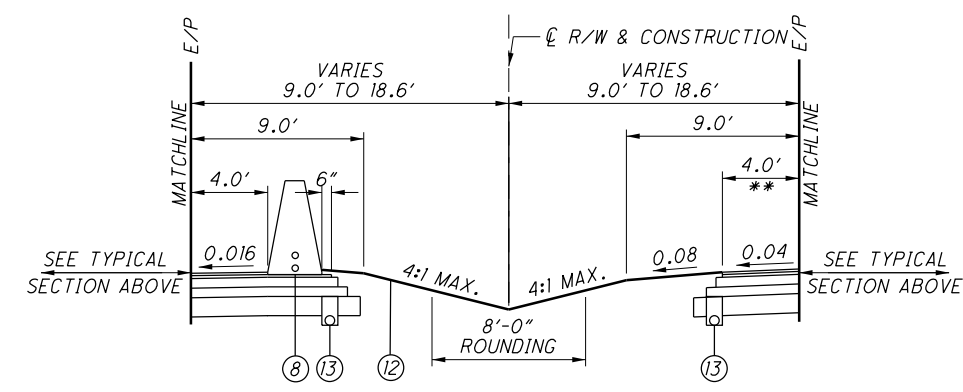
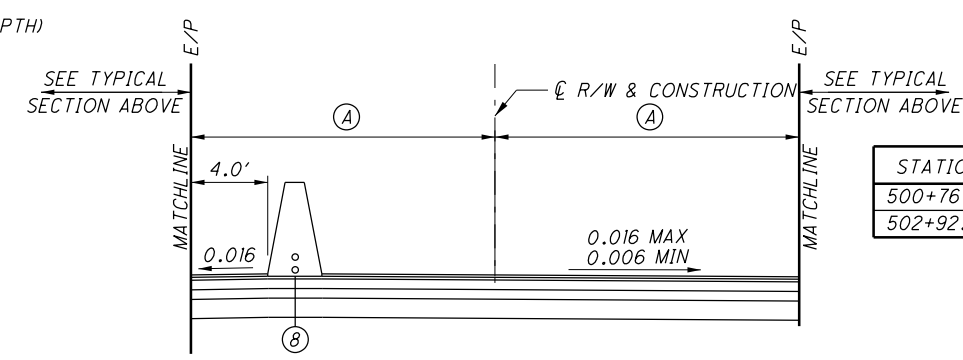


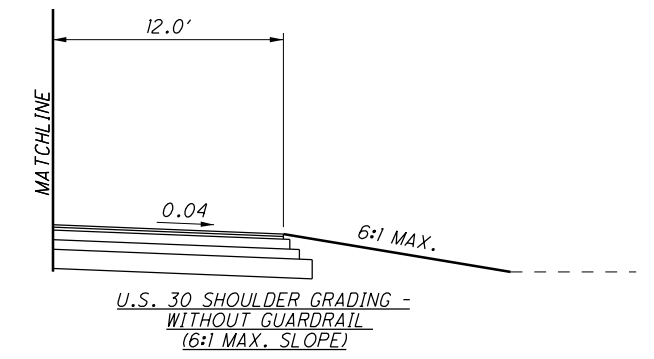
GRASS MEDIAN TYPICAL SECTION
STA. 489+00 TO STA. 495+00
STA. 685+00 TO STA. 689+50



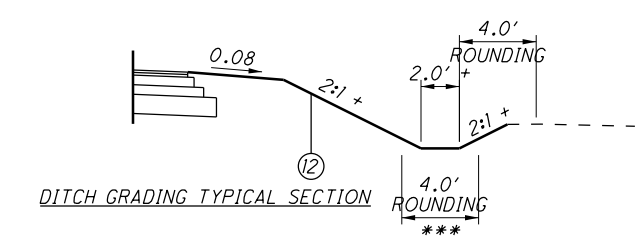
GRASS MEDIAN TYPICAL SECTION - WITH BARRIER
STA. 495+00 TO STA. 500+76.38
STA. 679+09.77 TO STA. 685+00 (MIRROR TYPICAL)



PAVED MEDIAN TYPICAL SECTION - WITH BARRIER DETAIL 1
STA. 500+76.38 TO STA. 502+92.15



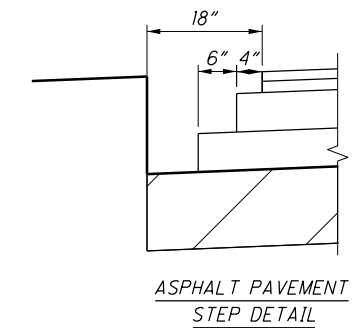
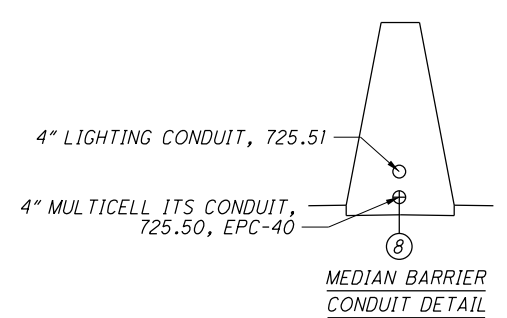
U.S. 30 SHOULDER GRADING - WITHOUT GUARDRAIL (6:1 MAX. SLOPE)



DITCH GRADING TYPICAL SECTION

PROPOSED ITEM LEGEND

- ① ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447) (SEE NOTE 3)
- ② ITEM 442 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446), AS PER PLAN
- ③ ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN
- ④ ITEM 304 - 6" AGGREGATE BASE
- ⑤ ITEM 407 - NON-TRACKING TACK COAT
- ⑥ ITEM 407 - TACK COAT
- ⑦ ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13")
- ⑧ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 (WITH TWO 4" RACEWAYS)
- ⑨ ITEM 606 - GUARDRAIL, TYPE MGS
- ⑩ ITEM 204 - SUBGRADE COMPACTION
- ⑪ ITEM 609 - CURB, TYPE 6
- ⑫ ITEM 659 - SEEDING AND MULCHING
- ⑬ ITEM 605 - 6" BASE PIPE UNDERDRAIN WITH GEOTEXTILE FABRIC, 707.31 OR 707.41 (18" NORMAL DEPTH)
- ⑭ ITEM 452 - 10.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QCIP WITH QC/OA
- ⑮ ITEM 206 - CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP
- ⑯ ITEM 206 - CURING COAT
- ⑰ ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- ⑱ ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15")
- ⑲ ITEM 608 - 4" CONCRETE WALK
- ⑳ ITEM 609 - CURB, TYPE 4-C
- ㉑ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (SEE TYPICALS FOR DEPTH)
- ㉒ ITEM 617 - COMPACTED AGGREGATE (AVERAGE THICKNESS - 2")
- ㉓ ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), AS PER PLAN (VARIABLE THICKNESS - SEE TYPICALS FOR DEPTH)
- ㉔ ITEM 202 - WEARING COURSE REMOVED
- ㉕ ITEM 442 - 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446), AS PER PLAN
- ㉖ ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), AS PER PLAN (VARIABLE THICKNESS - 1 3/4" TO 2 1/2")
- ㉗ ITEM 305 - 9" CONCRETE BASE, CLASS QCIP
- ㉘ ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER
- ㉙ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- ㉚ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN
- ㉛ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 (WITH 4" RACEWAY)
- ㉜ ITEM 608 - 4" CONCRETE MEDIAN
- ㉝ ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (VARIABLE THICKNESS - SEE TYPICALS FOR DEPTH)
- ㉞ ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22



STATION	(A)
500+76.38	9.0'
502+92.15	5.4'

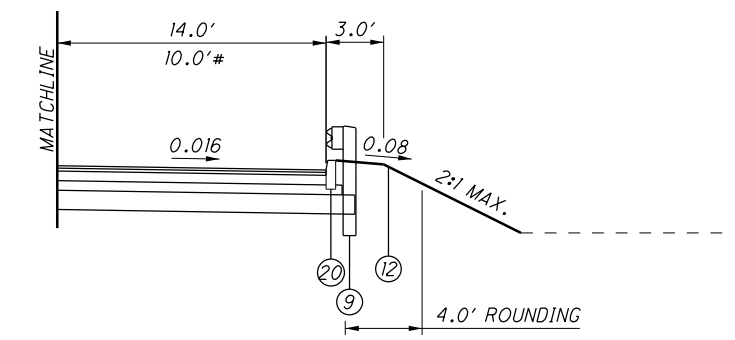
NOTE:

- 1. SEE SHEET 26 FOR LEGEND OF EXISTING PAVEMENT.
- 2. FOR SPEED CHANGE LANE TYPICAL SECTION SEE SHEET 18.
- 3. THE CONTRACTOR SHALL PROVIDE ANTI-SEGREGATION EQUIPMENT FOR ASPHALT SURFACE COURSE.
- * TRANSITION CROSS-SLOPE FROM 0.016 TO -0.016 (SLOPE TOWARDS OUTSIDE SHOULDER) FROM STA. 494+00 TO STA. 495+00 AND STA. 685+00 TO STA. 686+00
- ** TRANSITION SHOULDER CROSS-SLOPE FROM -0.04 TO +0.009 FROM STA. 500+26.45 TO STA. 500+76.45
- *** VEGETATED BIOFILTERS SHALL NOT BE ROUNDED. REFER TO SITE PLAN FOR LOCATIONS.
- + OR AS SHOWN ON CROSS SECTIONS

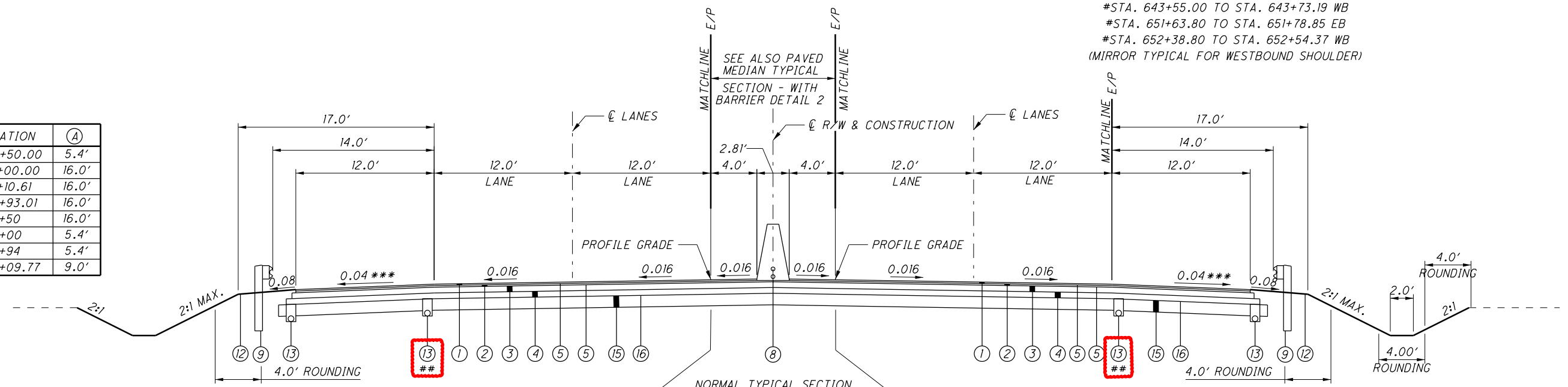
THIS UNDERDRAIN MAY BE SHIFTED TOWARDS THE OUTSIDE OF THE SHOULDER AS DIRECTED BY THE ENGINEER, TO ACCOUNT FOR EQUIPMENT TOLERANCES.

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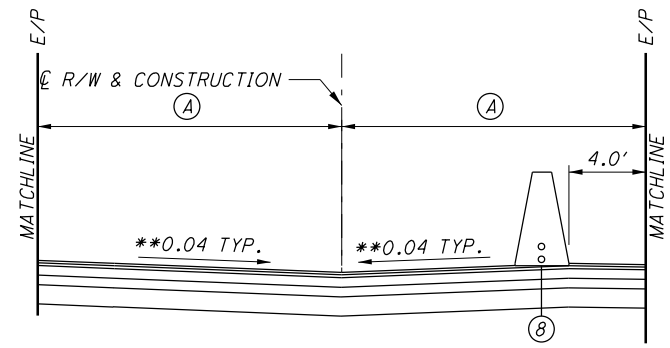
STATION	(A)
602+50.00	5.4'
610+00.00	16.0'
610+10.61	16.0'
626+93.01	16.0'
627+50	16.0'
634+00	5.4'
676+94	5.4'
679+09.77	9.0'



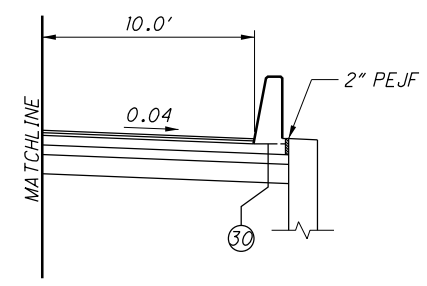
CURBED SHOULDER TYPICAL SECTION
 STA. 566+58.00 TO STA. 566+91.21 EB
 STA. 601+06.34 TO STA. 601+45.00 EB
 STA. 601+11.14 TO STA. 601+49.00 WB
 STA. 627+18.41 TO STA. 627+39.00 EB
 #STA. 642+95.00 TO STA. 643+21.80 EB
 #STA. 643+55.00 TO STA. 643+73.19 WB
 #STA. 651+63.80 TO STA. 651+78.85 EB
 #STA. 652+38.80 TO STA. 652+54.37 WB
 (MIRROR TYPICAL FOR WESTBOUND SHOULDER)



NORMAL TYPICAL SECTION
 STA. 502+92.15 TO STA. 544+68.17
 STA. 556+76.50 TO STA. 566+51.08
 STA. 569+17.89 TO STA. 584+54.35
 STA. 596+68.83 TO STA. 598+95.24
 STA. 601+08.74 TO STA. 602+50
 STA. 634+00 TO STA. 643+50.86
 STA. 646+15.04 TO STA. 652+21.98
 STA. 654+60.39 TO STA. 676+94



PAVED MEDIAN TYPICAL SECTION - WITH BARRIER DETAIL 2
 STA. 602+50 TO STA. 610+10.61
 STA. 626+93.01 TO STA. 634+00*
 STA. 676+94 TO STA. 679+09.77
 (MIRROR TYPICAL FOR BARRIER ALONG WESTBOUND LANES)



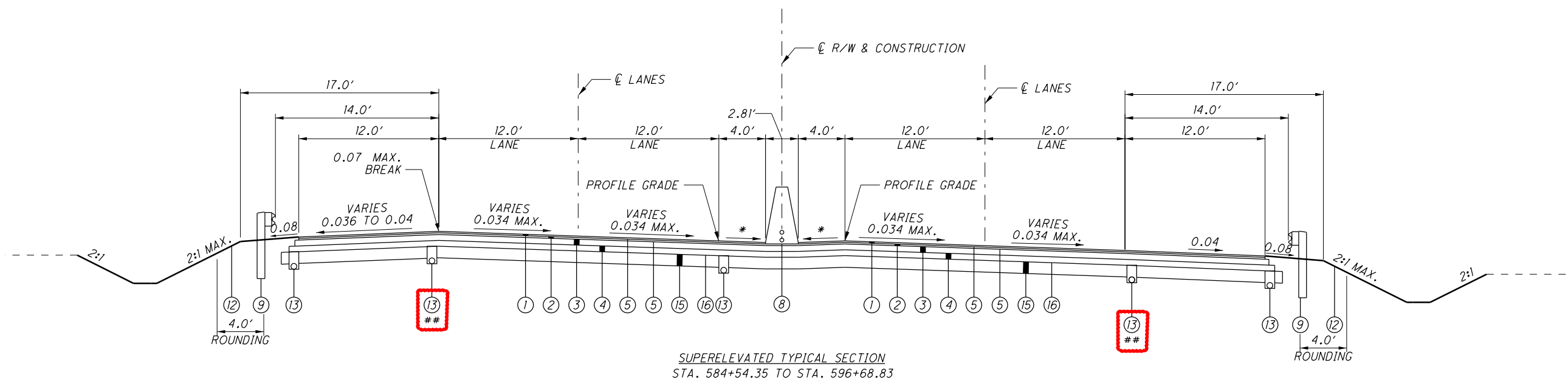
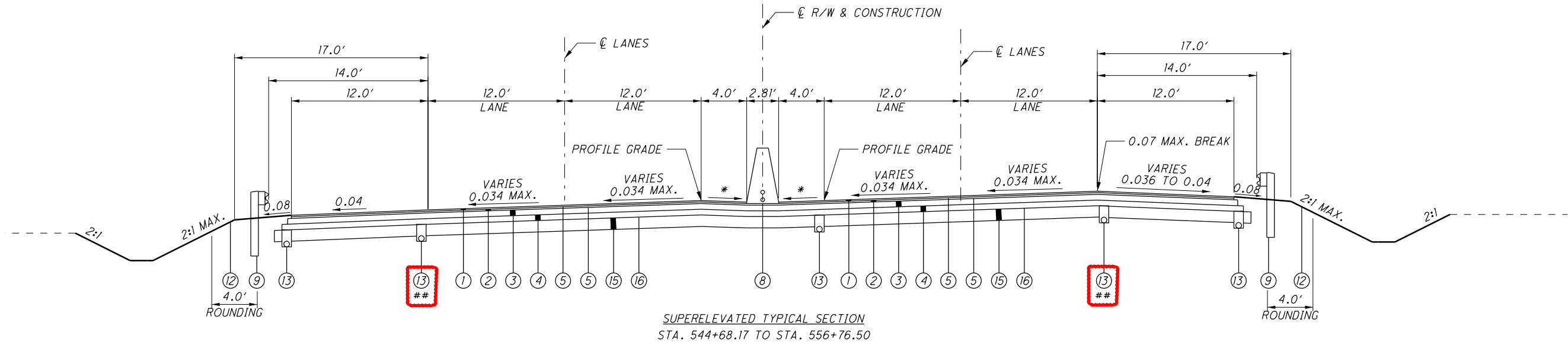
TYPICAL SECTION - WITH BARRIER DETAIL
 STA. 645+89.29 TO STA. 647+00

NOTE:

- SEE SHEET 12 FOR LEGEND.
 - FOR SINGLE SLOPE BARRIER TRANSITION AT THE PIERS UNDER TRIMBLE ROAD FROM 518+14 TO STA. 519+62, SEE SHEET 993 FOR PAVEMENT TRANSITION DETAIL.
 - FOR SINGLE SLOPE BARRIER TRANSITION AT THE PIERS UNDER FIFTH AVENUE FROM 677+44 TO STA. 678+30, SEE SHEET 996 FOR PAVEMENT TRANSITION DETAIL.
 - FOR SPEED CHANGE LANE TYPICAL SECTION SEE SHEET 18.
 - FOR ROCK CUT TYPICAL SECTION, SEE SHEET 15.
 - SEE SHEET 12 FOR DITCH GRADING TYPICAL SECTION.
- * STA. 626+91.40 TO STA. 627+01.40
 MEDIAN CONCRETE BARRIER SHALL BE PROVIDED FOR EASTBOUND AND WESTBOUND DIRECTIONS.
- ** TRANSITION SHOULDER CROSS-SLOPE FROM 0.04 TO 0.020 OVER A DISTANCE OF 20 FEET TO MEET EXISTING CATCH BASIN GRATE AT STA. 609+74
- *** TRANSITION SHOULDER CROSS-SLOPE FROM 0.04 TO 0.016 AND 0.016 TO 0.04 OVER A DISTANCE OF 65 FEET TO MATCH APPROACH SLAB CROSS-SLOPE.

THIS UNDERDRAIN MAY BE SHIFTED TOWARDS THE OUTSIDE OF THE SHOULDER AS DIRECTED BY THE ENGINEER, TO ACCOUNT FOR EQUIPMENT TOLERANCES.

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NOTE:

1. SEE SHEET 12 FOR LEGEND.
2. FOR SPEED CHANGE LANE TYPICAL SECTION SEE SHEET 18.

* SEE SUPERELEVATION TABLES ON SHEETS 869 & 870 FOR SHOULDER CROSS SLOPE.
 ** THIS UNDERDRAIN MAY BE SHIFTED TOWARDS THE OUTSIDE OF THE SHOULDER AS DIRECTED BY THE ENGINEER, TO ACCOUNT FOR EQUIPMENT TOLERANCES.

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ITEM 614 MAINTAINING TRAFFIC

CONTRA-FLOW SHALL BE USED TO MAINTAIN A MINIMUM OF TWO LANES OF US 30 TRAFFIC IN EACH DIRECTION AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC UNLESS THE PERMITTED LANE CLOSURE SCHEDULE (PLCS) REQUIREMENTS ARE MET. LANE CLOSURES ARE DISCUSSED IN MORE DETAIL IN THE PHASING NOTES.

IN GENERAL TRAFFIC ON ALL SIDE ROADS WILL BE MAINTAINED AND ADDRESSED AS SHOWN IN THE PLANS. SOME SIDE ROADS WILL REQUIRE SHORT TERM DETOURS.

THE CONTRACTOR IS EXPECTED TO UTILIZE MULTIPLE CREWS AS NECESSARY TO COMPLETE THE PROJECT ON TIME OR AHEAD OF SCHEDULE. THE DURATION OF THE RAMP CLOSURES SHALL BE MINIMIZED.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 DURING PERIODS WHEN THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

THE MAJORITY OF THE LENGTH OF THE TRIMBLE ROAD RAMPS WILL BE PLANED AND RESURFACED. THE PLANED AND RESURFACED PORTIONS OF THE RAMPS SHALL HAVE THE SURFACE COURSE COMPLETED BEFORE OPENING THE RAMPS TO TRAFFIC. THESE RAMPS SHALL NOT BE OPENED TO TRAFFIC WITH ONLY THE INTERMEDIATE COURSE IS PLACED. THESE RAMPS CARRY A HIGH VOLUME OF TRAFFIC.

EAST OF SR 545 THE MINIMUM WIDTH FROM THE FACE OF THE CONCRETE MEDIAN BARRIER ON THE LEFT TO THE FACE OF THE SINGLE SLOPED CONCRETE BARRIER ON THE RIGHT IS NOT WIDE ENOUGH TO MAINTAIN US 30 EB CONTRA-FLOW TRAFFIC. THE EXISTING PAVEMENT AND MEDIAN IN THIS AREA ARE ALSO LOCATED IN A TAPER SECTION. THE MEDIAN BARRIER AND THE CONCRETE BARRIER MAY BE RECONSTRUCTED AS SHOWN IN THE DETAILS TO PROVIDE ADEQUATE LATERAL CLEARANCE FOR CONTRA-FLOW MOT PHASING. IF THE GRADING FOR THE ROCK SLOPES IS COMPLETED PRIOR TO RECONSTRUCTING THE PROPOSED BARRIER WALL, THE TEMPORARY BARRIER WALL MAY NOT BE REQUIRED AND MAY BE NONPERFORMED.

THE CONSTRUCTION OF THE PAVEMENT FOR MAINTAINING TRAFFIC IN PHASES 1 AND 2 REQUIRES A LANE CLOSURE OF THE LANE ADJACENT THE WORK. THE LANE CLOSURES SHALL MEET THE TIME LIMITATIONS PER THE CURRENT ON-LINE PERMITTED LANE CLOSURE SCHEDULE (PLCS) OR AS NOTED IN THE GENERAL OR PHASING NOTES.

THE CONTRACTOR SHALL NOTIFY THE PUBLIC INFORMATION OFFICER (CONTACT INFO FOLLOWS OR AS PROVIDED AT THE PRECONSTRUCTION MEETING) IN WRITING A MINIMUM OF 21 DAYS IN ADVANCE OF THE DATE ANY DETOUR IS NEEDED. THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING. THE PUBLIC INFORMATION OFFICER WILL NOTIFY THE LOCAL EMERGENCY MANAGEMENT AGENCIES AND THE DISTRICT PERMITS DEPARTMENT.

PUBLIC INFORMATION OFFICER
ODOT DISTRICT 3
906 N. CLARK AVENUE
ASHLAND, OH 44805
OFFICE: (419) 207-7181 OR 7182
D03.PIO@DOT.OHIO.GOV

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

PERMITTED LANE CLOSURE ON US 30

A LANE CLOSURE IS DEFINED AS ANY RESTRICTION OF A LANE OF TRAFFIC INCLUDING, BUT NOT LIMITED TO, SET UP AND TEAR DOWN OF TRAFFIC CONTROL ZONES.

SEE PERMITTED LANE CLOSURE SCHEDULE (PLCS) AT [HTTP://PLCM.DOT.STATE.OH.US/](http://plcm.dot.state.oh.us/).

