50 CL 497+50 LT 497+50 LT 497+50 CL 501+28 LT 501+28 LT 501+28 CL	503+00 CL 501+28 LT 501+28 LT 501+28 CL 501+55.41 LT 501+55.41 LT 501+55.41 CL		5															378	378	378
TOTALS THIS SHEET										1384	1412	1412	1246	1218	1218		4236	3654				
TOTALS CARRIED TO GENERAL SUMMARY					25	4	1	68	204	0.53	0.27		0.47	0.23			0.80	0.69				

CALCULATED MJB CHECKED JML
SIGNING AND PAVEMENT MARKING SUBSUMMARY
FRA-70-13.01
 44
 137

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CALCULATED
MJB
CHECKED
JML

0 20 40
HORIZONTAL
SCALE IN FEET

SIGNING AND PAVEMENT MARKING PLAN
STA. 492+00 TO STA. 497+50

FRA-70-13.01

SIGN LEGEND			
	PROPOSED		
	EXISTING TO REMAIN		
	EXISTING TO BE REMOVED		

ITEM 644	ITEM 646	ITEM 807 THERMO	ITEM 807 EPOXY	ODOT LINE SPECIFICATIONS
				EDGE LINE, WHITE, 6"
				EDGE LINE, YELLOW, 6"
				LANE LINE, 6"
				TRANSVERSE LINE, YELLOW, 24"