US 30 LANE CLOSURE DISINCENTIVE- THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE IN THE AMOUNT SHOWN IN THE LANE VALUE CONTRACT ON SHEET 39 WHEN LANES ARE CLOSED TO TRAFFIC DURING TIMES DESIGNATED AS "LANE CLOSURE NOT PERMITTED" ON THE ODOT PLCM WEB SITE AT <http://plcm.dot.state.oh.us>.

ALTERNATE METHODS

THE MAINTENANCE OF TRAFFIC PLANS HAVE BEEN DEVELOPED ACCORDING TO THE APPROVED MAINTENANCE OF TRAFFIC ALTERNATIVES ANALYSIS (MOTAA). ANY CHANGES TO THE US 30 MAINTENANCE OF TRAFFIC MAY REQUIRE A REVISION TO THE APPROVED MOTAA AND SUBSEQUENT APPROVAL BY ODOT.

OFFSET TO BARRIER

UNLESS OTHERWISE SHOWN IN THE PLANS, THE OFFSET FROM THE TRAVEL WAY TO THE BARRIER TOE SHALL BE A MINIMUM OF 1 FOOT. THE OFFSET FROM THE BACK SIDE OF THE BARRIER TOE TO THE WORK AREA SHALL BE A MINIMUM OF 1 FOOT.

RAMP RECONSTRUCTION AND SIGNAGE

ALL PROPOSED (NEW) GROUND MOUNTED SIGNS AND CANTILEVER MOUNTED GUIDE SIGNS FOR THE RESPECTIVE RAMPS SHALL BE IN PLACE PRIOR TO OPENING THE RAMPS TO TRAFFIC AFTER THE RAMPS HAVE BEEN CLOSED AND RECONSTRUCTED. THE CONTRACTOR MAY REMOVE AND REINSTALL THE EXISTING SIGN SHEETING AT THE PROPOSED SIGN LOCATIONS AT THEIR EXPENSE UNTIL THE NEW SIGN SHEETING IS AVAILABLE UPON THE APPROVAL OF THE ENGINEER.

THE TIMING OF ANY PROPOSED SIGNAGE INSTALLATION ALONG US 30 OR A SIDE ROAD WILL DEPEND ON THE CONTRACTOR'S PHASING OF WORK. IT IS NOT INTENDED TO HAVE A PROPOSED SIGN CONFLICT WITH THE CONTRACTOR'S CONSTRUCTION PHASING.

TRIMBLE ROAD RAMPS AT US 30

THESE RAMPS WILL REMAIN AND BE RECONNECTED TO THE PROPOSED US 30 WORK. THE RAMPS WILL BE PLANED AND RESURFACED FROM TRIMBLE ROAD TO THE PROPOSED TIE-IN WORK AT THE US 30.

TRIMBLE ROAD BRIDGE OVER US 30

VANDAL PROTECTION FENCE IS BEING INSTALLED. THE POSTED SPEED LIMIT IS 35 MPH ON TRIMBLE ROAD. WHEN CONSTRUCTING THE VANDAL PROTECTION FENCE, THE CURB LANE ADJACENT TO THE WORK WILL BE CLOSED USING DRUMS AS PER MT-95.31 AND TRAFFIC WILL BE MAINTAINED AS FOLLOWS:

1. THE VANDAL FENCE ON THE EAST SIDE OF THE BRIDGE MAY BE CONSTRUCTED WHEN THE US 30 EB EXIT TO TRIMBLE ROAD RAMP A IS CLOSED. DO NOT CLOSE THE RAMP IN ORDER TO CONSTRUCT THE VANDAL FENCE.
2. THE VANDAL FENCE ON THE WEST SIDE OF THE BRIDGE MAY BE CONSTRUCTED WHEN THE US 30 WB EXIT TO TRIMBLE ROAD RAMP B IS CLOSED. DO NOT CLOSE THE RAMP IN ORDER TO CONSTRUCT THE VANDAL FENCE.
3. THE CONTRACTOR MAY CONSTRUCT THE VANDAL FENCE DURING THE ALLOWABLE LANE CLOSURE TIMES PERMITTED IN THE PLCS FOR US 30 BUT ONLY ONE DIRECTION OF TRAFFIC ON TRIMBLE ROAD MAY HAVE A CURB LANE CLOSURE AT A TIME.
4. DO NOT CONSTRUCT THE VANDAL FENCE WHEN TRAFFIC IS DETOURED TO THIS LOCATION DURING THE US 30 PHASING.

US 30 OVER SR 39 BRIDGES AND SR 39 PAVEMENT WORK

THE FOLLOWING WORK WILL BE COMPLETED IN THIS AREA:

1. THE INTERCHANGE RAMP CHANGES.
2. A PORTION OF THE PAVEMENT ON SR 39 UNDER US 30 WILL BE REMOVED AND REPLACED TO PROVIDE ADEQUATE VERTICAL CLEARANCE UNDER US 30.
3. SR 39 WILL BE RESTRIPEDED FROM 4 LANES TO 3 LANES.
4. A NEW TRAFFIC SIGNAL WILL BE INSTALLED AT RAMP H.

5. SR 39 WILL BE REDUCED TO 1 LANE OF TRAFFIC IN EACH DIRECTION FOR MOST OF THIS WORK. WHEN A CLOSURE IS REQUIRED FOR THE DEMOLITION OR ERECTION OF THE BRIDGE BEAMS, THE CLOSURE TIMES SHALL ONLY OCCUR ONLY BETWEEN THE HOURS OF 5:00 PM FRIDAY TO 9:00 PM SUNDAY. SEE THE PHASING NOTES FOR ADDITIONAL RESTRICTIONS. AK STEEL REQUIRES A MINIMUM OF 5 CALENDAR DAY ADVANCE NOTICE BEFORE THE DETOUR CAN BE IN PLACE IN ORDER TO REROUTE CRITICAL TIMED DELIVERIES WITH THEIR SUPPLIERS.

US 30 OVER BOWMAN STREET BRIDGES

THE BRIDGE WORK WILL BE PERFORMED IN MULTIPLE PHASES AS DETAILED IN THE PLANS. THE RIGHT SIDE PORTION OF THE US 30 EB BRIDGE OVER BOWMAN STREET IS TO BE CONSTRUCTED AND COMPLETED IN THE US 30 PHASE 1A BEFORE UTILIZING THE CROSSOVERS IN US 30 PHASE 3.

ONE LANE OF TRAFFIC IN EACH DIRECTION ON BOWMAN STREET WILL GENERALLY BE MAINTAINED. WHEN A SHORT DURATION CLOSURE IS REQUIRED FOR THE DEMOLITION OR ERECTION OF THE BEAMS, THE SHORT DURATION CLOSURE TIMES SHALL MATCH THE "US 30 SHORT TERM CLOSURE LIMITATIONS" NOTE. AK STEEL REQUIRES A MINIMUM OF 5 CALENDAR DAY ADVANCE NOTICE BEFORE THE DETOUR CAN BE IN PLACE IN ORDER TO REROUTE CRITICAL TIMED DELIVERIES WITH THEIR SUPPLIERS.



LONGVIEW AVENUE CUL-DE-SAC

THE LONGVIEW AVENUE CUL-DE-SAC IS TO BE CONSTRUCTED BEFORE OR WHEN RAMPS H, HL AND HR ARE CONSTRUCTED. THE LIFT GATE SHALL BE FULLY FUNCTIONAL BEFORE OPENING THIS CUL-DE-SAC TO TRAFFIC.

LONGVIEW AVENUE RELOCATION

LONGVIEW AVENUE BETWEEN SR 39 AND BOWMAN STREET IS HEAVILY TRAVELED BY LARGE TRUCKS ACCESSING THE AK STEEL AND OTHER MANUFACTURING IN THE AREA. THE RELOCATION WORK ON LONGVIEW AVENUE EAST OF SR 39 SHALL BE COMPLETED BEFORE CONFLICTING EARTHWORK FOR THE US 30 BRIDGE OVER BOWMAN STREET AND THE ROADWAY WIDENING BETWEEN SR 39 AND THE SR 13 BRIDGE ON THE US 30 EB SIDE IS CONSTRUCTED. THE ROADWAY WILL BE CLOSED AND TRAFFIC WILL BE DETOURED DURING A PORTION OF THE RELOCATION WORK. AK STEEL REQUIRES A MINIMUM OF 5 CALENDAR DAY ADVANCE NOTICE BEFORE THE DETOUR CAN BE IN PLACE IN ORDER TO REROUTE CRITICAL TIMED DELIVERIES WITH THEIR SUPPLIERS. SEE PHASE 1 FOR ADDITIONAL NOTES RELATED TO THIS AREA.

LEGEND FOR PHASES

-  WORK AREA
-  TEMPORARY PAVEMENT

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CALCULATED
BAD
CHECKED
SDS

MAINTENANCE OF TRAFFIC GENERAL NOTES

RIC-30-9.26

LANE CLOSURE/REDUCTION REQUIRED

UNLESS OTHERWISE NOTED IN THE PLANS, 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.

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 CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS > 12 HOURS & <2 WEEKS <12 HOURS	21 CALENDAR DAYS PRIOR TO CLOSURE 14 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE

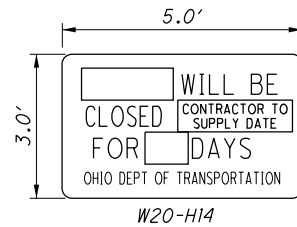
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES N/A 14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

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

NOTIFICATION OF TRAFFIC RESTRICTIONS

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

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.



NOTIFICATION OF CLOSURE SIGN TIME TABLE

ITEM	DURATION CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS > 12 HOURS & <2 WEEKS <12 HOURS	14 CALENDAR DAYS PRIOR TO CLOSURE 7 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE

ENTRANCE RAMP DECISION SIGHT DISTANCES

SOME OF THE MT STANDARD DRAWINGS REQUIRE THE CONSTRUCTION PLANS TO NOTE THE DECISION SIGHT DISTANCE THAT IS TO BE USED ON THIS PROJECT. THE DECISION SIGHT DISTANCES ON US 30 IS AS FOLLOWS:

55 MPH SPEED LIMIT ZONE IS 1135 FEET.

60 MPH SPEED LIMIT ZONE IS 1280 FEET.

WINTER TIME LIMITATIONS

ALL EXISTING LANES, INCLUDING RAMPS, SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT BETWEEN OCTOBER 31 AND APRIL 1. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$5,000 PER CALENDAR DAY.

WINTER MONTH ACTIVITIES

AFTER CONSTRUCTION HAS SHUT DOWN FOR THE WINTER TIME FROM OCTOBER 31 THRU APRIL 1, THE CONTRACTOR SHALL MAINTAIN THE PAVEMENT THROUGHOUT THE WINTER AND THE CITY OF MANSFIELD WILL ADDRESS THE SNOW AND ICE OPERATIONS. THE ENGINEER DETERMINES THE REPAIR AREA LOCATIONS, SIZE AND TYPE OF REPAIRS AND WRITES A WORK ORDER. THE WORK ORDER IS SUBMITTED TO THE CONTRACTOR VIA EMAIL TO PERFORM THE REPAIRS WITHIN 48 HOURS OF RECEIVING THE WORK ORDER. REPAIRS ARE TO BE PERFORMED DURING TIME FRAMES AS ALLOWED PER THE PLCS. THE CONTRACTOR WILL EMAIL THE ENGINEER DOCUMENTING WHEN THE WORK ORDER FOR THE REPAIR(S) WERE COMPLETED. THIS PROCESS MAY BE MODIFIED BY THE ENGINEER. PAYMENT FOR THE PAVEMENT REPAIRS WILL BE PER 109.05C FORCE ACCOUNT.

PAVEMENT MARKINGS AFTER THE FIRST YEAR OF CONSTRUCTION

WHEN PHASE 2 WORK HAS BEEN COMPLETED AND BY OCTOBER 31 OF THE FIRST CONSTRUCTION YEAR, PAVEMENT MARKINGS SHALL BE PLACED USING ITEM 642 TYPE 1 MATERIAL. IT IS ESTIMATED THAT THE PAVEMENT MARKINGS THAT NEED TO BE REPLACED ARE PROVIDED AND CARRIED TO THE GENERAL SUMMARY AS FOLLOWS:

ITEM 642 - EDGE LINE, 6", TYPE 1	14.42 MILES (7.21 MILE YELLOW AND 7.21 MILE WHITE)
ITEM 642 - LANE LINE, 6", TYPE 1	7.21 MILES
ITEM 642 - DOTTED LINE, 6", TYPE 1	6354 FEET
ITEM 642 - CHANNELIZING LINE, 12", TYPE 1	7626 FEET

PAVEMENT MARKINGS AFTER THE SECOND YEAR OF CONSTRUCTION

WHEN PHASE 5 WORK HAS BEEN COMPLETED AND BY OCTOBER 31 OF THE SECOND CONSTRUCTION YEAR, PAVEMENT MARKINGS SHALL BE PLACED PER PHASE 5A.

US 30 PAVEMENT MARKINGS ON THE SURFACE COURSE

AFTER PLACING THE SURFACE COURSE ON US 30 AND THE RAMPS, THE CONTRACTOR IS PROVIDED AN ESTIMATED QUANTITY OF PAVEMENT MARKINGS AS SHOWN BELOW UNTIL THE FINAL PAVEMENT MARKINGS ARE PLACED:

ITEM 642 - EDGE LINE, 6", TYPE 1	20.10 MILE
ITEM 642 - LANE LINE, 6", TYPE 1	7.84 MILE
ITEM 642 - CHANNELIZING LINE, 12", TYPE 1	13,578 FT
ITEM 642 - DOTTED LINE, 6", TYPE 1	18,728 FT
ITEM 642 - STOP LINE, TYPE 1	120 FT

IF FINAL PAVEMENT MARKINGS HAVE ALREADY BEEN PLACED THEN THE APPROPRIATE AMOUNT OF WORK MAY BE NON-PERFORMED AS DIRECTED BY THE ENGINEER.

ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THIS ITEM IS PROVIDED TO ADDRESS TEMPORARY WEDGES AT THE END OF RAMPS, PAVEMENT LAYER ENDS, AND APPROACH SLABS. THE TEMPORARY WEDGES ARE TO MEET THE REQUIREMENTS OF BP-3.1. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	300 CU YD
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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 ON SIDE ROADS.

ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B	10 CU. YD.
ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	10 CU. YD.

BUTT JOINTS

BUTT JOINTS SHALL NOT BE LEFT OPEN TO TRAFFIC. A TEMPORARY ASPHALT WEDGE IS TO BE CONSTRUCTED USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERECTED AND MAINTAINED WHEN THE BUTT JOINT IS LEFT OPEN. THESE SIGNS ARE TO BE INCLUDED IN THE LUMP SUM OF ITEM 614 - MAINTAINING TRAFFIC.

OVERNIGHT TRENCH CLOSING (US 30 SHOULDER RECONSTRUCTION/WIDENING PHASES 1 AND 2)

THE SHOULDER RECONSTRUCTION/WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

DUST CONTROL

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

ITEM 616 - WATER	2900 M. GAL.
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**ITEM 622 - PORTABLE BARRIER, 50", AS PER PLAN
ITEM 622 - PORTABLE BARRIER, 50", BRIDGE MOUNTED, AS PER PLAN**

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 50-INCH PORTABLE BARRIER AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS, SEE SCD RM-4.1.

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY ROADWAY ENGINEERING.

PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18 INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE. PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622 - PORTABLE BARRIER, 50", AS PER PLAN OR ITEM 622 - PORTABLE BARRIER, 50", BRIDGE MOUNTED, AS PER PLAN.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

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

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

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

ITEM 614 - BARRIER REFLECTOR, TYPE 5, ONE WAY 507 EACH
ITEM 614 - OBJECT MARKER, ONE WAY 479 EACH

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

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEO'S HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 2500 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

LIMITATIONS ON THE REMOVAL OF MAJOR OVERHEAD TRUSS SIGNS

WHEN REMOVING THE MAJOR OVERHEAD TRUSS SIGNS THE CONTRACTOR SHALL STOP TRAFFIC AS PER MT-99.60. THE WINDOW OF TIME FOR SHORT TERM CLOSURES ON US 30 IS FROM 10:00 PM FRIDAY TO 5:00 AM SATURDAY AND 10:00 PM SATURDAY TO 5:00 AM SUNDAY MORNINGS ONLY. THE LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS PLAN NOTE ALSO HAS RESTRICTIONS.

US 30 SHORT TERM CLOSURE LIMITATIONS

WHEN REMOVING THE EXISTING STRUCTURE BEAMS AND ERECTING THE NEW STRUCTURE BEAMS THE CONTRACTOR SHALL STOP TRAFFIC ON US 30 AS PER MT-99.60. THE WINDOW OF TIME FOR SHORT TERM CLOSURES ON US 30 IS FROM 10:00 PM FRIDAY TO 5:00 AM SATURDAY AND 10:00 PM SATURDAY TO 5:00 AM SUNDAY MORNINGS ONLY. THE LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS PLAN NOTE ALSO HAS RESTRICTIONS. THE CLOSURES ALSO AFFECT TRAFFIC ON SR 39 AND BOWMAN STREET WHICH ARE CRITICAL TO THE AK STEEL AND OTHER MANUFACTURERS IN THE AREA. ANY OTHER TIMES MUST BE APPROVED BY THE ENGINEER.

DRUMS AND MAINTENANCE OF TRAFFIC STANDARD CONSTRUCTION DRAWINGS

UNLESS OTHERWISE LABELED IN THE PLANS, THE DRUMS SHOWN IN THE PHASING MAY SCALE AT 10 FEET C/C BUT THE INTENT IS TO FOLLOW THE STANDARD DRAWINGS AND OMUTCD. IN ORDER TO KEEP THE PHASING PLAN SHEETS CLEAN, THE TAPERS, LANE SHIFTS, EXIT AND ENTRANCE RAMPS DO NOT SHOW ALL OF THE SIGNING WHICH ARE SHOWN IN THE MT STANDARD CONSTRUCTION DRAWINGS. THE INTENT IS TO UTILIZE THE SIGNING AS SHOWN IN THE APPROPRIATE MT SCD'S.

DROP OFFS ON SIDE ROADS

THE SIDE ROADS ON THIS PROJECT (SR 39, RELOCATED LONGVIEW AVENUE, BOWMAN STREET, LONGVIEW AVE. E., AND SR 545) ARE LOCATED WITHIN AN URBAN AREA. AT THE END OF THE WORK DAY THE CONTRACTOR SHALL BACKFILL TO LESS THAN A 12" DEPTH AS PER MT-101.90 WHERE DRUMS ARE SPECIFIED IN THE PLANS.

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL DETOUR ROUTE WILL BE SELECTED BY AGREEMENT BETWEEN ODOT AND LOCAL GOVERNMENTAL AGENCIES PRIOR TO THE HIGHWAY CLOSURE.

DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

PAYMENT FOR THE WORK NECESSARY TO REPAIR THESE LOCAL ROADS WILL BE PERFORMED BY CHANGE ORDER.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

RIC-30-9.26

PHASE 3

GENERAL: THIS PHASE USES CROSSOVERS AND CONTRA-FLOW WITH ONE LANE OF US 30 WB ON THE NORTH SIDE OF THE US 30 MEDIAN AND ONE LANE OF US 30 WB TRAFFIC ON THE SOUTHERN SIDE OF THE US 30 MEDIAN WITH TWO US 30 EB LANES. PAVEMENT FOR MAINTAINING TRAFFIC WILL BE CONSTRUCTED ON THE NORTH SIDE OF THE MEDIAN. THE OUTSIDE PORTIONS OF THE US 30 WB BRIDGES AND A PORTION OF THE US 30 WB PAVEMENT AND MEDIAN BARRIER WILL BE CONSTRUCTED. THE CLOSURE REPAIR WORK AND A PORTION OF SURFACE TREATMENT TO RIC-30-1157 MAY BE PERFORMED.

RAMP CLOSURE LIMITATIONS:

1. THE US 30 WB ENTRANCE RAMP FROM SR 13 RAMP C AND THE US 30 WB ENTRANCE RAMP HL FROM SR 39 SHALL NOT BE CLOSED AT THE SAME TIME.

PORTABLE BARRIER CONNECTION AT STATION 555+20: INSTALL THE PORTABLE BARRIER ON THE US 30 EB SIDE TO SEPARATE OPPOSING TRAFFIC FROM THE WORK AREA AS CLOSE TO STATION 555+20 AS FEASIBLE. DURING THE PLCS, CLOSE THE MEDIAN LANE ON THE US 30 WB SIDE PER SCD MT-95.30 AND REMOVE THE EXISTING CONCRETE MEDIAN BARRIER STARTING AT THE DOWNSTREAM END AND WORKING EASTWARD. COMPLETE THE CONNECTION OF THE PORTABLE BARRIER TO THE EXISTING CONCRETE MEDIAN BARRIER AT APPROXIMATELY STATION 555+20. THIS WORK SHALL BE COMPLETED BEFORE BEGINNING PHASE 3 OPERATION.

WORK TO BE PERFORMED AS FOLLOWS:

A. CONSTRUCT THE OUTSIDE PORTION OF THE US 30 WB LANES IN THE EXISTING BARRIER MEDIAN SECTION. CONSTRUCT THE INSIDE PORTION OF THE US 30 WB LANES ALONG WITH THE PROPOSED MEDIAN BARRIER IN THE EXISTING GRASS MEDIAN SECTION.

B. CONSTRUCT THE PAVEMENT FOR MAINTAINING TRAFFIC IN THE MEDIAN SHOULDER AREA ON THE US 30 WB SIDE IN THE GRASS MEDIAN SECTION.

C. CONSTRUCT A PORTION OF NEW RAMP G AT SR 39 FROM THE TIE-IN AT SR 39 TO APPROXIMATELY RAMP G STATION 369+00.

D. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP B FROM LONGVIEW AVENUE EAST AND SR 13. SEE DETOUR PLAN 3D MAP.

E. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP RL FROM SR 545. SEE DETOUR PLAN 3E MAP.

F. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB EXIT RAMP RR TO SR 545. SEE DETOUR PLAN 3F MAP.

G. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB EXIT RAMP D TO SR 13. SEE DETOUR PLAN 3G MAP.

H. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP C FROM SR 13. SEE DETOUR PLAN 3H AND 3I MAP.

I. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP (SL) FROM SR 545. SEE DETOUR PLAN 3H AND 3I MAP.

J. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB EXIT RAMP (SR) TO SR 545. SEE DETOUR PLAN 3J MAP.

K. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP D FROM FIFTH AVENUE. SEE DETOUR PLAN 3K MAP.

L. INSTALL THE DETOUR SIGNING AND CLOSE BOTH US 30 WB EXIT RAMPS TO SR 39 (RAMPS HR AND J). REMOVE THE PAVEMENT AND REGRADE THE EXISTING US 30 WB EXIT RAMP J TO NB SR 39. SEE DETOUR PLAN 3L MAP.

M. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP HL FROM SR 39. SEE DETOUR PLAN 3M MAP.

N. CONSTRUCT THE OUTSIDE PORTION OF THE US 30 WB BRIDGES.

O. CONSTRUCT THE LONGVIEW AVENUE WEST CUL-DE-SAC AND RAMPS H, HL AND HR AT SR 39, INCLUDING THE REMAINING PORTION OF THE TRAFFIC SIGNAL. THE TRAFFIC SIGNAL SHALL BE FULLY OPERATIONAL WHEN THE RAMPS ARE OPEN TO TRAFFIC.

SUBPHASES 3A AND 3B IN THIS AREA ARE TO BE CONSTRUCTED WHEN THE RAMPS AT SR 39 ARE CLOSED.

P. OPEN THE LONGVIEW AVENUE CUL-DE-SAC WHEN THE PAVEMENT, CURB, DRAINAGE, LIFT GATE AND SIGNS ARE COMPLETED.

Q. PHASES 3A AND 3B: THESE PHASES ARE INTENDED TO CONSTRUCT THE PAVEMENT AND MEDIAN BARRIER IN THE EXISTING MEDIAN TRANSITION AREA FROM APPROXIMATELY STATION 545+41 TO STATION 555+20 AND STATION 662+00 TO STATION 689+50.

R. PHASES 3A AND 3B WILL REQUIRE CHANGING THE LANE CONFIGURATION WITHIN A SMALL PORTION OF THE OVERALL PHASE 3 SETUP. MATCH LINES ARE PROVIDED IN THE PLANS.

1. PHASE 3A PLACE THE SINGLE US 30 WB LANE ON THE OUTSIDE SHOULDER PAVEMENT AND CONSTRUCT THE PAVEMENT AND THE MEDIAN SECTION.

2. PHASE 3B - PLACE THE SINGLE US 30 WB LANE ON THE INSIDE SHOULDER PAVEMENT AND CONSTRUCT THE REMAINING PAVEMENT ON THE OUTSIDE PORTION. WHEN COMPLETED THE PHASE 3B SINGLE US 30 WB LANE MAY TRANSITION FROM THE MEDIAN SIDE TO THE OUTSIDE SHOULDER AS ORIGINALLY INSTALLED FOR THE NORMAL PHASE 3 CONDITION OR REMAIN IN PLACE.

PHASE 4

GENERAL: THIS PHASE USES CROSSOVERS AND CONTRA-FLOW WITH ONE LANE OF US 30 WB TRAFFIC ON THE NORTH SIDE OF THE US 30 MEDIAN AND ONE LANE OF US 30 WB TRAFFIC ON THE SOUTHERN SIDE OF THE US 30 MEDIAN WITH TWO EB LANES. A PORTION OF THE US 30 WB BRIDGES AND A PORTION OF THE US 30 WB PAVEMENT AND MEDIAN BARRIER WILL BE CONSTRUCTED. A PORTION OF THE SEALER INCLUDING SEALING THE CLOSURE POUR REPAIR AREA TO RIC-30-1157 MAY BE PERFORMED.

RAMP CLOSURE LIMITATIONS:

- 1. THE US 30 WB ENTRANCE RAMP D FROM TRIMBLE ROAD IS TO BE CLOSED WHICH INCLUDES A TIME LIMITATION.
- 2. THE US 30 WB EXIT RAMP B TO TRIMBLE ROAD MAY BE CLOSED AT CERTAIN TIME LIMITATIONS.
- 3. THE US 30 WB EXIT RAMP C TO FIFTH AVENUE IS TO BE CLOSED WHICH INCLUDES A TIME LIMITATION.

WORK TO BE PERFORMED AS FOLLOWS:

A. INSTALL THE DETOUR SIGNING AND CLOSE US 30 EB ENTRANCE RAMP B FROM LONGVIEW AVENUE EAST AND SR 13. SEE DETOUR PLAN 4A AND 4E MAP.

B. RETAIN THE RAMP CLOSURE FROM PHASE 3 AND KEEP THE US 30 EB ENTRANCE RAMP RL FROM SR 545 CLOSED. SEE DETOUR PLAN 4A AND 4E MAP.

C. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 EB EXIT RAMP RR TO SR 545. SEE DETOUR PLAN 4C MAP.

D. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP D FROM FIFTH AVENUE. SEE DETOUR PLAN 4D MAP.

E. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP SL FROM SR 545. SEE DETOUR PLAN 4 A AND 4E MAP.

SHIFT THE SINGLE LANE OF US 30 WB TRAFFIC NORTH OF THE MEDIAN ONTO THE PERMANENT PAVEMENT CONSTRUCTED IN PHASE 3. IN THE BARRIER MEDIAN SECTION, THE INSIDE PORTION OF THE US 30 WB LANES WILL BE CONSTRUCTED. CONSTRUCT THE OUTSIDE PORTION OF THE US 30 WB LANES, EARTHWORK, GUARDRAIL AND SIGNAGE IN THE GRASS MEDIAN SECTION, AS SHOWN IN THE PHASING PLAN SHEETS.

F. THE US 30 WB EXIT RAMP TO SR 309 IS TO BE CONSTRUCTED IN TWO PHASES. THE "OPEN RIGHT" PHASE FOR SR 309 WB UTILIZES THE EXISTING PAVEMENT AND IS TO BE PERFORMED BEFORE THE "OPEN LEFT" PHASE FOR SR 309 WB. THE US 30 WB ENTRANCE RAMP D FROM TRIMBLE ROAD IS TO BE CLOSED DURING THIS WORK WHICH INCLUDES A TIME LIMITATION. ENTRANCE RAMP D SHALL NOT BE OPEN TO TRAFFIC UNTIL THIS PORTION OF US 30 AND BOTH PHASES OF THE EXIT RAMP TO SR 309 WORK ARE COMPLETE.

THIS DETOUR IS LIMITED TO 28 CONSECUTIVE DAYS TO COMPLETE THE WORK IN THIS AREA FROM STATION 489+00 TO STATION 515+00. THIS INCLUDES UNDERDRAINS, PAVEMENT (UP TO AND EXCLUDING THE SURFACE COURSE), SIGNAGE, GUARDRAIL, APPLICABLE PAVEMENT MARKINGS AND GRADING. THE TIME LIMIT IS TIED TO THE US 30 WB ENTRANCE RAMP D FROM TRIMBLE ROAD AND APPLIES TO THE PORTION OF THE US 30 WB AND THE EXIT RAMP TO SR 309 AND THE ENTRANCE RAMP D FROM TRIMBLE ROAD. THE SURFACE COURSE SHALL BE PLACED ON THE RESURFACING (NON-FULL DEPTH REPLACEMENT) PORTION OF RAMP D BEFORE OPENING TO TRAFFIC.

THIS DETOUR IS LIMITED TO A MAXIMUM OF 28 CONSECUTIVE CALENDAR DAYS. AFTER 28 CONSECUTIVE CALENDAR DAYS THE US 30 WB ENTRANCE RAMP D FROM TRIMBLE ROAD SHALL BE OPEN TO TRAFFIC AS DETAILED IN THE PLANS. THE 28 CONSECUTIVE CALENDAR DAY LIMITATION IS CONSIDERED TO BE AN INTERIM COMPLETION DATE. IF THE CONTRACTOR FAILS TO COMPLETE THE WORK BY THE 28 CONSECUTIVE CALENDAR DAY LIMITS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT TABLE.

INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB ENTRANCE RAMP D FROM TRIMBLE ROAD. SEE DETOUR PLAN 4F MAP.

G. THE US 30 WB EXIT RAMP B TO TRIMBLE ROAD SHALL REMAIN OPEN AND CONSTRUCTED IN TWO PHASES FOR THE FULL DEPTH REMOVAL AND REPLACEMENT PORTION. THE RAMP B OPEN LEFT PHASE SHOULD BE PERFORMED BEFORE THE RAMP B OPEN RIGHT PHASE. THE SURFACE COURSE SHALL BE PLACED ON THE RESURFACING (NON-FULL DEPTH REPLACEMENT) PORTION OF RAMP B BEFORE OPENING TO TRAFFIC. A RAMP CLOSURE BETWEEN 9:00 PM TO 6:00 AM IS ALLOWED FOR THE RESURFACING PORTION ONLY. THE CLOSURE IS LIMITED TO TWO CONSECUTIVE NIGHTS. SEE DETOUR PLAN 4G MAP.

H. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB EXIT RAMP C TO FIFTH AVENUE. SEE DETOUR PLAN 4H MAP. OPEN THE US 30 WB EXIT RAMP C TO TRAFFIC ONCE COMPLETED. THE CONTRACTOR IS LIMITED IN TIME FOR THIS DETOUR AND IS TO COMPLETE THE WORK IN THIS AREA FROM STATION 685+00 TO STATION 690+50 WHICH IS TO INCLUDE UNDERDRAINS, PAVEMENT (UP TO AND EXCLUDING THE SURFACE COURSE), SIGNAGE, GUARDRAIL, APPLICABLE PAVEMENT MARKINGS AND GRADING.

THIS DETOUR IS LIMITED TO A MAXIMUM OF 14 CONSECUTIVE CALENDAR DAYS. AFTER 14 CONSECUTIVE CALENDAR DAYS, THE US 30 WB EXIT RAMP C TO FIFTH AVENUE SHALL BE OPEN TO TRAFFIC AS DETAILED IN THE PLANS. THE 14 CONSECUTIVE CALENDAR DAY LIMITATION IS CONSIDERED TO BE AN INTERIM COMPLETION DATE. IF THE CONTRACTOR FAILS TO COMPLETE THE WORK BY THE 14 CONSECUTIVE CALENDAR DAY LIMIT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT TABLE.

I. THE SURFACE TREATMENT AND OTHER WORK REMAINING ON THE RIC-30-1157 BRIDGE MAY BE PERFORMED. THE CLOSURE POURS OF THE US 30 WB BRIDGES SHALL BE CONSTRUCTED.

J. INSTALL THE DETOUR SIGNING AND CLOSE THE US 30 WB EXIT RAMP SR TO SR 545. SEE DETOUR PLAN 4J MAP.

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SEQUENCE OF CONSTRUCTION NOTES

RIC-30-9.26

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PHASING	614	614	614	614	614	614	614	614	614	622	622	622	642	642	642	642	642	642
	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT FT	WORK ZONE GORE MARKING, CLASS II, 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	PORTABLE BARRIER, 50", AS PER PLAN FT	PORTABLE BARRIER, 50", BRIDGE MOUNTED, AS PER PLAN FT	PORTABLE BARRIER, "Y" CONNECTOR EACH	LANE LINE, 6", TYPE I MILE	EDGE LINE, 6", TYPE I WHITE MILE	EDGE LINE, 6", TYPE I YELLOW MILE	CHANNELIZING LINE, 8", TYPE I FT	CHANNELIZING LINE, 12", TYPE I FT	DOTTED LINE, 6", TYPE I FT	
PHASE 1	12,641	3,220	3,959	354	554	420	30	50	17,480	180								
PHASE 2	12,668		2,969						19,260									
PHASE 3	17,514	1,025	9,785				12		70,104	1180	1							
PHASE 4	18,098	1,025	13,617				12		23,265	580	2							
PHASE 5	22,823		10,190						29,050									
PHASE 5A									140				10.29	10.58	11.04	3,786	13,042	14,182
PHASE 6	12,972	1,000	14,117				12		48,095	990								
PHASE 7	16,896	1,000	13,193				12		26,581	640	4							
TOTALS CARRIED TO GENERAL SUMMARY	113,612	7,270	67,830	354	554	420	78	50	233,975	3570	7	10.29	21.62	11.04	3,786	13,042	14,182	

SUBSUMMARY MAINTENANCE OF TRAFFIC	CALCULATED BAD CHECKED AFS
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REF NO.	SHEET NO.	STATION TO STATION		614	614				614		614	614	614	614	614	614	614	614	614	622	
				INCREASED BARRIER DELINEATION FT	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH				BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL EACH	OBJECT MARKER, TWO WAY EACH	WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT MILE	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE) MILE	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW) MILE	WORK ZONE CHANNELIZING LINE, CLASS 1, 8", 642 PAINT FT		WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS 1, 642 PAINT FT	WORK ZONE STOP LINE, CLASS 1, 642 PAINT FT		WORK ZONE ARROW, CLASS 1, 642 PAINT EACH
TO																					
SR 39 - PHASE D																					
DL-12	107-108	681+50	682+75																		
EL-36	107-108	682+25	704+59																		
EL-37	107-108	702+08	704+59																		
EL-38	107-108	686+50	700+40																		
EL-39	107-108	701+40	704+70																		
CL-11	107-108	683+87	700+00																		
CL-12	107-108	701+50	704+50																		
CHL-17	107-108	705+25	708+75																		
AR-19	107-108	705+55																			
AR-20	107-108	706+35																			
AR-21	107-108	707+15																			
AR-22	107-108	707+95																			
AR-23	107-108	708+70																			
IA-11	107-108	684+40																			
PB-9	107-108	684+40	695+90																		
PB-9	107-108	699+10	700+59																		
IA-12	107-108	695+50																			
PB-10	107-108	695+50	698+56																		
IA-13	107-108	698+56																			
SB-6	107-108	690+50																			
SR 39 - PHASE E																					
SB-7	109-110	690+50																			
SB-8	109-110	689+64																			
SB-9	109-110	690+84																			
CL-13	109-110	677+50	680+95																		
CL-14	109-110	682+32	689+64																		
CL-15	109-110	690+84	700+40																		
EL-40	109-110	677+50	681+82																		
EL-41	109-110	682+32	689+64																		
EL-42	109-110	691+25	700+50																		
EL-43	109-110	677+50	680+85																		
EL-44	109-110	681+82	700+40																		
EL-45	109-110	701+20	704+55																		
TD-1	109-110	688+34	689+64																		
CHL-18	109-110	690+84	692+59																		
AR-24	109-110	681+15																			
AR-25	109-110	684+40																			
AR-26	109-110	691+14																			
AR-27	109-110	691+94																			
CHL-19	109-110	705+25	708+75																		
AR-28	109-110	705+55																			
AR-29	109-110	706+35																			
AR-30	109-110	707+15																			
AR-31	109-110	707+95																			
AR-32	109-110	708+70																			
LL-3	109-110	677+50	681+76																		
* THIS ITEM WAS ALSO USED IN PHASE C. NO ADDITIONAL QUANTITY PROVIDED.																					
SUBTOTALS CARRIED TO SHEET 134				1,300	1				28	28	0.08	0.78	1.61	0.05	875	125	127	93	14	1,300	

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES PHASE 1

RIC-30-9.26

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REF NO.	SHEET NO.	STATION TO STATION		614		614		614		614		614		614		614		614		622	
				INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)			BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL		OBJECT MARKER, TWO WAY	WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)		WORK ZONE CHANNELIZING LINE, CLASS 1, 8", 642 PAINT		WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS 1, 642 PAINT	WORK ZONE STOP LINE, CLASS 1, 642 PAINT		WORK ZONE ARROW, CLASS 1, 642 PAINT
				TO																	
				FT	EACH			EACH	EACH	MILE	MILE	MILE	FT	FT	FT	FT			EACH	FT	
LL-4	109-110	677+50	688+50							0.21											
DL-13	109-110	704+55	705+25											70							
LL-5	109-110	700+50	706+00							0.10											
CL-16	109-110	701+50	704+50									0.06									
IA-14	109-110	695+40			1																
IA-15	109-110	695+50			*																
IA-16	109-110	698+80			*																
PB-11	109-110	695+40	695+90		50			2	2												50
PB-12	109-110	695+50	698+80		*			*	*												*
PB-11	110	699+10	699+70		60			2	2												60
SR 39 - PHASE F																					
TD-2	111-112	688+34	689+64																		
SB-10	111-112	689+64																			
SB-11	111-112	690+50																			127
SB-12	111-112	690+84																			16
CL-17	111-112	677+50	680+95																		14
																					22
CL-18	111-112	682+32	689+64																		
CL-19	111-112	690+84	700+40																		
CL-20	111-112	701+50	706+00																		
EL-46	111-112	677+50	681+76																		
EL-47	111-112	682+32	689+64																		
EL-48	111-112	691+45	705+90																		
EL-49	111-112	677+50	680+85																		
EL-50	111-112	681+82	700+40																		
EL-51	111-112	701+20	704+50																		
LL-6	111-112	677+50	681+76																		
LL-7	111-112	677+50	688+34																		
AR-33	111-112	681+15																			
AR-34	111-112	684+40																			
AR-35	111-112	691+14																			
AR-36	111-112	691+94																			
AR-37	111-112	705+55																			
AR-38	111-112	706+35																			
AR-39	111-112	707+15																			
AR-40	111-112	707+95																			
AR-41	111-112	708+70																			
CHL-20	111-112	690+84	692+59																		
CHL-21	111-112	705+25	708+75																		
IA-17	111-112	694+60																			
IA-18	111-112	695+50																			
IA-19	111-112	698+56																			
PB-13	111-112	694+60	695+90		130			3	3												130
PB-14	111-112	695+50	698+60		*			*	*												*
PB-13	111-112	699+10	700+60		150			4	4												150
* THIS ITEM WAS ALSO USED IN PHASE C. NO ADDITIONAL QUANTITY PROVIDED.																					
SUBTOTALS CARRIED TO SHEET 134				390	2			11	11	0.60	0.54	0.96	525	70	127	52			9	390	

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES PHASE 1

RIC-30-9.26

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REF NO.	SHEET NO.	STATION TO STATION		614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	622	622					
				INCREASED BARRIER DELINEATION FT	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH	WORK ZONE RAISED PAVEMENT MARKER (YELLOW) EACH	WORK ZONE RAISED PAVEMENT MARKER (WHITE) EACH	BARRIER REFLECTOR, TYPE I, ONE WAY EACH	BARRIER REFLECTOR, TYPE I, BIDIRECTIONAL EACH	OBJECT MARKER, ONE WAY EACH	OBJECT MARKER, TWO WAY EACH	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) MILE	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT FT	WORK ZONE GORE MARKING, CLASS II, 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	PORTABLE BARRIER, 50", AS PER PLAN FT	PORTABLE BARRIER, 50", BRIDGE MOUNTED, AS PER PLAN FT		
TO																											
SR 545 - STAGE 1 - PHASE D																											
EL-64	120-121	151+39	180+65																								
EL-65	120-121	154+51	164+70																								
EL-66	120-121	165+60	175+70																								
EL-67	120-121	176+75	180+65																								
DL-17	120-121	151+51	154+73																								
CHL-22	120-121	154+73	159+00																								
AR-42	120-121	154+73																									
AR-43	120-121	155+53																									
AR-44	120-121	156+33																									
AR-45	120-121	157+13																									
AR-46	120-121	157+93																									
AR-47	120-121	158+73																									
TD-3	120-121	177+50	180+65																								
CL-32	120-121	151+39	153+40																								
CL-33	120-121	154+60	164+50																								
CL-34	120-121	165+96	175+75																								
CL-35	120-121	176+86	180+65																								
CL-36	120-121	177+25	180+65																								
CL-37	120-121	77+88	78+08																								
SB-20	120-121	77+08																									
SB-21	120-121	00+40																									
CL-38	120-121	00+40	00+85																								
SR 545 - STAGE 2																											
EL-68	122	158+50	167+52																								
EL-69	122	154+49	168+33																								
CL-39	122	154+49	168+33																								
IA-24	122	160+50																									
IA-25	122	163+25																									
IA-26	122	160+31																									
IA-27	122	163+06																									
PB-17	122	160+50	163+25																								
PB-18	122	160+31	163+06																								
SR 545 - STAGE 3																											
EL-70	123	151+90	167+00																								
EL-71	123	149+90	164+70																								
EL-72	123	166+00	167+18																								
CL-40	123	149+90	164+50																								
IA-28	123	154+50																									
PB-19	123	154+50	163+15																								
IA-29	123	163+15																									
SUBTOTALS THIS SHEET				1,430	6			29	29		1.11	2.02	427		322	100	103			6	1,430						
SUBTOTALS SHEET 128				6,670	4	507	1120	574	574		0.78	0.33	2.64	2.21	9,050	2,738	1,017		420	6	7,350	180					
SUBTOTALS SHEET 129				3,810	4			77	77		0.14	0.63	1.47	0.05	600	186	1,087		25	6	3,810						
SUBTOTALS SHEET 130				760	3			16	16		0.07	0.32	0.47	0.04	1,164	296	140		40	15	760						
SUBTOTALS SHEET 131				1,300	1			28	28		0.08	0.78	1.61	0.05	875		125	127		14	1,300						
SUBTOTALS SHEET 132				390	2			11	11		0.60	0.54	0.96		525		70	127		9	390	0					
SUBTOTALS SHEET 133				2,440	4			48	48		0.83	2.79	0.97		1,198		241				2,440	0					
TOTALS CARRIED TO SHEET 66-67				16,800	24	507	1120	574	574		209	574	209	1.67	4.54	11.96	3.32	12,641	3,220	3,959	354	554	420	30	50	17,480	180

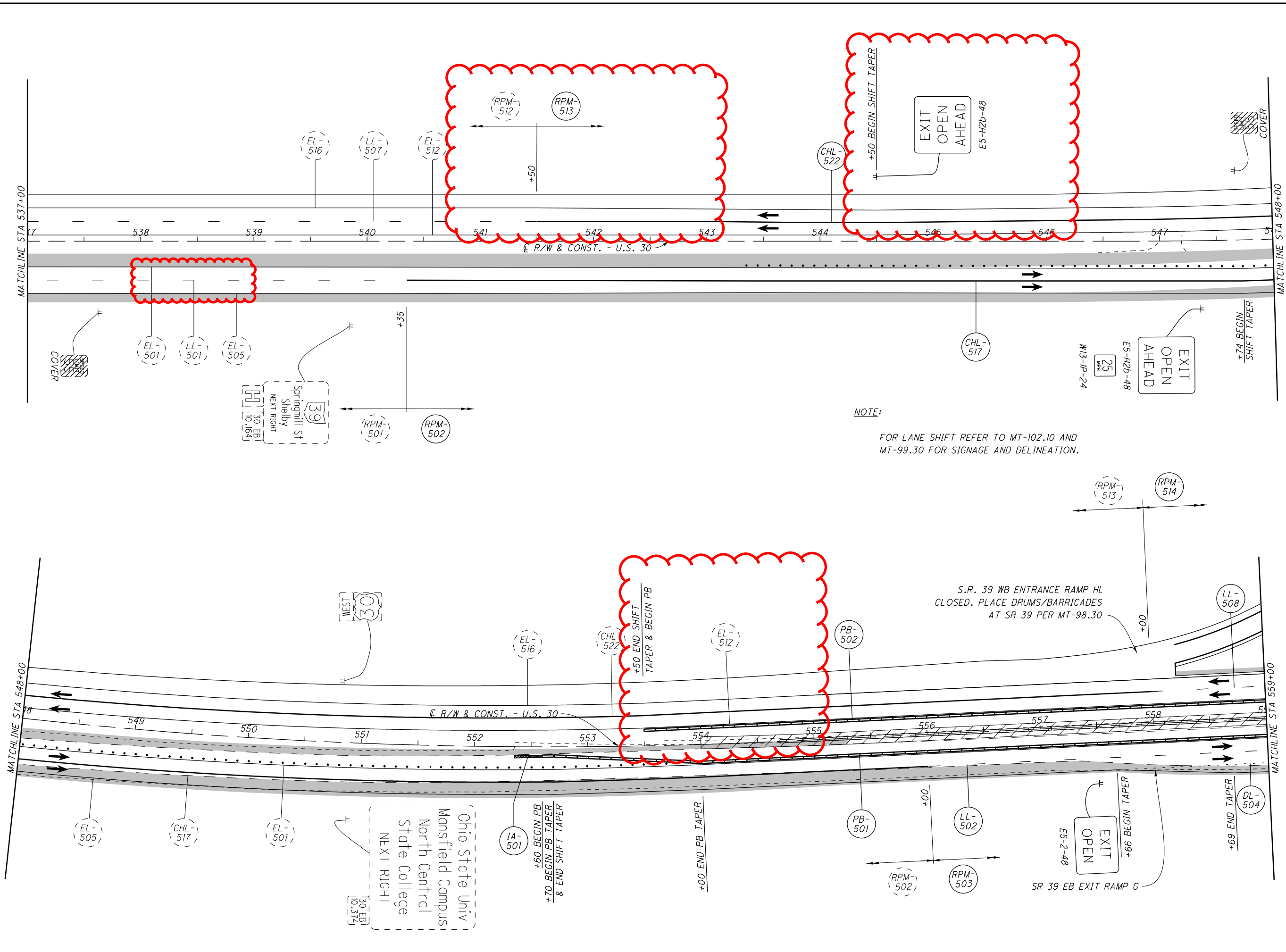
MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES PHASE 1

RIC-30-9.26

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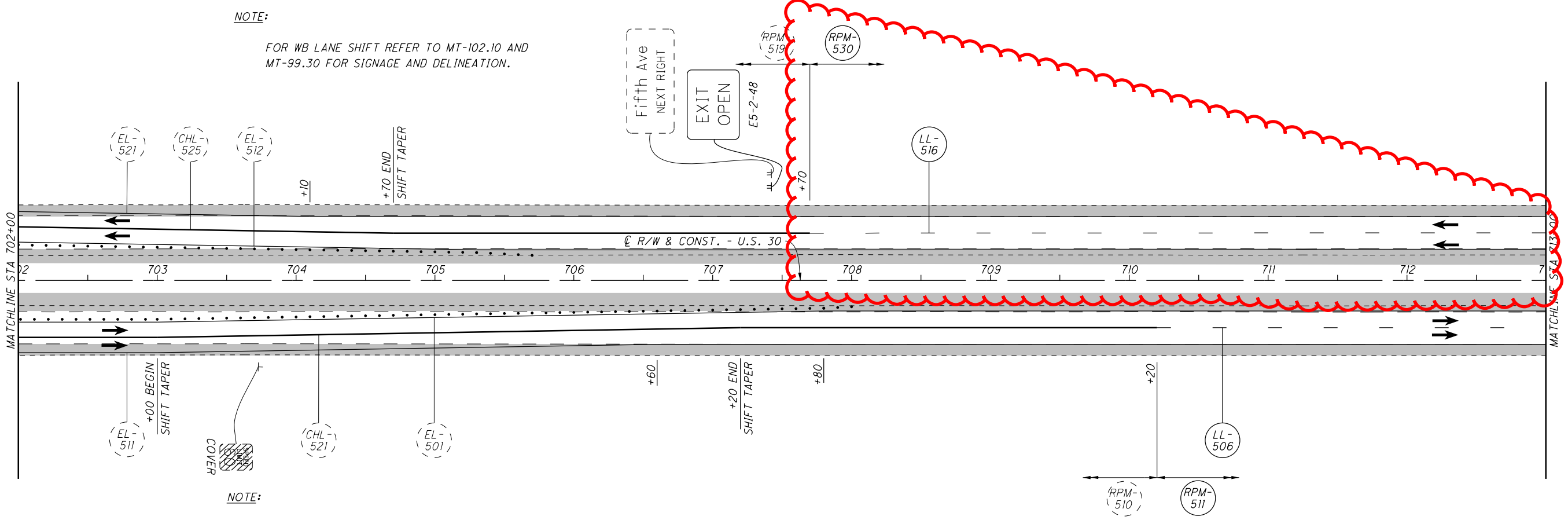
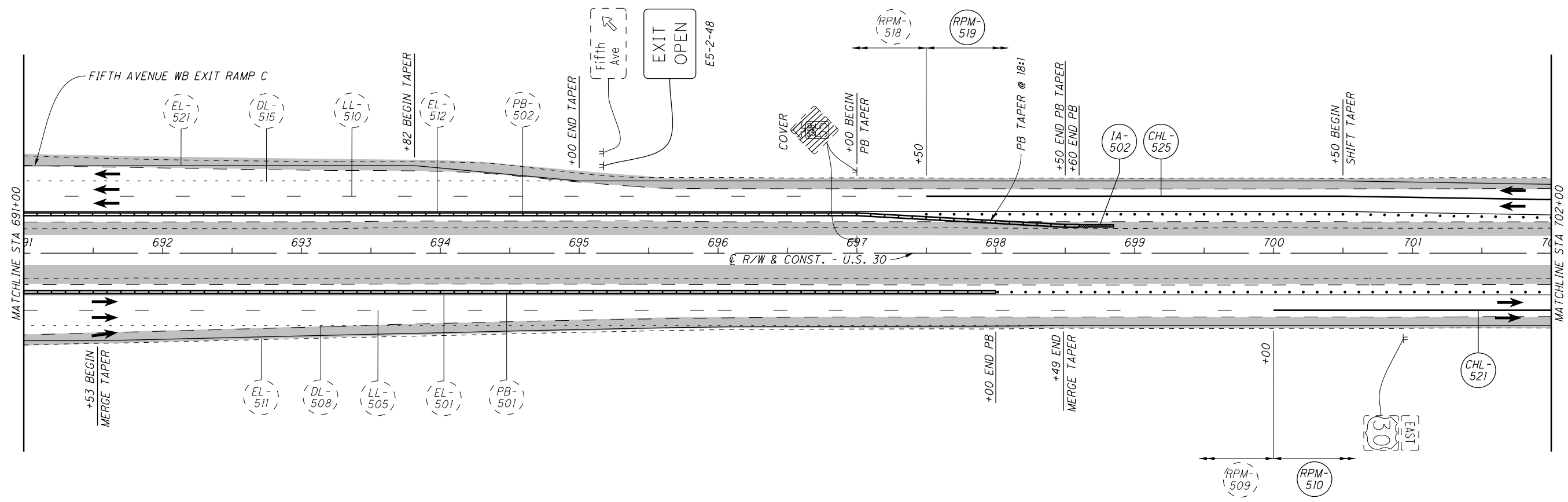
NOTE:
FOR LANE SHIFT REFER TO MT-102.10 AND
MT-99.30 FOR SIGNAGE AND DELINEATION.

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MAINTENANCE OF TRAFFIC-PHASE 5
STA 537+00 TO STA 559+00

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NOTE:
FOR WB LANE SHIFT REFER TO MT-102.10 AND MT-99.30 FOR SIGNAGE AND DELINEATION.

NOTE:
FOR EB LANE SHIFT REFER TO MT-102.10 AND MT-99.30 FOR SIGNAGE AND DELINEATION.



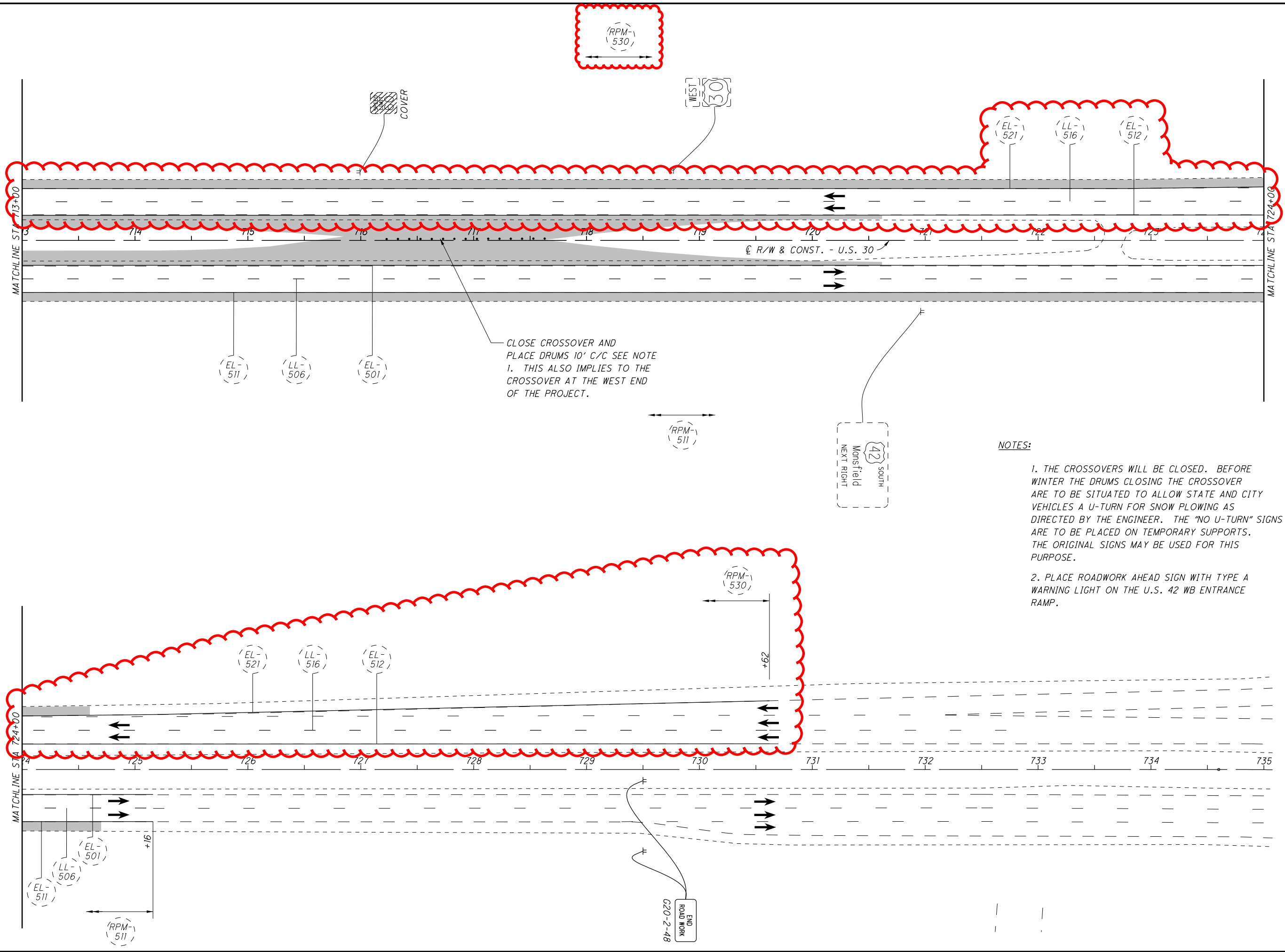
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MAINTENANCE OF TRAFFIC-PHASE 5
STA 691+00 TO STA 713+00

RIC-30-9.26

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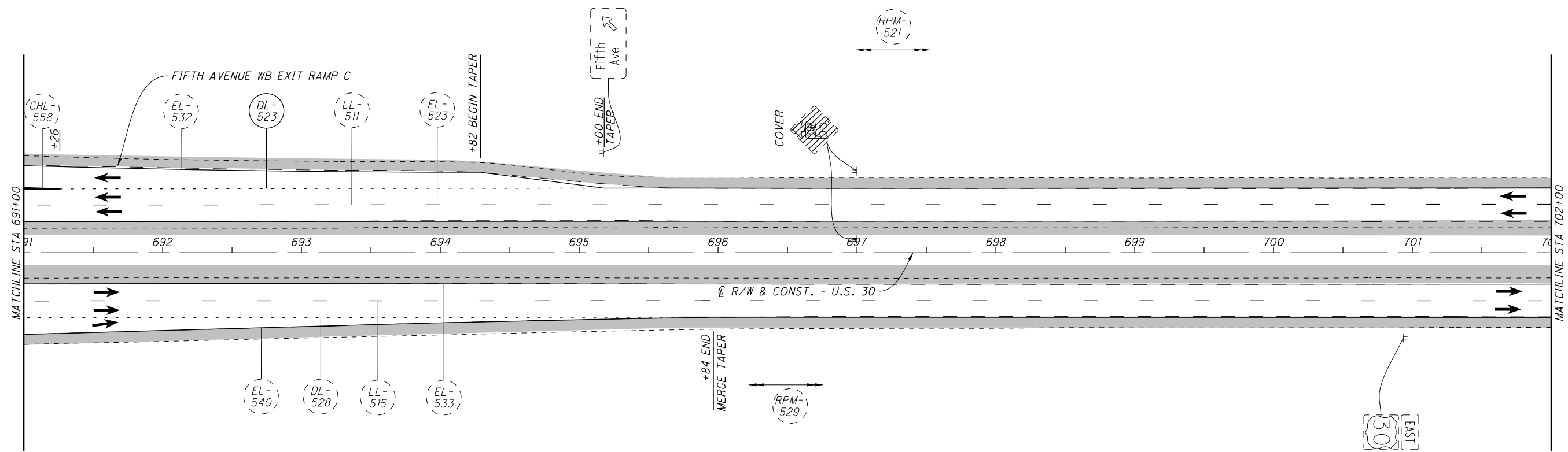


NOTES:

1. THE CROSSOVERS WILL BE CLOSED. BEFORE WINTER THE DRUMS CLOSING THE CROSSOVER ARE TO BE SITUATED TO ALLOW STATE AND CITY VEHICLES A U-TURN FOR SNOW PLOWING AS DIRECTED BY THE ENGINEER. THE "NO U-TURN" SIGNS ARE TO BE PLACED ON TEMPORARY SUPPORTS. THE ORIGINAL SIGNS MAY BE USED FOR THIS PURPOSE.
2. PLACE ROADWORK AHEAD SIGN WITH TYPE A WARNING LIGHT ON THE U.S. 42 WB ENTRANCE RAMP.

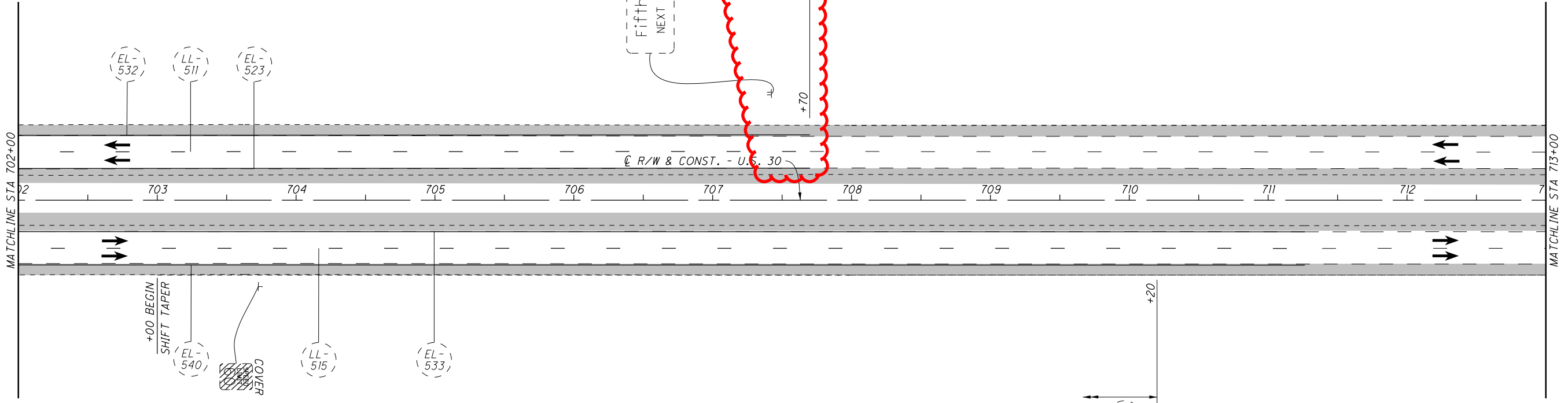
<p>MAINTENANCE OF TRAFFIC-PHASE 5</p> <p>STA 713+00 TO STA 735+00</p>	<p>CALCULATED BAD</p> <p>CHECKED AFS</p>
<p>RIC-30-9.26</p>	<p>246</p> <p>1669</p>

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NOTE:

FOR WB LANE SHIFT REFER TO MT-102.10 AND MT-99.30 FOR SIGNAGE AND DELINEATION.



NOTE:

FOR EB LANE SHIFT REFER TO MT-102.10 AND MT-99.30 FOR SIGNAGE AND DELINEATION.



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MAINTENANCE OF TRAFFIC-PHASE 5A
STA 691+00 TO STA 713+00

RIC-30-9.26

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REF NO.	SHEET NO.	STATION TO STATION		614		614		614		614		614		614		614		614		622	
				INCREASED BARRIER DELINEATION FT	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH	WORK ZONE RAISED PAVEMENT MARKER (YELLOW) EACH	WORK ZONE RAISED PAVEMENT MARKER (WHITE) EACH	BARRIER REFLECTOR, TYPE I, ONE WAY EACH	OBJECT MARKER, ONE WAY EACH	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) MILE	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT FT	PORTABLE BARRIER, 50", AS PER PLAN FT						
EL-511	233-255	681+50	TO	725+16											0.83						
LL-501	233-255	445+20		540+35								1.80									
CHL-517	233-255	540+35		556+00																	1,565
LL-502	233-255	556+00		599+50								0.82									
CHL-518	233-255	599+50		614+50																	1,500
LL-503	233-255	614+50		624+00								0.18									
CHL-519	233-255	624+00		637+00																	1,300
LL-504	233-255	637+00		652+00								0.28									
CHL-520	233-255	652+00		665+00																	1,300
LL-505	233-255	665+00		700+00								0.66									
CHL-521	233-255	700+00		710+20																	1,020
LL-506	233-255	710+20		725+16								0.28									
IA-501	233-255	552+60																			
PB-501	233-255	552+60		698+00	14,540					291	291										14,540
EL-512	233-255	444+23		730+62											5.42						
RPM-512	233-255	444+23		541+50																	
RPM-513	233-255	541+50		558+00		84	168														
RPM-514	233-255	558+00		599+62			36														
RPM-515	233-255	599+62		614+50		75	151														
RPM-516	233-255	614+50		624+00			9														
RPM-517	233-255	624+00		640+82			170														
RPM-518	233-255	640+82		697+50		85	48														
RPM-519	233-255	697+50		707+70			104														
PB-502	233-255	553+50		698+60	14,510					290	290										14,510
IA-502	233-255	698+60																			
LL-507	233-255	444+23		541+50								1.84									
CHL-522	233-255	541+50		558+00																	1,650
LL-508	233-255	558+00		599+62								0.79									
CHL-523	233-255	599+62		614+50																	1,488
LL-509	233-255	614+50		624+00								0.18									
CHL-524	233-255	624+00		640+82																	1,682
LL-510	233-255	640+82		697+50								1.07									
CHL-525	233-255	697+50		707+70																	1,020
EL-513	233-255	444+23		489+00											0.85						
CHL-526	233-255	489+00		491+53																	253
CHL-527	233-255	489+00		491+53																	253
DL-509	233-255	491+53		504+67																	1,314
EL-514	233-255	489+00		511+89											0.43						
CHL-528	233-255	504+67		511+89																	722
CHL-529	233-255	504+67		511+89																	722
EL-515	233-255	511+89		525+35											0.25						
CHL-530	233-255	525+35		527+64																	229
CHL-531	233-255	525+35		527+64																	229
DL-510	233-255	527+64		534+50																	686
EL-516	233-255	525+35		563+93											0.73						
CHL-532	233-255	563+93		564+80																	87
CHL-533	233-255	563+93		564+80																	87
DL-511	233-255	564+80		569+10																	430
EL-517	233-255	563+93		633+33											1.31						
SUBTOTALS CARRIED TO SHEET 262						29,050	2	296	768			581	581	7.90	4.40	5.42	15,107			2,430	29,050

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES PHASE 5

RIC-30-9.26

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REF NO.	SHEET NO.	STATION TO STATION		614	614	614	614	614	614	614	614	614	614	614	614	614	622	
				INCREASED BARRIER DELINEATION FT	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH	WORK ZONE RAISED PAVEMENT MARKER (YELLOW) EACH	WORK ZONE RAISED PAVEMENT MARKER (WHITE) EACH	BARRIER REFLECTOR, TYPE I, ONE WAY EACH	OBJECT MARKER, ONE WAY EACH	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) MILE	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT FT	PORTABLE BARRIER, 50", AS PER PLAN FT			
CHL-534	233-255	633+33	633+77														44	
CHL-535	233-255	633+33	633+77														44	
DL-512	233-255	633+77	636+72														295	
EL-518	233-255	633+00	651+31									0.35						
CHL-536	233-255	651+31	651+51														20	
CHL-537	233-255	651+31	651+51														20	
DL-513	233-255	651+51	655+89														438	
EL-519	233-255	651+01	674+50									0.44						
DL-514	233-255	664+51	670+07														556	
CHL-538	233-255	670+07	674+50														443	
CHL-539	233-255	670+07	674+50														443	
EL-520	233-255	674+50	686+51									0.23						
CHL-540	233-255	686+51	689+50														299	
CHL-541	233-255	686+51	689+50														299	
DL-515	233-255	689+50	695+00														550	
EL-521	233-255	686+38	730+62										0.84					
DL-516	233-255	550+00	556+95														1295	
RPM-520	233-255	550+00	558+00				41											
EL-522	233-255	550+00	558+20									0.16						
CHL-542	233-255	556+95	558+20														125	
CHL-543	233-255	556+95	558+20														125	
LL-516	245-246	707+70	730+62										0.43					
RPM-530	245-246	707+70	730+62				20											
SUBTOTALS THIS SHEET							61					0.43		2.02			1,862	3,134
SUBTOTALS SHEET 260						339	862						4.43	5.38			5,854	4,626
SUBTOTALS SHEET 261				29,050	2	296	768	581	581	7.90		4.40	5.42			15,107	2,430	29,050
PHASE 5 TOTALS CARRIED TO SHEET 264				29,050	2	635	1691	581	581	8.33		10.85	10.80			22823	10,190	29,050

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES PHASE 5

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REF NO.	SHEET NO.	STATION TO STATION		614	614		614	614	614	614	642	642	642	642	642	642	622
				INCREASED BARRIER DELINEATION FT	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH		WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (YELLOW) EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (WHITE) EACH	BARRIER REFLECTOR, TYPE I, ONE WAY EACH	OBJECT MARKER, ONE WAY EACH	LANE LINE, 6", TYPE I MILE	EDGE LINE, 6", TYPE I (WHITE) MILE	EDGE LINE, 6", TYPE I (YELLOW) MILE	CHANNELIZING LINE, 8", TYPE I FT	CHANNELIZING LINE, 12", TYPE I FT	DOTTED LINE, 6", TYPE I FT	PORTABLE BARRIER, 50", AS PER PLAN FT
TO PHASE 5A																	
EL-523	247-254	543+00	707+70										3.12				
LL-511	247-254	543+00	707+70							3.12							
RPM-521	247-254	543+00	707+70					138									
EL-524	247-254	543+00	558+22									0.29					
DL-517	247-254	544+03	554+10													1,007	
CHL-544	247-254	554+10	558+22													412	
CHL-545	247-254	554+10	558+22													412	
EL-525	247-254	558+22	563+93									0.11					
CHL-546	247-254	563+93	565+89													196	
CHL-547	247-254	563+93	565+89													196	
DL-518	247-254	565+89	572+00														611
EL-526	247-254	563+93	628+85									1.23					2,149
DL-519	247-254	606+49	627+98														
CHL-548	247-254	627+98	628+85													87	
CHL-549	247-254	627+98	628+85													87	
EL-527	247-254	628+85	633+33									0.08					
CHL-550	247-254	633+33	634+44													111	
CHL-551	247-254	633+33	634+44													111	
DL-520	247-254	634+44	647+94														1,350
EL-528	247-254	633+33	648+74									0.29					
CHL-552	247-254	647+94	648+74													80	
CHL-553	247-254	647+94	648+74													80	
EL-529	247-254	648+74	651+31									0.05					
CHL-554	247-254	651+31	651+84													53	
CHL-555	247-254	651+31	651+84													53	
DL-521	247-254	651+84	657+00														516
EL-530	247-254	651+31	674+50									0.44					
DL-522	247-254	660+88	669+85														897
CHL-556	247-254	669+85	674+50													465	
CHL-557	247-254	669+85	674+50													465	
EL-531	247-254	674+50	686+52									0.23					
CHL-558	247-254	686+52	691+26													474	
CHL-559	247-254	686+52	691+26													474	
DL-523	247-254	691+26	695+18														392
EL-532	247-254	686+38	707+70									0.40					
PB-503	247-254	552+60	602+50	*													*
IA-503	247-254	552+60			*												
PB-504	247-254	635+68	637+00	140						3							140
IA-504	247-254	635+68			1												
EL-533	247-254	540+35	710+20											3.22			
EL-534	247-254	540+35	561+92									0.41					
CHL-560	247-254	540+35	556+00											1565			
RPM-522	247-254	540+35	556+00					79	159								
RPM-523	247-254	556+00	599+50						37								
LL-512	247-254	556+00	614+00								1.10						
* THIS ITEM WAS ALSO USED IN PHASE 5. NO ADDITIONAL QUANTITY PROVIDED.																	
SUBTOTALS CARRIED TO SHEET 264				140	1		79	334	3	3	4.22	3.53	6.34	1,565	3,756	6,922	140

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES PHASE 5

RIC-30-9.26

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REF NO.	SHEET NO.	STATION TO STATION				614	614	614	614	614	614	614	614	614	614	614	614	614	622	622	622
				TO		INCREASED BARRIER DELINEATION FT	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH	WORK ZONE RAISED PAVEMENT MARKER (YELLOW) EACH	WORK ZONE RAISED PAVEMENT MARKER (WHITE) EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY EACH	OBJECT MARKER, ONE WAY EACH	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) MILE	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT FT		WORK ZONE GORE MARKING, CLASS II, 642 PAINT FT	PORTABLE BARRIER, 50", AS PER PLAN FT	PORTABLE BARRIER, 50", BRIDGE MOUNTED, AS PER PLAN FT
EL-735	300-326	664+77		676+00								0.21									
PB-716	300-326	664+77		667+00					6	6									230		
DL-717	300-326	664+77		669+00												423					
CHL-744	300-326	669+00		676+00										700							
CHL-745	300-326	669+00		674+50										550							
EL-736	300-326	676+00		680+60								0.09									
PB-717	300-326	672+50		680+00				17	17										800		
PB-718	300-326	672+40		674+41				5	5										190		1
IA-711	300-326	672+40								1											
CHL-746	300-326	687+00		694+00										700							
CHL-747	300-326	687+00		694+00										700							
EL-737	300-326	687+00		715+00								0.53									
DL-718	300-326	694+00		702+56												856					
EL-738	300-326	707+61		715+00									0.14								
RPM-711	300-326	704+61		717+61		66	66														
SUBTOTALS THIS SHEET						1	66	66	28	28		0.74	0.23	2,650		1,279			1,220		1
SUBTOTALS SHEET 338					18,256	5	117	204	369	369		10.48	10.43	5,506	1,000	1,947	12	17,996	430	1	
SUBTOTALS SHEET 339							162	509			4.92	3.94	5.42	4,376		7,268					
SUBTOTALS SHEET 340						3			158	158		3.12	0.17	4,364		2,699		7,365	210	2	
TOTALS CARRIED TO SHEET 66-67					18,256	9	345	779	555	555	4.92	18.28	16.25	16,896	1,000	13,193	12	26,581	640	4	

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES

PHASE 7

RIC-30-9.26

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SHEET NUM.												PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
32-38B	40-65	66-67	369-371	380-383	390	395	918	959	991	1510-1511	1531-1585	OFFICE CALCS	01/NHS/BR	02/NHS/PV	03/NHS/BR							04/NHS/BR
				45.8										45.8			602	20000	45.8	CY	CONCRETE MASONRY	
				2,525										2,525			605	13300	2,525	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
				93,656										93,656			605	14000	93,656	FT	6" BASE PIPE UNDERDRAINS	
				2,807				18						2,825			611	00510	2,825	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
				22										22			611	02000	22	FT	8" CONDUIT, TYPE C	
				147										147			611	04400	147	FT	12" CONDUIT, TYPE B	
				182										182			611	04600	182	FT	12" CONDUIT, TYPE C	
				79										79			611	04900	79	FT	12" CONDUIT, TYPE D	
				77										77			611	05700	77	FT	15" CONDUIT, TYPE A	
				2,227										2,227			611	05900	2,227	FT	15" CONDUIT, TYPE B	
				204										204			611	06100	204	FT	15" CONDUIT, TYPE C	
				362										362			611	06700	362	FT	15" CONDUIT, TYPE F, 707.50 TYPE C OR 707.21	
				227										227			611	07400	227	FT	18" CONDUIT, TYPE B	
				306										306			611	07600	306	FT	18" CONDUIT, TYPE C	
				24										24			611	09100	24	FT	21" CONDUIT, TYPE C	
				27										27			611	09400	27	FT	21" CONDUIT, TYPE D	
				103										103			611	10200	103	FT	24" CONDUIT, TYPE A	
				275										275			611	10400	275	FT	24" CONDUIT, TYPE B	
				61										61			611	10600	61	FT	24" CONDUIT, TYPE C	
				96										96			611	11200	96	FT	24" CONDUIT, TYPE F, 707.50 TYPE C OR 707.21	
				228										228			611	11900	228	FT	27" CONDUIT, TYPE B	
				131										131			611	13200	131	FT	30" CONDUIT, TYPE A	
				92										92			611	13400	92	FT	30" CONDUIT, TYPE B	
				253										253			611	16400	253	FT	36" CONDUIT, TYPE B	
				71										71			611	16600	71	FT	36" CONDUIT, TYPE C	
				98										98			611	19400	98	FT	42" CONDUIT, TYPE B	
				164										164			611	20900	164	FT	48" CONDUIT, TYPE B	
				422										422			611	21100	422	FT	48" CONDUIT, TYPE C	
				397										397			611	22400	397	FT	54" CONDUIT, TYPE B	
				88										88			611	52702	88	FT	29" X 45" CONDUIT, TYPE B, 706.04	
				54										54			611	52706	54	FT	29" X 45" CONDUIT, TYPE D, 706.04	
				147										147			611	53000	147	FT	38" X 60" CONDUIT, TYPE A, 706.04	
				137										137			611	96600	137	FT	CONDUIT, BORED OR JACKED, 15", TYPE B	
				196										196			611	96600	196	FT	CONDUIT, BORED OR JACKED, 18", TYPE B	
				181										181			611	96600	181	FT	CONDUIT, BORED OR JACKED, 21", TYPE C	
				153										153			611	96600	153	FT	CONDUIT, BORED OR JACKED, 30", TYPE A	
				241										241			611	96600	241	FT	CONDUIT, BORED OR JACKED, 30", TYPE B	
				392										392			611	96600	392	FT	CONDUIT, BORED OR JACKED, 36", TYPE B	
				246										246			611	96600	246	FT	CONDUIT, BORED OR JACKED, 42", TYPE A	
				182										182			611	96600	182	FT	CONDUIT, BORED OR JACKED, 48", TYPE A	
				389										389			611	96600	389	FT	CONDUIT, BORED OR JACKED, 54", TYPE A	
				265										265			611	96600	265	FT	CONDUIT, BORED OR JACKED, 66", TYPE A	
				229										229			611	96600	229	FT	CONDUIT, BORED OR JACKED, 66", TYPE B	
				234										234			611	96600	234	FT	CONDUIT, BORED OR JACKED, 78", TYPE A	
				4										4			611	98150	4	EACH	CATCH BASIN, NO. 3	
				11										11			611	98180	11	EACH	CATCH BASIN, NO. 3A	
				2										2			611	98270	2	EACH	CATCH BASIN, NO. 4A	
				5										5			611	98370	5	EACH	CATCH BASIN, NO. 6	
				26										26			611	98410	26	EACH	CATCH BASIN, NO. 8	
				9										9			611	98434	9	EACH	CATCH BASIN, NO. 8A	
				1										1			611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
				1										1			611	98570	1	EACH	CATCH BASIN, NO. 2-5	
				2										2			611	98630	2	EACH	CATCH BASIN ADJUSTED TO GRADE	
				2										2			611	99114	2	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
				4										4			611	99140	4	EACH	INLET, NO. 4 FOR SINGLE SLOPE BARRIER, TYPE B1	
				9										9			611	99140	9	EACH	INLET, NO. 4 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN	34
				7										7			611	99574	7	EACH	MANHOLE, NO. 3	
				2										2			611	99654	2	EACH	MANHOLE ADJUSTED TO GRADE	
				2										2			611	99660	2	EACH	MANHOLE RECONSTRUCTED TO GRADE	
				60										62			611	99710	62	EACH	PRECAST REINFORCED CONCRETE OUTLET	

GENERAL SUMMARY

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SHEET NUM.											PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.			
32-38B	40-65	66-67	369-371	380-383	390	395	918	959	991	1510-1511	1531-1585	OFFICE CALCS	01/NHS/BR	02/NHS/PV							03/NHS/BR	04/NHS/BR	
	34.52	21.62											5.62	50.52			642	00104	56.14	MILE	EDGE LINE, 6", TYPE 1		
	15.05	10.29											2.54	22.8			642	00204	25.34	MILE	LANE LINE, 6", TYPE 1		
		3,786												3,786			642	00400	3,786	FT	CHANNELIZING LINE, 8", TYPE 1		
	21,204	13,042											3,424.6	30,821.4			642	00404	34,246	FT	CHANNELIZING LINE, 12", TYPE 1		
	120													120			642	00500	120	FT	STOP LINE, TYPE 1		
	25,082	14,182											3,926.4	35,337.6			642	01510	39,264	FT	DOTTED LINE, 6", TYPE 1		
																					FOR ADDITIONAL TRAFFIC CONTROL QUANTITIES	1009	
																					TRAFFIC SIGNALS		
																					FOR TRAFFIC SIGNALS ESTIMATED QUANTITIES	1147	
																					RETAINING WALLS		
																					FOR RETAINING WALL 10B ESTIMATED QUANTITIES	974	
																					FOR RETAINING WALL 7B ESTIMATED QUANTITIES	980	
																					BUILDING DEMOLITION		
LS														LS			202	56001	LS		BUILDING DEMOLISHED, AS PER PLAN, PARCEL 208, PORTION OF BUILDING	38A	
4														4			SPECIAL	69070100	4	SF	ASBESTOS ABATEMENT, WINDOW GLAZING COMPOUND	38A	
50														50			SPECIAL	69070100	50	SF	ASBESTOS ABATEMENT, DRYWALL SYSTEMS	38A	
1														1			SPECIAL	69070100	1	SF	ASBESTOS ABATEMENT, ELECTRICAL BACKING PLATE	38A	
20														20			SPECIAL	69070100	20	SF	ASBESTOS ABATEMENT, RESIDUAL FLASHING	38A	
																					NOISE BARRIERS		
								3,190						3,190			605	11101	3,190	FT	6" SHALLOW PIPE UNDERDRAINS, AS PER PLAN	960	
								73,704						73,704			SPECIAL	60610210	73,704	SF	NOISE BARRIER (REFLECTIVE)	959	
																					STRUCTURES OVER 20 FOOT SPAN		
																					FOR RIC-30-0982 ESTIMATED QUANTITIES	1200	
																					FOR RIC-30-1074 ESTIMATED QUANTITIES	1207	
																					FOR RIC-30-1135 ESTIMATED QUANTITIES	1273	
																					FOR RIC-30-1156 ESTIMATED QUANTITIES	1329	
																					FOR RIC-30-1212 ESTIMATED QUANTITIES	1335	
																					FOR RIC-30-1219 ESTIMATED QUANTITIES	1347	
																					FOR RIC-30-1236 ESTIMATED QUANTITIES	1428	
																					FOR RIC-30-1283 ESTIMATED QUANTITIES	1507	
																					MAINTENANCE OF TRAFFIC		
	10													10			410	12000	10	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B		
	275													275			606	98000	275	FT	GUARDRAIL, MISC.: MEDIAN BARRIER PROTECTION	61	
	2,500													250	2,250		614	11110	2,500	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
	58,662	279,713												33,838	304,537		614	11630	338,375	FT	INCREASED BARRIER DELINEATION		
		59													59		614	12336	59	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)		
															1		614	12338	1	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)		
	LS													LS			614	12420	LS		DETOUR SIGNING		
	20													20			614	12484	20	EACH	WORK ZONE INCREASED PENALTIES SIGN		
	20													20			614	12500	20	EACH	REPLACEMENT SIGN		
	100												10	90			614	12600	100	EACH	REPLACEMENT DRUM		
	2													2			614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM		
		11,311												1,131	10,180		614	12800	11,311	EACH	WORK ZONE RAISED PAVEMENT MARKER		
	197	831												103	925		614	12801	1,028	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	45	
															381		614	13000	381	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		
	71	310												725	6,528		614	13310	7,253	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY		
	1,203	6,050												21	188		614	13310	209	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL		
		209													51	456		614	13318	507	EACH	BARRIER REFLECTOR, TYPE 5, ONE WAY	
	507													455	4,090		614	13350	4,545	EACH	OBJECT MARKER, ONE WAY		
	631	3,914													193	1,741		614	13360	1,934	EACH	OBJECT MARKER, TWO WAY	
	656	1,278												750,000			614	18000	750,000	EACH	MAINTAINING TRAFFIC, MISC.: BRIDGE DECK AND PAVEMENT PATCHING	48	
	750,000														16		614	18000	16	EACH	MAINTAINING TRAFFIC, MISC.: EMERGENCY ACCESS GATE SYSTEMS	48	
	16														90		614	18601	90	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	44	
	90														3.18	28.61		614	20110	31.79	MILE	WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	
		31.79													0.45	4.09		614	21100	4.54	MILE	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	
		4.54													18.26	164.27		614	22110	182.53	MILE	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT	
		182.53																					

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GENERAL SUMMARY
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REF NO.	SHEET NO.	STATION TO STATION		SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	202	202	202	202	202	202	601	601	601	
				FILL AND PLUG EXISTING CONDUIT, 12"	FILL AND PLUG EXISTING CONDUIT, 15"	FILL AND PLUG EXISTING CONDUIT, 18"	FILL AND PLUG EXISTING CONDUIT, 24"	FILL AND PLUG EXISTING CONDUIT, 30"	FILL AND PLUG EXISTING CONDUIT, 27"	FILL AND PLUG EXISTING CONDUIT, 36"	FILL AND PLUG EXISTING CONDUIT, 48"	FILL AND PLUG EXISTING CONDUIT, 60"	FILL AND PLUG EXISTING CONDUIT, 66"	FILL AND PLUG EXISTING CONDUIT, 78"	FENCE REMOVED	GATE REMOVED	REMOVAL MISC.: POLE BASE	REMOVAL MISC.: STEEL POST	REMOVAL MISC.: WOOD POST	REMOVAL MISC.: CONCRETE DRAIN OUTLET	TIED CONCRETE BLOCK MAT, TYPE 2	PAVED GUTTER, TYPE 4, AS PER PLAN	PAVED GUTTER, TYPE 1-2
		TO		FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	SY	FT	FT	
			U.S. 30																				
411	488+90		500+00										271										
413	500+00		511+00					176			193												
419	533+00		544+00								164												
421	544+00		555+00								252												
423	555+00		566+00									182											
427	577+00		588+00						146														
429	588+00		599+00			134																	
431	599+00		609+50			253															221		
435	620+00		631+00																		16		
438	631+00		642+00																2				
440-441	642+00		653+00																		114		
443	653+00		664+00				151														61		
447	675+00		686+00	64		57				167	246												
449	686+00		697+00									232											
TOTALS CARRIED TO SHEET 369A				64	0	444	297	176	167	246	609	271	182	232	0	0	0	0	0	2	191	221	0

ROADWAY SUBSUMMARY

RIC-30-9.26

357A
1669

CALCULATED
JIM
CHECKED
SDS

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REF NO.	SHEET NO.	STATION TO STATION			SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	202	202	202	202	202	202	601	601	601
					FILL AND PLUG EXISTING CONDUIT, 12"	FILL AND PLUG EXISTING CONDUIT, 15"	FILL AND PLUG EXISTING CONDUIT, 18"	FILL AND PLUG EXISTING CONDUIT, 24"	FILL AND PLUG EXISTING CONDUIT, 30"	FILL AND PLUG EXISTING CONDUIT, 27"	FILL AND PLUG EXISTING CONDUIT, 36"	FILL AND PLUG EXISTING CONDUIT, 48"	FILL AND PLUG EXISTING CONDUIT, 60"	FILL AND PLUG EXISTING CONDUIT, 66"	FILL AND PLUG EXISTING CONDUIT, 78"	FENCE REMOVED	GATE REMOVED	REMOVAL MISC.: POLE BASE	REMOVAL MISC.: STEEL POST	REMOVAL MISC.: WOOD POST	REMOVAL MISC.: CONCRETE DRAIN OUTLET	TIED CONCRETE BLOCK MAT, TYPE 2	PAVED GUTTER, TYPE 4, AS PER PLAN
		TO			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	SY	FT	FT

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REF NO.	SHEET NO.	STATION TO STATION		SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL	202	202	202	202	202	202	601	601	601	
				FILL AND PLUG EXISTING CONDUIT, 12"	FILL AND PLUG EXISTING CONDUIT, 15"	FILL AND PLUG EXISTING CONDUIT, 18"	FILL AND PLUG EXISTING CONDUIT, 24"	FILL AND PLUG EXISTING CONDUIT, 30"	FILL AND PLUG EXISTING CONDUIT, 27"	FILL AND PLUG EXISTING CONDUIT, 36"	FILL AND PLUG EXISTING CONDUIT, 48"	FILL AND PLUG EXISTING CONDUIT, 60"	FILL AND PLUG EXISTING CONDUIT, 66"	FILL AND PLUG EXISTING CONDUIT, 78"	FENCE REMOVED	GATE REMOVED	REMOVAL MISC.: POLE BASE	REMOVAL MISC.: STEEL POST	REMOVAL MISC.: WOOD POST	REMOVAL MISC.: CONCRETE DRAIN OUTLET	TIED CONCRETE BLOCK MAT, TYPE 2	PAVED GUTTER, TYPE 4, AS PER PLAN	PAVED GUTTER, TYPE 1-2
				FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	SY	FT	FT	
			TO																				
		S.R. 13 RAMP C																					
550	9+15.37		12+00																		13		
		RAMP W																					
559	132+40.62		136+50																			3	
561	136+50		140+67.38											209								1	
		RAMP X																					
564	236+25.32		242+98.32																			3	
		S.R. 545 RAMP SL																					
568	347+03.84		351+65.74																			146	
		S.R. 545 RAMP SR																					
570	448+66.53		452+33.43																			168	
TOTALS CARRIED TO SHEET 369A				0	314	0	0	0	0	0	0	0	0	209	0	0	0	0	4	3	13	0	0

ROADWAY SUBSUMMARY	CALCULATED
	JJM
RIC - 30 - 9 . 26	CHECKED
	SDS

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REF NO.	SHEET NO.	STATION TO STATION	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611
			21" CONDUIT, TYPE C FT	24" CONDUIT, TYPE A FT	24" CONDUIT, TYPE B FT	24" CONDUIT, TYPE C FT	24" CONDUIT, TYPE F, 707.50 TYPE C OR 707.21 FT	27" CONDUIT, TYPE B FT	30" CONDUIT, TYPE A FT	30" CONDUIT, TYPE B FT	36" CONDUIT, TYPE B FT	36" CONDUIT, TYPE C FT	42" CONDUIT, TYPE B FT	48" CONDUIT, TYPE B FT	48" CONDUIT, TYPE C FT	54" CONDUIT, TYPE B FT	CONDUIT, BORED OR JACKED, 18", TYPE B FT
		TO U.S. 30															
432	599+00	609+50															196
447A	675+00	686+00						154									
RELOCATED LONGVIEW AVE																	
472	308+00	312+50			31	55											
LONGVIEW AVE E																	
480	52+00	55+50			6	6											
SUBTOTALS CARRIED TO SHEET 381			0	0	37	61	0	154	0	0	0	0	0	0	0	0	196

CALCULATED JJM CHECKED SDS	DRAINAGE SUBSUMMARY	RIC - 30 - 9 . 26	373 1669
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REF NO.	SHEET NO.	STATION TO STATION		611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	
				21" CONDUIT, TYPE C	24" CONDUIT, TYPE A	24" CONDUIT, TYPE B	24" CONDUIT, TYPE C	24" CONDUIT, TYPE F, 707.50 TYPE C OR 707.21	27" CONDUIT, TYPE B	30" CONDUIT, TYPE A	30" CONDUIT, TYPE B	36" CONDUIT, TYPE B	36" CONDUIT, TYPE C	42" CONDUIT, TYPE B	48" CONDUIT, TYPE B	48" CONDUIT, TYPE C	54" CONDUIT, TYPE B	CONDUIT, BORED OR JACKED, 18", TYPE B	
			TO	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	
STORM SEWER PROFILES																			
927	0+00 (SR 39)		5+50 (SR 39)											98	164				
929	5+50 (SR 39)		10+27.35 (SR 39)	24				19					84	71			422		
931	0+00 (RAMP W)		4+65.42 (RAMP W)																
933	0+00 (SR 545)		3+58.17 (SR 545)			132		96			92								
936	237+00 (RAMP Y)					106													
CULVERT DETAILS																			
945	560+19.67-2 (US 30)																	198	
946	560+19.67-3 (US 30)																	199	
953	237+00 (RAMP S)										131								
SUBTOTALS				24	0	238	0	96	19	131	92	253	71	98	164	422	397	0	
SHEET 373				0	0	37	61	0	154	0	0	0	0	0	0	0	0	0	196
SHEET 377				0	103	0	0	0	55	0	0	0	0	0	0	0	0	0	0
TOTALS CARRIED TO GENERAL SUMMARY				24	103	275	61	96	228	131	92	253	71	98	164	422	397	0	196

DRAINAGE SUBSUMMARY				
RIC-30-9.26				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CALCULATED</td> <td style="text-align: center;">JJM</td> </tr> <tr> <td style="text-align: center;">CHECKED</td> <td style="text-align: center;">SDS</td> </tr> </table>	CALCULATED	JJM	CHECKED	SDS
CALCULATED	JJM			
CHECKED	SDS			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">381</td> </tr> <tr> <td style="text-align: center;">1669</td> </tr> </table>	381	1669		
381				
1669				

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REF NO.	SHEET NO.	STATION TO STATION		611	611	611	611	611	611	611	611	611	611	611	611	611	611	
				29" X 45" CONDUIT, TYPE B, 706.04	29" X 45" CONDUIT, TYPE D, 706.04	38" X 60" CONDUIT, TYPE A, 706.04	CONDUIT, BORED OR JACKED, 15", TYPE B	CONDUIT, BORED OR JACKED, 30", TYPE A	CONDUIT, BORED OR JACKED, 30", TYPE B	CONDUIT, BORED OR JACKED, 36", TYPE B	CONDUIT, BORED OR JACKED, 42", TYPE A	CONDUIT, BORED OR JACKED, 48", TYPE A	CONDUIT, BORED OR JACKED, 54", TYPE A	CONDUIT, BORED OR JACKED, 66", TYPE A	CONDUIT, BORED OR JACKED, 66", TYPE B	CONDUIT, BORED OR JACKED, 78", TYPE A	CONDUIT, BORED OR JACKED, 21", TYPE C	
				FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	
TO																		
STORM SEWER PROFILES																		
929	5+50 (SR 39)	10+27.35 (SR 39)															181	
931	0+00 (RAMP W)	4+65.42 (RAMP W)							210									
935	0+00 (RAMP SL)	3+58.89 (RAMP SL)					137											
937	14164+29.39 (ASH RR)								149									
938	14162+50 (ASH RR)								92									
CULVERT DETAILS																		
939	494+40.69 (US 30)											265						
940	505+08.17 (US 30)			147														
941	510+41.20 (US 30)									182								
942	536+20.87 (US 30)										150							
943	546+81 (US 30)										239							
944	560+19.67-1 (US 30)											229						
947	582+17.39 (US 30)									182								
948	590+03.47 (US 30)						133											
949	676+50 (US 30)									246								
950	687+49 (US 30)															234		
951	64+73.02 (LONGVIEW)			88														
952	64+80.14 (LONGVIEW)	65+31.14 (LONGVIEW)			54													
SUBTOTALS				88	54	147	137	133	241	392	246	182	389	265	229	234	181	
TOTALS CARRIED TO GENERAL SUMMARY				88	54	147	137	133	241	392	246	182	389	265	229	234	181	

CALCULATED JJM CHECKED SDS	DRAINAGE SUBSUMMARY	RIC - 30 - 9 . 26	382 1669
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SHEET NO.	STATION TO STATION		203	203	203	203	659	863	863	863
			EXCAVATION (01/NHS/BR) CY	EXCAVATION (02/NHS/PV) CY	EMBANKMENT (01/NHS/BR) CY	EMBANKMENT (02/NHS/PV) CY	SEDDING AND MULCHING SY	GEOGRID, TYPE PI SY	GEOGRID, TYPE SI SY	REINFORCED EMBANKMENT CY
WISE AVE										
738	20+50	22+00		45		88	502			
739	22+50	24+00		37		120	547			
740	24+50	26+00		106		45	569			
741	26+50	28+00		225		17	648			
742	28+50	30+00		155		26	625			
743	30+50	31+65		71		36	396			
LONGVIEW AVE E										
744	52+00	53+50		4		2	35			
745	54+00	55+50		23		40	337			
746	56+00	57+50		62		5	127			
747	58+00	59+50		31		35	253			
748	60+00	61+50		19		75	385			
749	62+00	63+50		25		18	235			
750	64+00	65+50		60		25	392			
751	66+00	67+50		389		8	745			
752	68+00	69+50		129		13	81			
753	70+00	71+50		73		4	185			
754	72+00	73+50		48		6	303			
755	74+00	75+50		80		14	301			
756	76+00	77+50		63		117	486			
757	78+00			49		14	142			
S.R. 545										
758	150+00	151+00		0		0	0			
758A	151+50	153+50		44		10	198			
759	154+00	155+00		74		25	470			
760	155+50	156+50		36		36	939			
761	157+00	158+00		89		62	705			
762	158+50	160+00		99		78	992			
763	160+50	161+00		598		1	492			
764	161+50	162+00		708		122	355			
765	162+50	163+00		504		325	597			
766	163+50	165+00		753		95	1383			
767	165+50	167+00		344		117	977			
768	167+50	169+50		36		154	1298			
769	170+00	171+50		43		101	1002			
770	172+00	173+50		51		78	997			
771	174+00	175+00		39		60	758			
772	175+50	176+50		47		46	578			
773	177+00	178+00		7		2	111			

SHEET NO.	STATION TO STATION		203	203	203	203	659	863	863	863
			EXCAVATION (01/NHS/BR) CY	EXCAVATION (02/NHS/PV) CY	EMBANKMENT (01/NHS/BR) CY	EMBANKMENT (02/NHS/PV) CY	SEDDING AND MULCHING SY	GEOGRID, TYPE PI SY	GEOGRID, TYPE SI SY	REINFORCED EMBANKMENT CY
TRIMBLE RAMP A										
774	3+50	4+00		1		20	50			
775	4+50	6+00		79		32	475			
776	6+50	8+00		256		55	926			
777	8+50	10+00		69		3	399			
TRIMBLE RAMP B										
778	13+50			8		0	12			
779	14+00	15+50		573		17	905			
780	16+00	17+50		591		1	837			
781	18+00	20+00		581		3	1144			
TRIMBLE RAMP C										
782	17+50	18+50		322		25	523			
783	19+00	20+50		507		17	871			
784	21+50	22+50		239		4	696			
785	23+00	24+50		104		44	1049			
786	25+00	26+50		45		131	880			
TRIMBLE RAMP D										
787	7+50	8+50		101		47	608			
788	9+00	10+50		464		14	905			
789	11+00	12+50		142		0	343			
S.R. 39 RAMP G										
790	357+00	358+50		77		174	435			
791	359+00	360+50		495		1481	870			
792	361+00	362+50		809		2009	1397			
793	363+00	363+50		1143		201	989			
794	364+00	364+50		2175		254	1639			
795	365+00	365+50		4569		183	2142			
796	366+00	366+50		3019		373	1675			
797	367+00	367+50		2293		604	1603			
798	368+00	368+50		1892		749	1627			
799	369+00	369+50		1075		673	1797			
800	370+00	370+50		564		336	1731			
801	371+00	371+50		210		101	833			
S.R. 39 RAMP H										
802	462+50	463+50		2471		784	1244			
803	464+00	464+50		2694		1909	1558			
804	465+00	466+50		581		308	831			
SHEET SUBTOTALS CARRIED TO SHEET 395										
			0	33580	0	12572	50140	0	0	0

CALCULATED
JGL
CHECKED
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EARTHWORK SUBSUMMARY

RIC - 30 - 9 .26

393
1669

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SHEET NO.	STATION TO STATION	203	203	203	203	659	863	863	863
		EXCAVATION (01/NHS/BR) CY	EXCAVATION (02/NHS/PV) CY	EMBANKMENT (01/NHS/BR) CY	EMBANKMENT (02/NHS/PV) CY	SEEDING AND MULCHING SY	GEOGRID, TYPE PI SY	GEOGRID, TYPE SI SY	REINFORCED EMBANKMENT CY
S.R. 545 RAMP RR									
849	2+50		640		0	176			
S.R. 545 RAMP RL									
850	2+50		144		0	50			
S.R. 545 RAMP R									
851	3+00	4+00	3998		0	1611			
852	4+50	5+50	1816		1	1727			
S.R. 545 RAMP RR									
853	4+50	5+00	262		0	258			
854	5+50	6+00	200		0	383			
S.R. 545 RAMP RL									
855	4+50	5+50	209		0	395			
856	6+00	6+50	33		16	277			
FIFTH AVE RAMP A									
857	170+50	172+00	122		27	605			
858	172+50	174+00	317		8	710			
859	174+50	176+00	602		5	697			
860	176+50	178+00	1103		7	1203			
861	178+50	180+00	357		8	980			
FIFTH AVE RAMP B									
862	369+00	371+00	374		5	658			
863	371+50	373+50	454		24	614			
FIFTH AVE RAMP D									
864	473+50	475+00	315		1	387			
865	475+50	477+00	915		5	803			
866	477+50	478+50	569		1	651			
867	479+00	480+00	587		512	855			
868	480+50	481+50	233		219	432			
SUBTOTALS		0	13,250	0	839	13,472	0	0	0
SUBTOTALS FROM SHEET 391		185	51,116	13,811	69,852	99,787	1,270	680	1,689
SUBTOTALS FROM SHEET 392		0	71,906	0	27,266	56,088	0	0	0
SUBTOTALS FROM SHEET 393		0	33,580	0	12,572	50,140	0	0	0
SUBTOTALS FROM SHEET 394		0	31,904	0	41,587	48,001	5,716	2,995	7,352
TOTALS CARRIED TO GENERAL SUMMARY		0	201,941	0	165,927	267,488	6,986	3,675	9,041

SEEDING AND MULCHING CALCULATIONS

ITEM 659 - TOPSOIL
 $267488 \text{ SQ YD} \times 111 \text{ CU YD} / 1000 = 29691.17 \text{ CU YD}$ USE 29,691 CU YD

ITEM 659 - REPAIR SEEDING AND MULCHING
 $267488 \text{ SQ YD} \times 0.05 = 13374.40 \text{ SQ YD}$ USE 13,374 SQ YD

ITEM 659 - INTER-SEEDING
 $267488 \text{ SQ YD} \times 0.05 = 13374.40 \text{ SQ YD}$ USE 13,374 SQ YD

ITEM 659 - COMMERCIAL FERTILIZER
 $267488 \text{ SQ YD} \times 9 = 2407392.00 \text{ SQ FT}$
 $2407392.00 \times 30 \text{ LBS} / 1000 \text{ SQ FT} = 72221.76 \text{ LBS}$
 $13374 \text{ SQ YD} \times 9 = 120366.00 \text{ SQ FT}$
 $120366.00 \times 20 \text{ LBS} / 1000 \text{ SQ FT} = 2407.32 \text{ LBS}$
 $72221.76 \text{ LBS} + 2407.32 \text{ LBS} = 74629.08 \text{ LBS} / 2000 = 37.31 \text{ TON}$ USE 37.31 TON

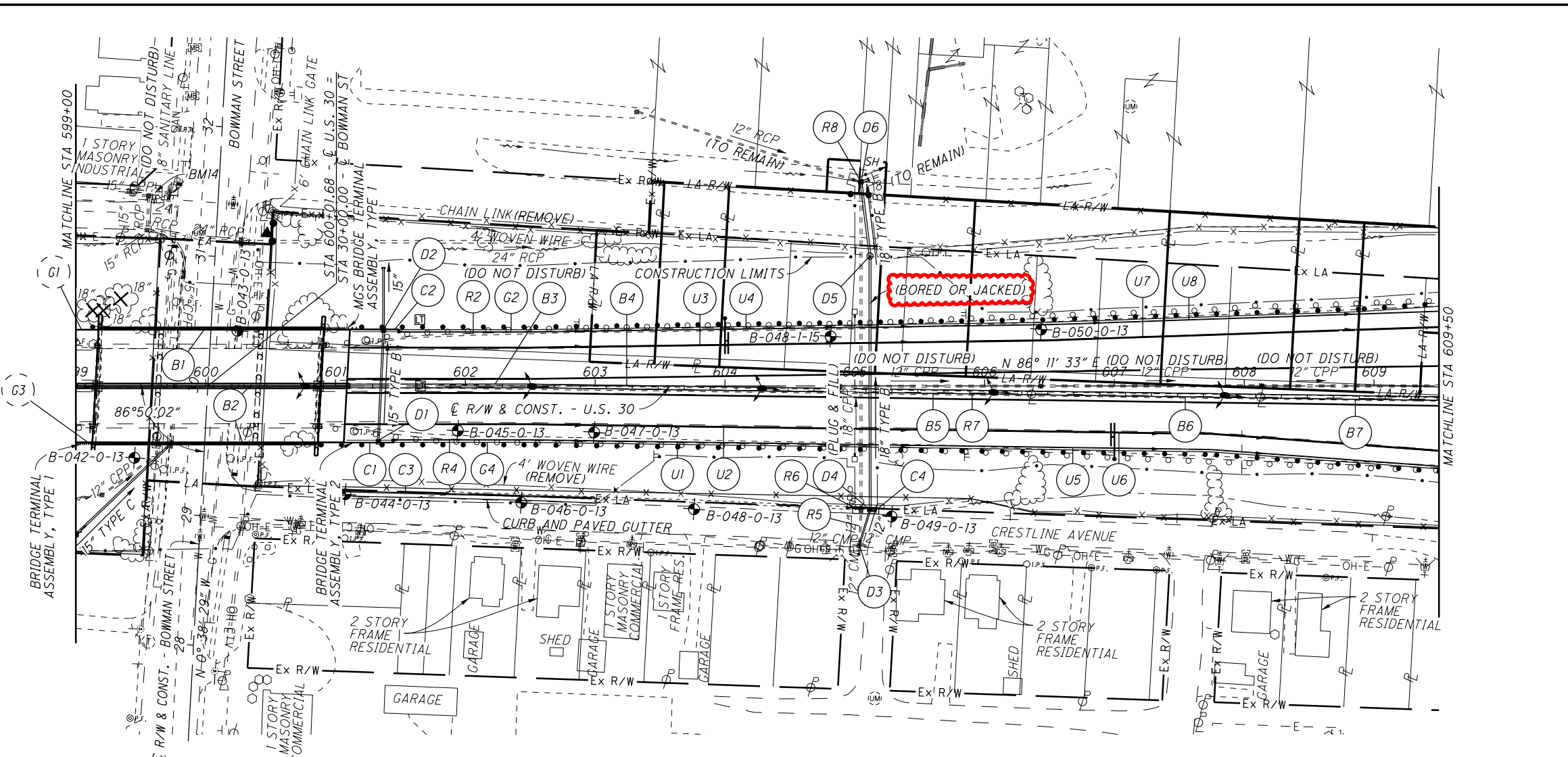
ITEM 659 - LIME
 $267488 \text{ SQ YD} \times 9 = 2407392.00 \text{ SQ FT}$
 $2407392.00 \text{ SQ FT} / 43560 = 55.2661157 \text{ ACRE}$ USE 55.27 ACRE

ITEM 659 - WATER
 $267488 \text{ SQ YD} \times 9 = 2407392.00 \text{ SQ FT}$
 $2407392.00 \text{ SQ FT} / 1000 \times 300 \text{ GAL} \times 2 \text{ APPLICATIONS} = 1444.44 \text{ M GAL}$
 $13374 \text{ SQ YD} \times 9 = 120366.00 \text{ SQ FT}$
 $120366.00 \text{ SQ FT} / 1000 \times 300 \text{ GAL} = 36.11 \text{ M GAL}$
 $1444.44 \text{ M GAL} + 36.11 \text{ M GAL} = 1480.55 \text{ M GAL}$ USE 1481 M GAL

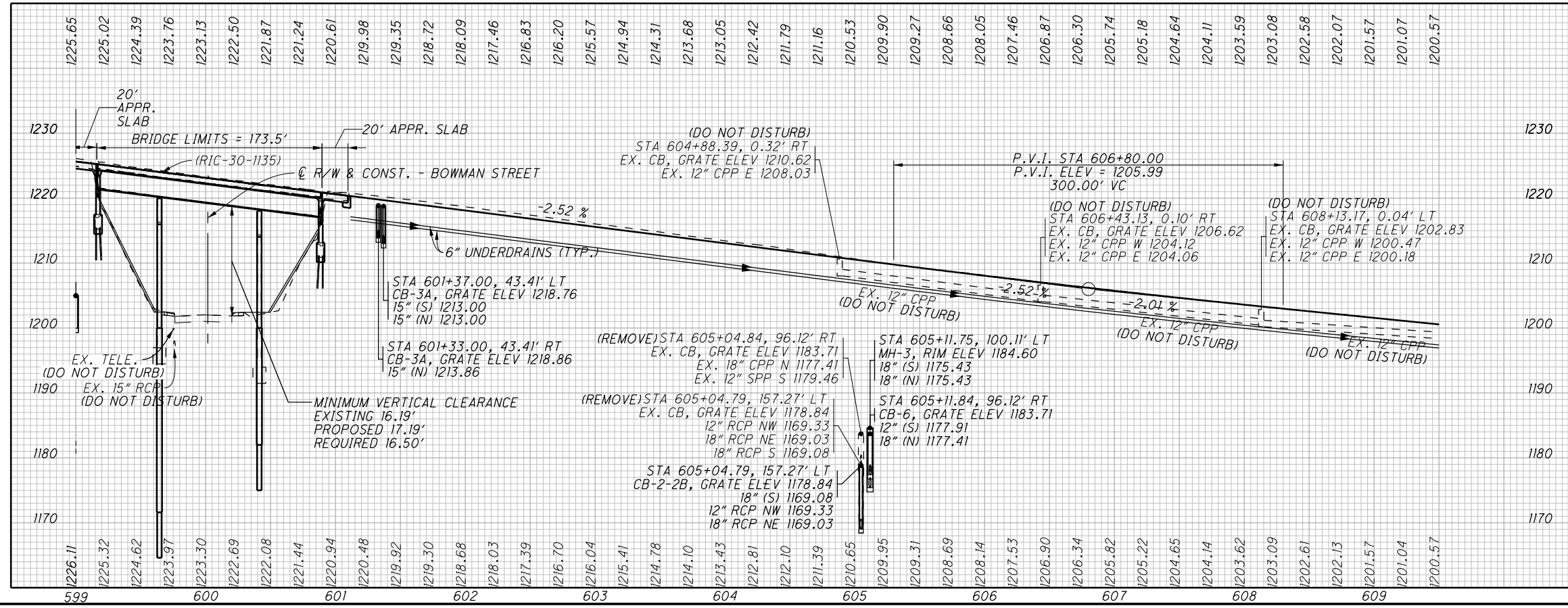
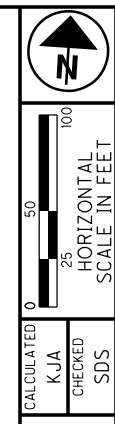
TOTALS CARRIED TO GENERAL NOTES SHEET 34.

CALCULATED	JGL
CHECKED	JJM
EARTHWORK SUBSUMMARY	
RIC - 30 - 9 . 26	
395	
1669	

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	SEE SHEET
SURVEY CONTROL	3
BOWMAN ST. P&P	473
PAVEMENT TRANSITION	994
BRIDGE DETAILS	1270-1325



**PLAN AND PROFILE - U.S. 30
STA 599+00 TO STA 609+50**

RIC-30-9.26

430
1669

CALCULATED
KJA
CHECKED
SDS

M:\5074\93455\Design\Roadway\Sheets\93455\000\3B.dgn 3/9/2020 3:43:06 PM Kja282

REF NO.	SHEET NO.	STATION TO STATION		602	611	611	611	611	611	611	611	611	611	611	611	611
				CONCRETE MASONRY CY	12" CONDUIT, TYPE B FT	12" CONDUIT, TYPE C FT	15" CONDUIT, TYPE B FT	15" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21 FT	18" CONDUIT, TYPE B FT	18" CONDUIT, TYPE C FT	CATCH BASIN, NO. 3A EACH	CATCH BASIN, NO. 6 EACH	CATCH BASIN, NO. 2-2B EACH	MANHOLE, NO. 3 EACH	CONDUIT, BORED OR JACKED, 18", TYPE B FT	
			TO													
D1	430	601+33.00	601+37.00				86			1						
D2	430	601+37.00		0.25				52								
D3	430	605+04.36	605+11.84		29											
D4	430	605+11.75	605+11.84					58		1				196		
D5	430	605+04.79	605+11.75													
D6	430	605+04.79			6				6				1			
SUBTOTALS CARRIED TO SHEETS 372-375				0.25	28	6	86	52	58	6	1	1	1	1	196	
SUBTOTALS CARRIED TO SHEETS 357-359																

CALCULATED
JJM
CHECKED
SDS

ESTIMATED QUANTITIES - U.S. 30
STA 599+00 TO STA 609+50

RIC-30-9.26

432
1669

REF NO.	SHEET NO.	STATION TO STATION		202	202	202	202	202	SPECIAL	SPECIAL	SPECIAL	SPECIAL	606	606	606					626	670	
				CONCRETE BARRIER REMOVED FT	PIPE REMOVED, 24" AND UNDER FT	[REDACTED]	GUARDRAIL REMOVED FT	GUARDRAIL REMOVED, BARRIER DESIGN FT	CATCH BASIN REMOVED EACH	FILL AND PLUG EXISTING CONDUIT, 12" FT	FILL AND PLUG EXISTING CONDUIT, 18" FT	FILL AND PLUG EXISTING CONDUIT, 36" FT	FILL AND PLUG EXISTING CONDUIT, 27" FT	GUARDRAIL, TYPE MGS FT	ANCHOR ASSEMBLY, MGS TYPE E EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH					BARRIER REFLECTOR, TYPE 5, (ONE-WAY) EACH	DITCH EROSION PROTECTION SY
R1	446	676+34	TO 676+64		31																	
R2	446	676+64										246										
R3	446	676+30	677+47				117															
R4	446	677+46	678+09	63																		
R5	446	676+71	678+42				62	105														
R6	446	677+75	679+44				59	107														
R7	446	678+06	678+59	53																		
R8	446	678+59	679+99				140															
R9	446	680+78	680+87		7																	
R10	446	683+62	683+70		10																	
R11	446	683+70	683+73																			
R12	446	683+73																				
G1	446	675+81.20	678+18.65										175	1	1						4	
G2	446	677+94.18	680+19.15										162.5	1	1						4	
E1	446	675+00	678+00																		250	
E2	446	676+50	678+00																		125	
E3	446	679+37	680+87																		129	
E4	446	679+73	681+23																		125	
E5	446	682+15	689+50																		613	
E6	446	682+15	685+15																		250	
SUBTOTALS CARRIED TO SHEETS 357-359				116	48	[REDACTED]	378	212	4	64	57	246	[REDACTED]	337.5	2	2					8	1492

ESTIMATED QUANTITIES - U.S. 30
STA 675+00 TO STA 686+00

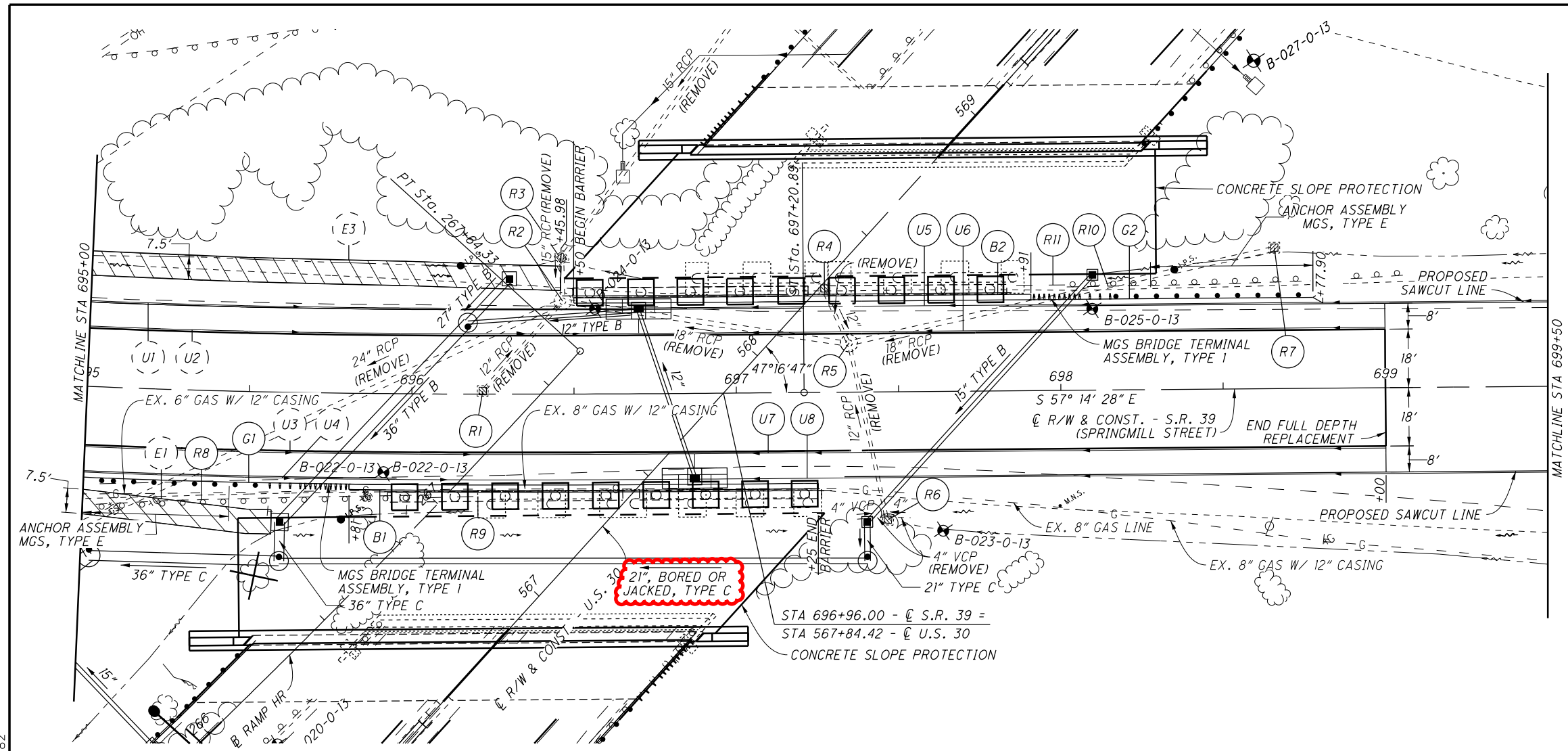
RIC-30-9.26

CALCULATED
JJM
CHECKED
SDS

447
1669

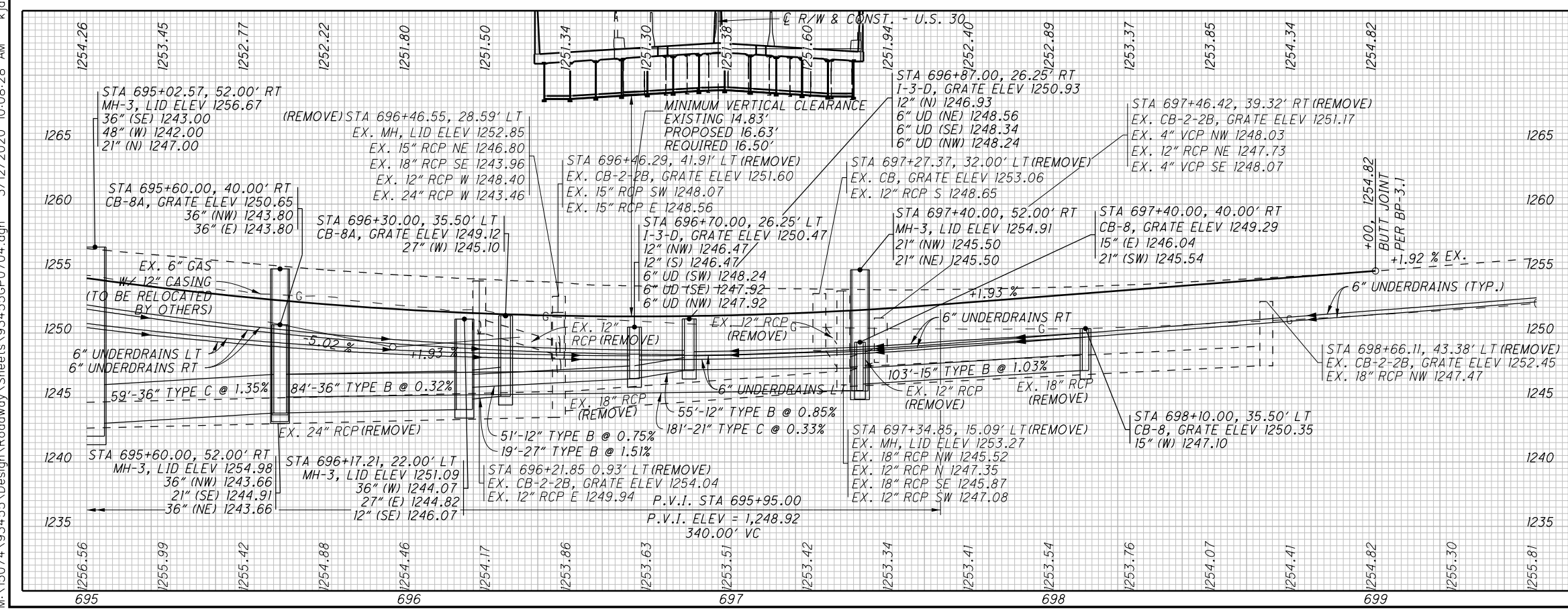


	SEE SHEET
SURVEY CONTROL	3
U.S. 30 P&P AND QUANTITIES	424-425
GRADING PLAN	897-898
STORM PROF. AND QUANTITIES	928-929
BRIDGE DETAILS	1204-1269



CURVE DATA - @ S.R. 39

P.I. Sta.	690+42.85
Δ	= 34° 15' 55" (LT)
Dc	= 3° 00' 00"
R	= 1,909.86'
Ls	= 250.00'
θ_s	= 3° 45' 00"
LT	= 166.70'
ST	= 83.37'
Lc	= 892.18'
Ts	= 714.14'
Es	= 90.11'



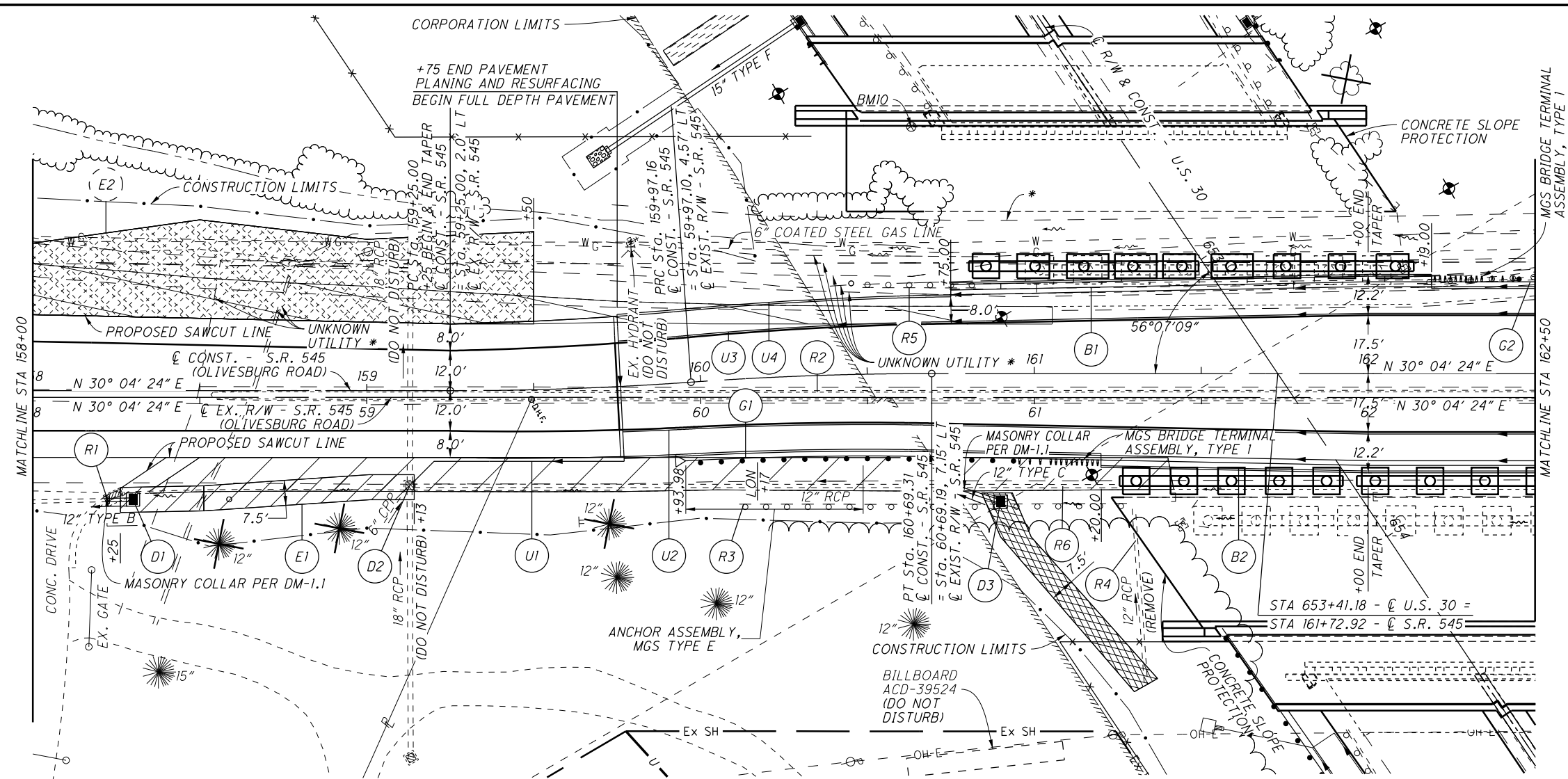
PLAN AND PROFILE - S.R. 39
STA 695+00 TO STA 699+50

RIC-30-9.26

462
1669

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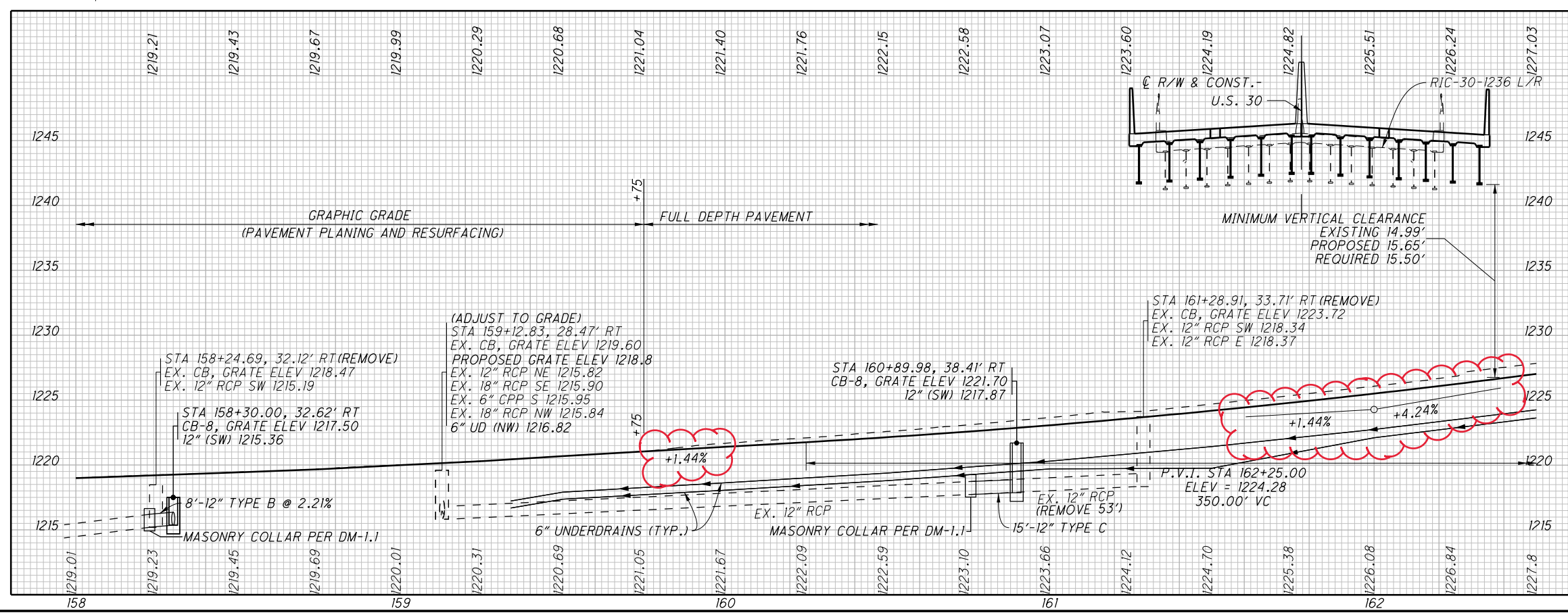
M:\15074_93455\Design\Roadway\Sheets\93455GP3003.dgn 2/28/2020 3:31:22 PM gcb284



	SEE SHEET
SURVEY CONTROL	3
U.S. 30 P&P	439-443
S.R. 545 EB RAMP REMOVAL PLAN AND QUANTITIES	575-576
WATERLINE QUANTITIES	986
BRIDGE DETAILS	1425-1504

E1 88 FT x 7.5 FT x 1/9 = 73 SY

* PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.



CURVE DATA - \bar{C} CONST. S.R. 545

P.I. Sta. 159+61.09	P.I. Sta. 160+33.25
$\Delta = 4^\circ 05' 20''$ (LT)	$\Delta = 4^\circ 05' 20''$ (RT)
$D_c = 5^\circ 40' 00''$	$D_c = 5^\circ 40' 00''$
$R = 1,011.10'$	$R = 1,011.10'$
$T = 36.09'$	$T = 36.09'$
$L = 72.16'$	$L = 72.16'$
$E = 0.64'$	$E = 0.64'$
$C = 72.14'$	$C = 72.14'$

0 20 40
HORIZONTAL SCALE IN FEET

CALCULATED JGL
CHECKED SDS

PLAN AND PROFILE - S.R. 545
STA. 158+00 TO STA. 162+50

RIC-30-9.26

497
1669



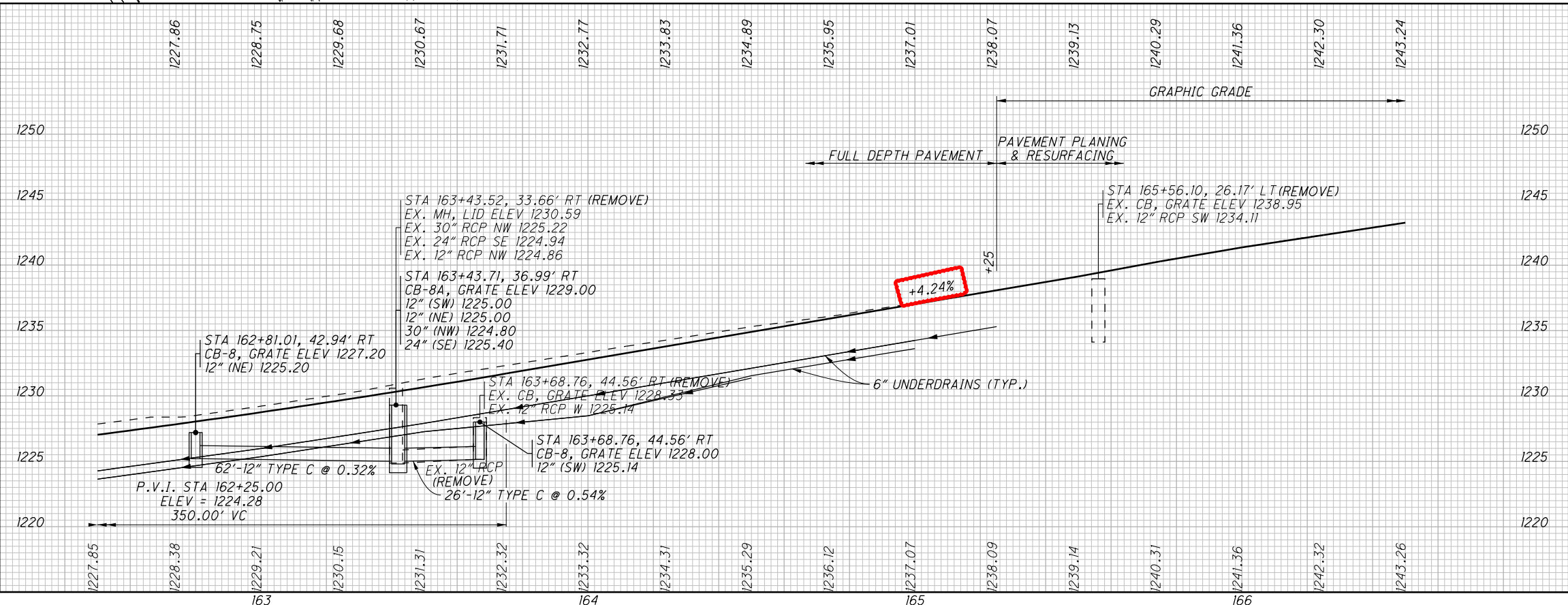
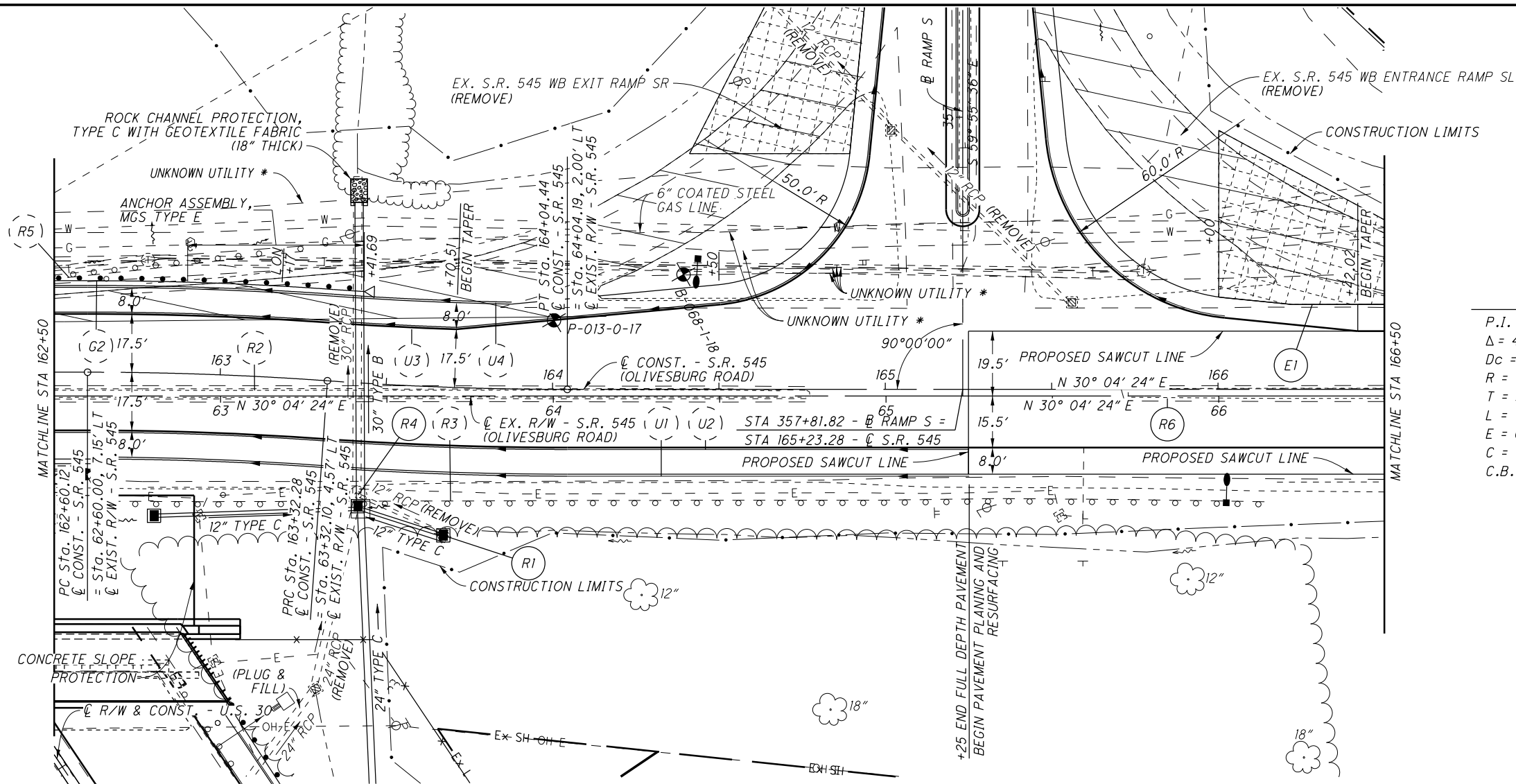
CALCULATED JGL CHECKED SDS

	SEE SHEET
SURVEY CONTROL	3
RAMP S P&P AND QUANTITIES	573-574
GRADING PLAN	901
INTERSECTION DETAIL	910
STORM SEWER PROFILE	932-933
PAVEMENT TRANSITION	998
BRIDGE DETAILS	1425-1504

CURVE DATA - C CONST. S.R. 545

P.I. Sta. 162+96.22	P.I. Sta. 163+68.37
$\Delta = 4^\circ 05' 20''$ (RT)	$\Delta = 4^\circ 05' 20''$ (LT)
$D_c = 5^\circ 40' 00''$	$D_c = 5^\circ 40' 00''$
$R = 1,011.10'$	$R = 1,011.10'$
$T = 36.09'$	$T = 36.09'$
$L = 72.16'$	$L = 72.16'$
$E = 0.64'$	$E = 0.64'$
$C = 72.14'$	$C = 72.14'$
C.B. = $N 32^\circ 07' 04'' E$	C.B. = $N 32^\circ 07' 04'' E$

E1 950 FT x 23 FT x 1/9 = 2533 SY



* PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.

PLAN AND PROFILE - S.R. 545
STA. 162+50 TO STA. 166+50

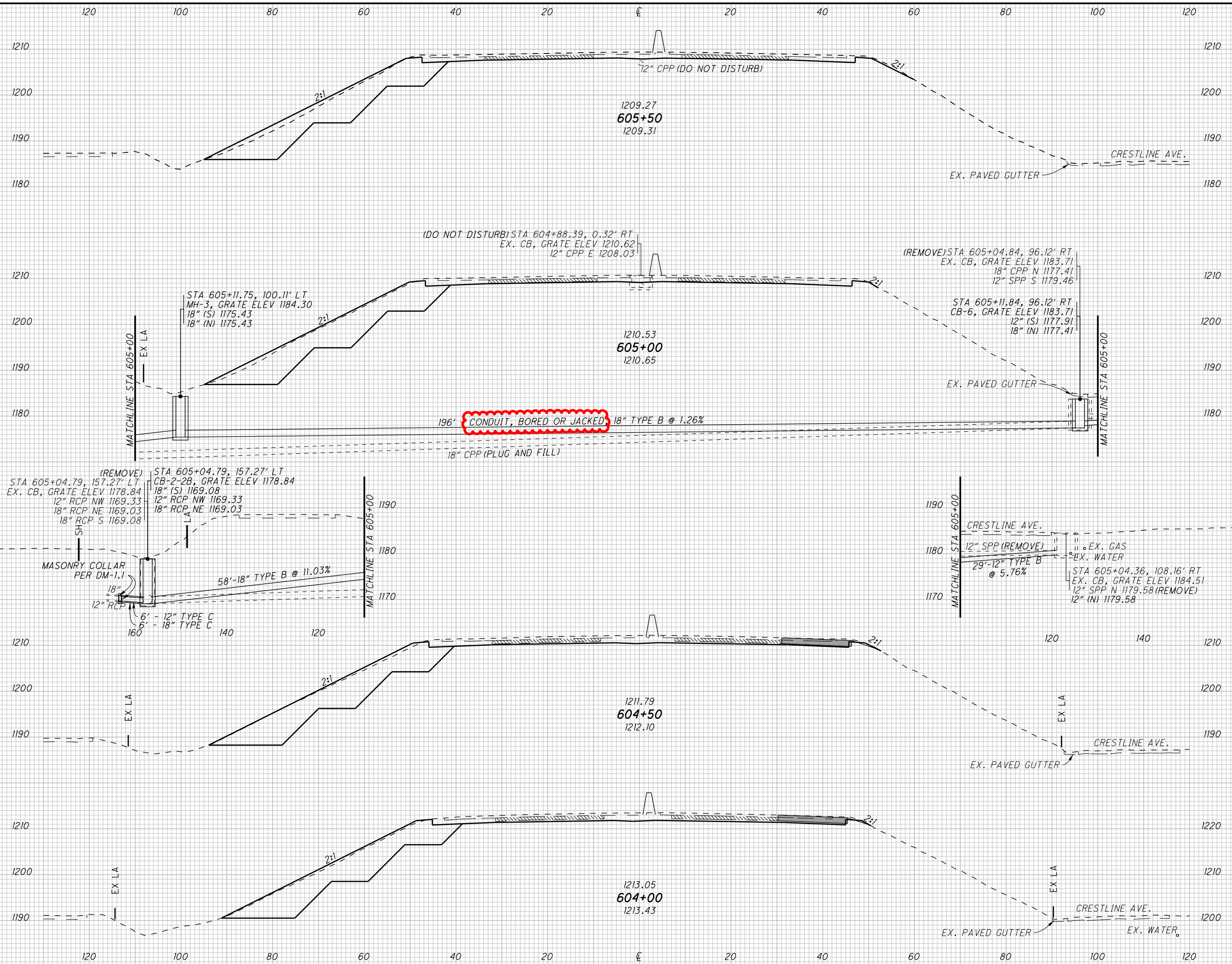
RIC-30-9.26

499
1669

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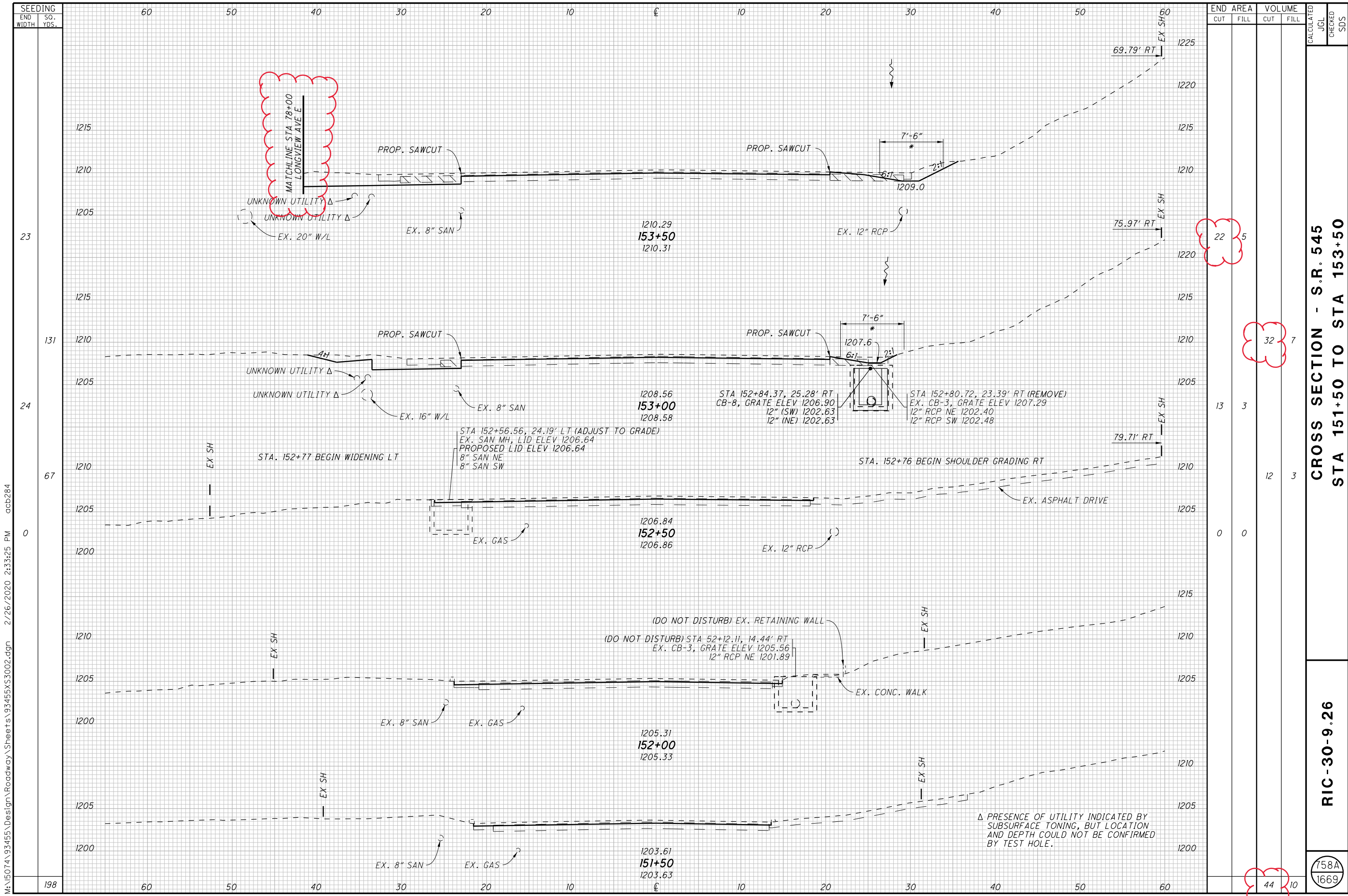
SEEDING	END AREA		VOLUME		CALCULATED	CHECKED
	END WIDTH	SO. YDS.	CUT	FILL		
75			285	266		
397					545	496
68			304	270		
381					581	498
69			324	268		
372					590	487
65			313	258		
353			365	267		
1503			2081	1748		



CROSS SECTIONS - U.S. 30
STA 604+00 TO STA 605+50

RIC-30-9.26

661
1669



END STA	END AREA		VOLUME		CALCULATED JGL	CHECKED SDS
	CUT	FILL	CUT	FILL		
153+50						
152+50						
151+50						
150+50						
149+50						
148+50						
147+50						
146+50						
145+50						
144+50						
143+50						
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11+50						
10+50						
9+50						
8+50						
7+50						
6+50						
5+50						
4+50						
3+50						
2+50						
1+50						
0+50						
SEEDING						
END WIDTH						
SO. YDS.						

CROSS SECTION - S.R. 545
STA 151+50 TO STA 153+50

RIC-30-9.26

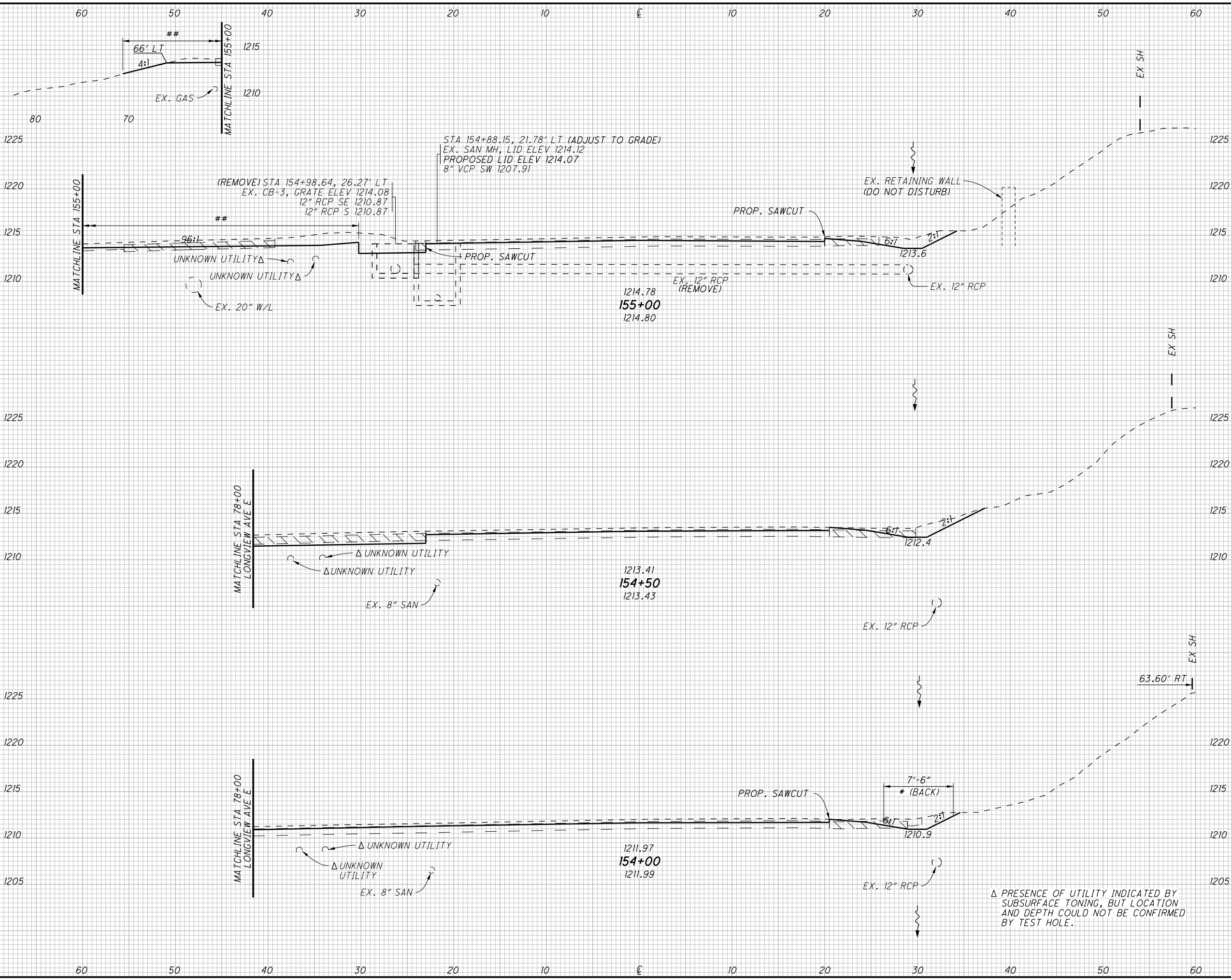
758A
1669

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△ PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.

SEEDING
END SO. WIDTH YDS.

64
22
114
19
117
470



END AREA	VOLUME		CALCULATED	CHECKED
	CUT	FILL		
30	3			
10	5			
4	5			
24	9		759	
74	25		1669	

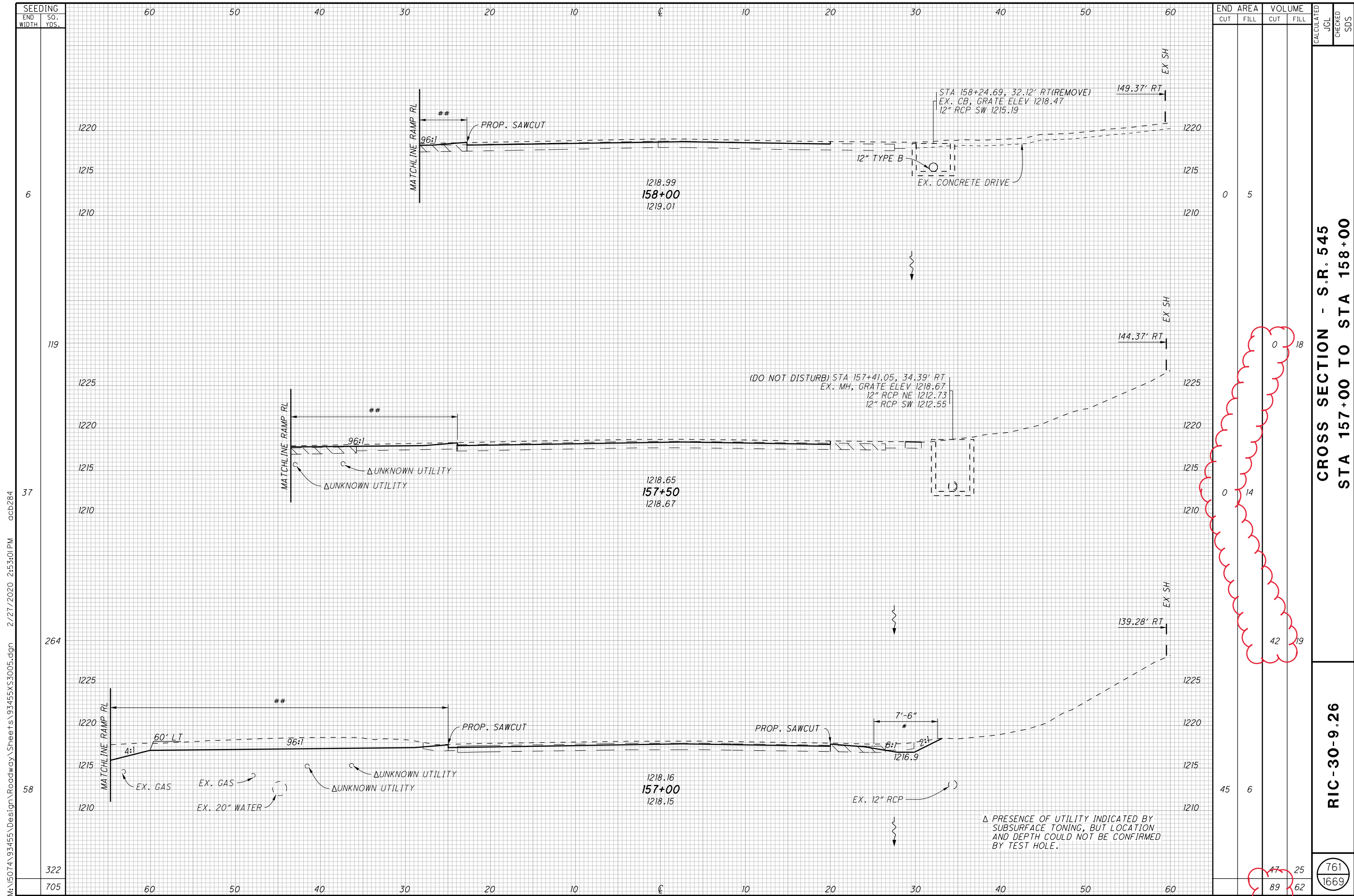
**CROSS SECTION - S.R. 545
STA 154+00 TO STA 155+00**

RIC-30-9.26

△ PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.

24 9
74 25

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END AREA	VOLUME		CALCULATED	CHECKED
	CUT	FILL		
0	5	18		
0	14	18		
45	6	19		
89	62	25	761	1669

CROSS SECTION - S.R. 545
STA 157+00 TO STA 158+00

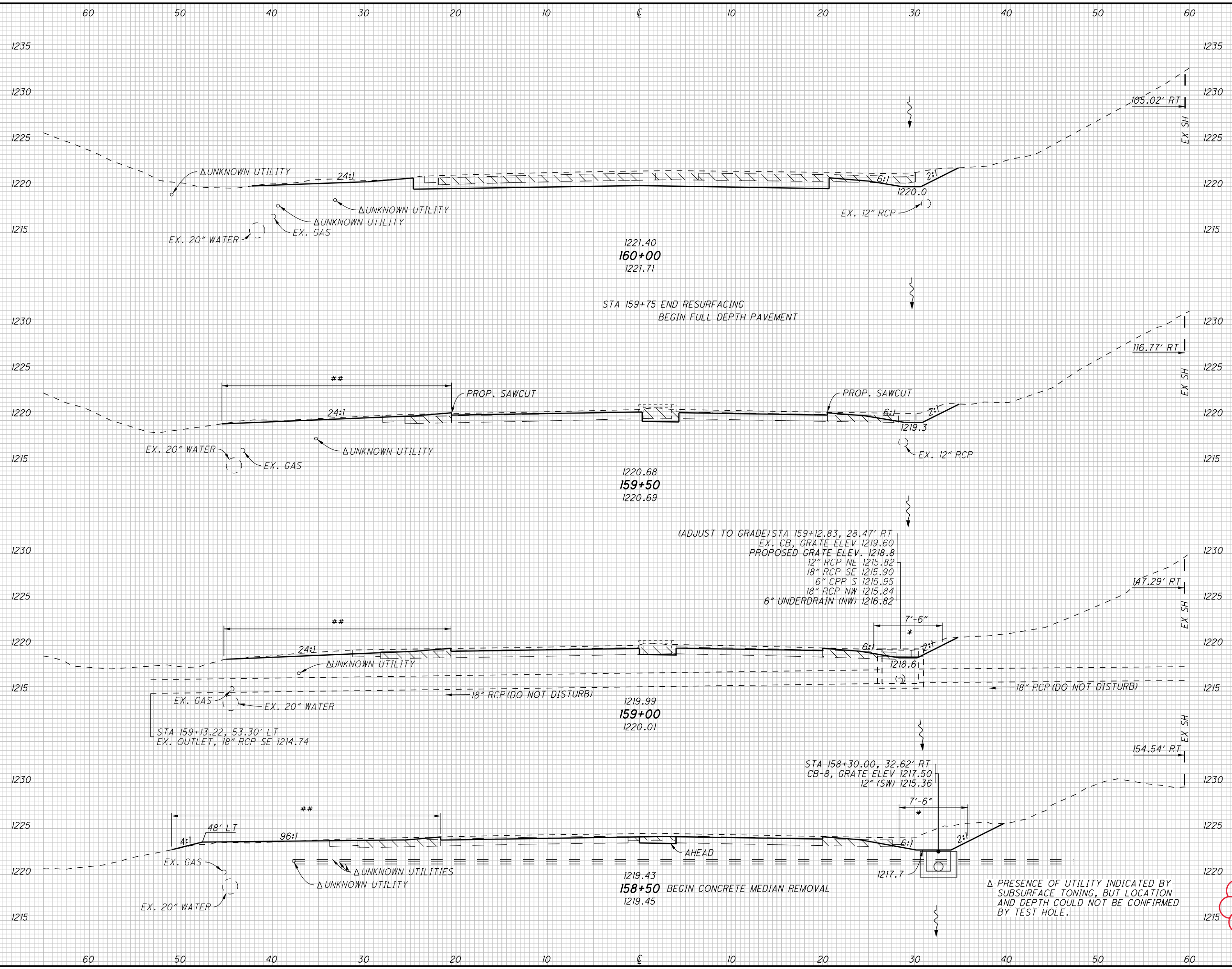
RIC-30-9.26

Δ PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.

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SEEDING	
END WIDTH	SO. YDS.
43	
253	
48	
267	
48	
294	
58	
178	
992	

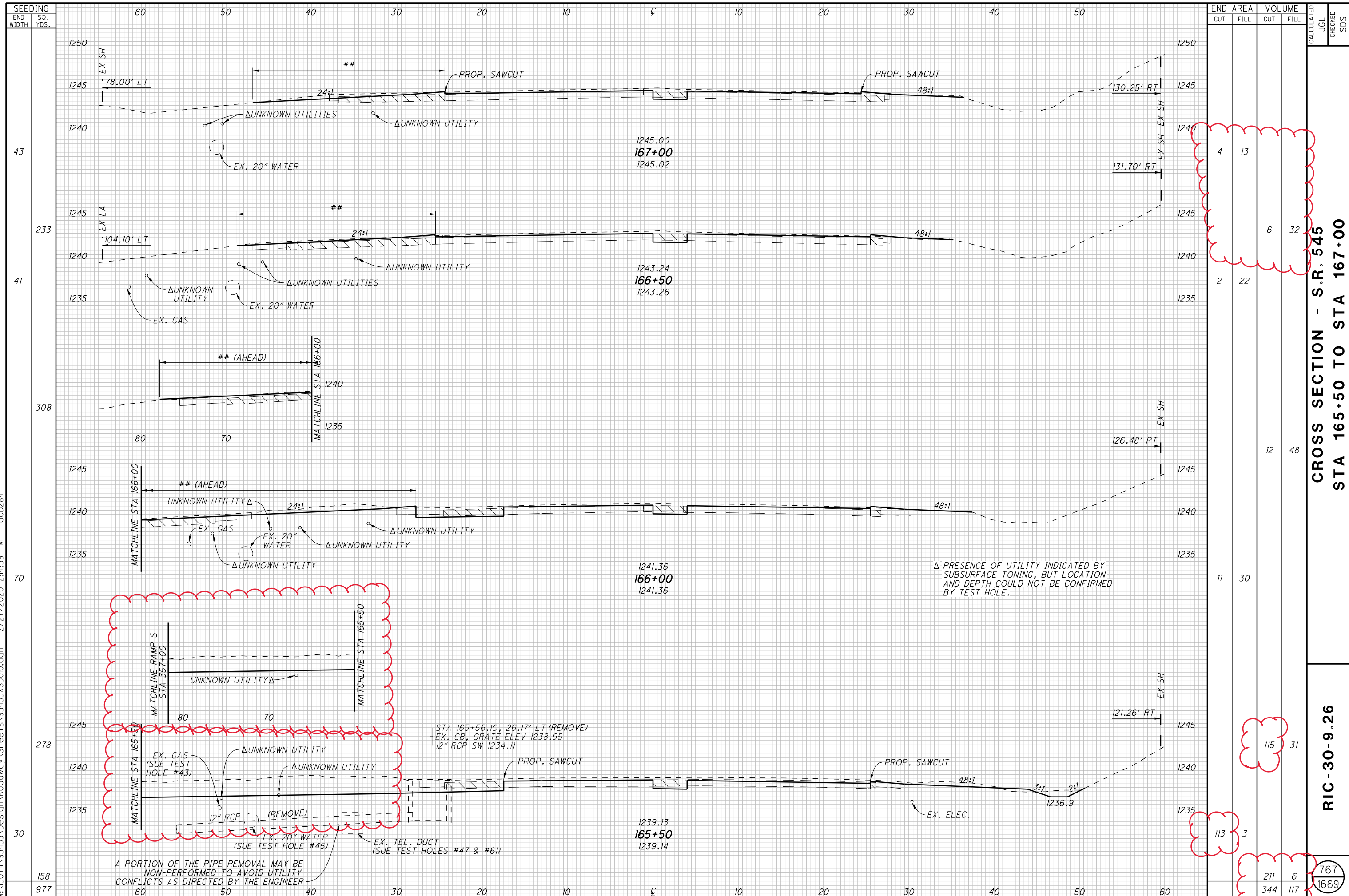


END AREA		VOLUME	
CUT	FILL	CUT	FILL
38	1		
8	11	43	11
7	13	14	22
19	15	24	26
		18	19
		99	78

CROSS SECTION - S.R. 545
STA 158+50 TO STA 160+00
RIC-30-9.26
 CALCULATED JGL
 CHECKED SDS
 762
 1669

△ PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.

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END AREA	VOLUME	CALCULATED	CHECKED		
				CUT	FILL
4	13				
2	22	6	32		
11	30	12	48		
113	3	115	31		
211	6	767	1669		
344	117				

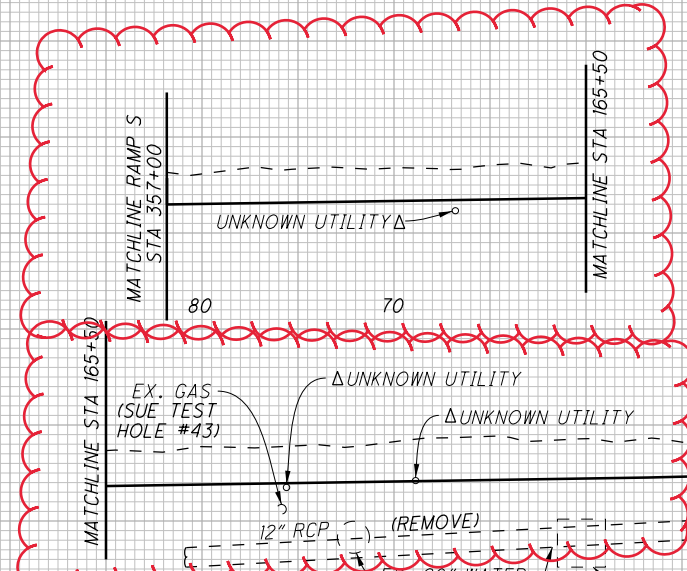
**CROSS SECTION - S.R. 545
STA 165+50 TO STA 167+00**

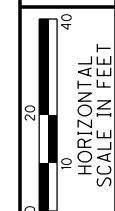
RIC-30-9.26

A PORTION OF THE PIPE REMOVAL MAY BE NON-PERFORMED TO AVOID UTILITY CONFLICTS AS DIRECTED BY THE ENGINEER

△ PRESENCE OF UTILITY INDICATED BY SUBSURFACE TONING, BUT LOCATION AND DEPTH COULD NOT BE CONFIRMED BY TEST HOLE.

STA 165+56.10, 26.17' LT (REMOVE)
EX. CB, GRATE ELEV 1238.95
12" RCP SW 1234.11

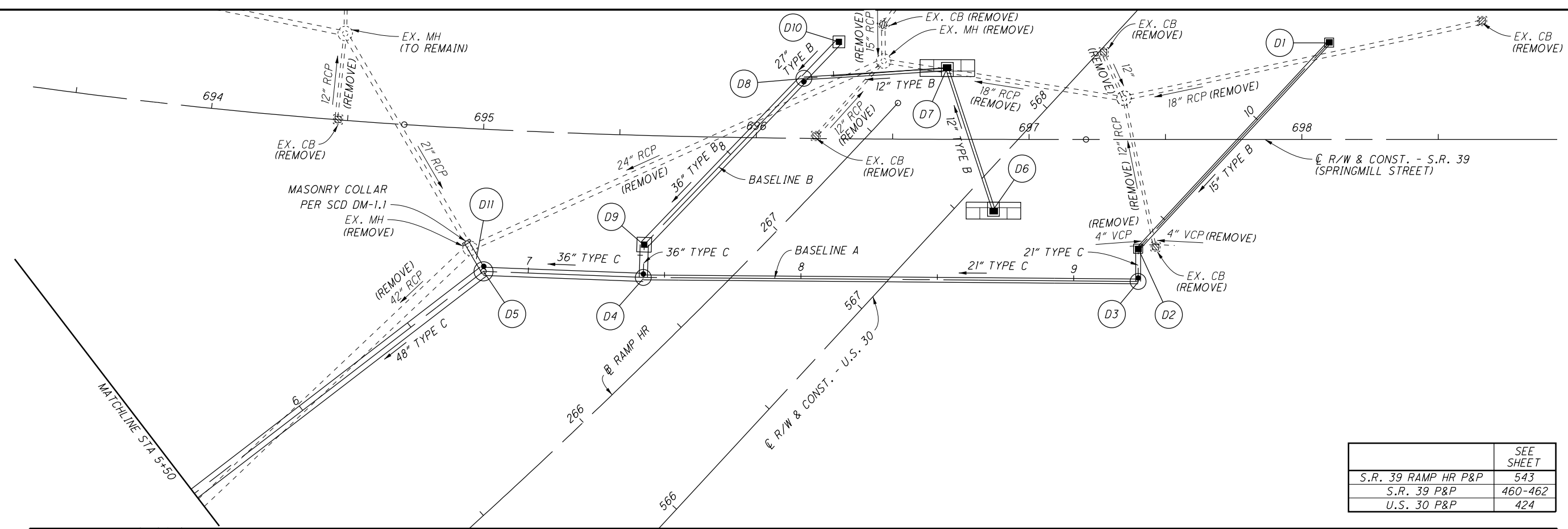




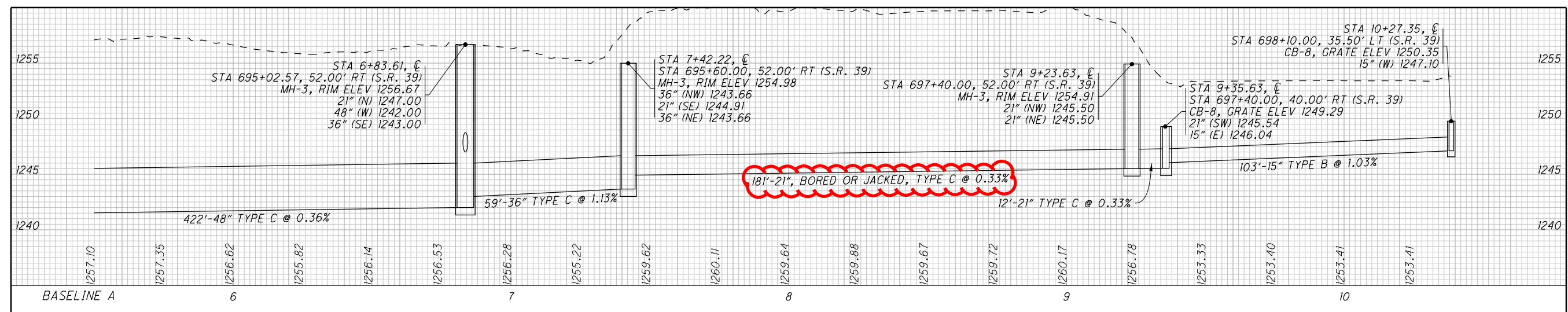
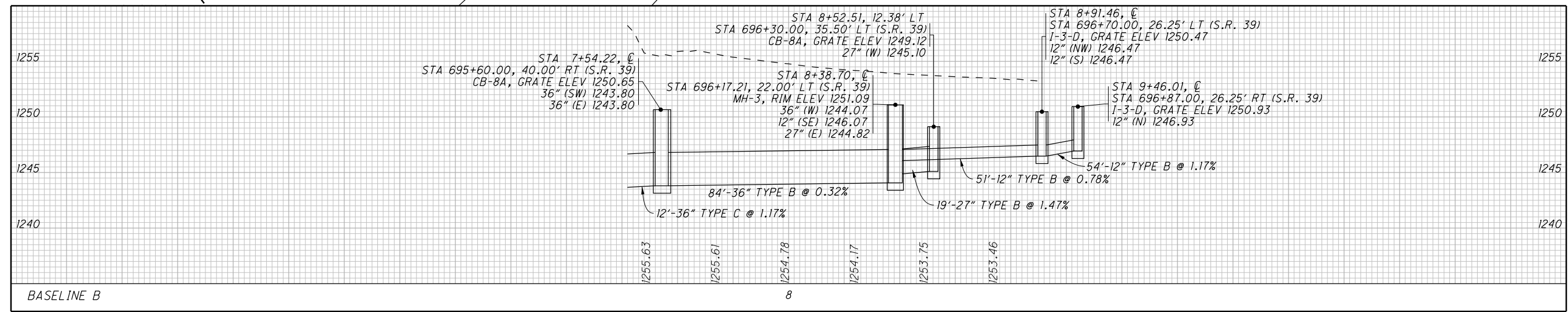
CALCULATED JGL
CHECKED JJM

**STORM SEWER PROFILES - S.R. 39
STA 5+50 TO STA 10+27.35**

RIC-30-9.26



	SEE SHEET
S.R. 39 RAMP HR P&P	543
S.R. 39 P&P	460-462
U.S. 30 P&P	424

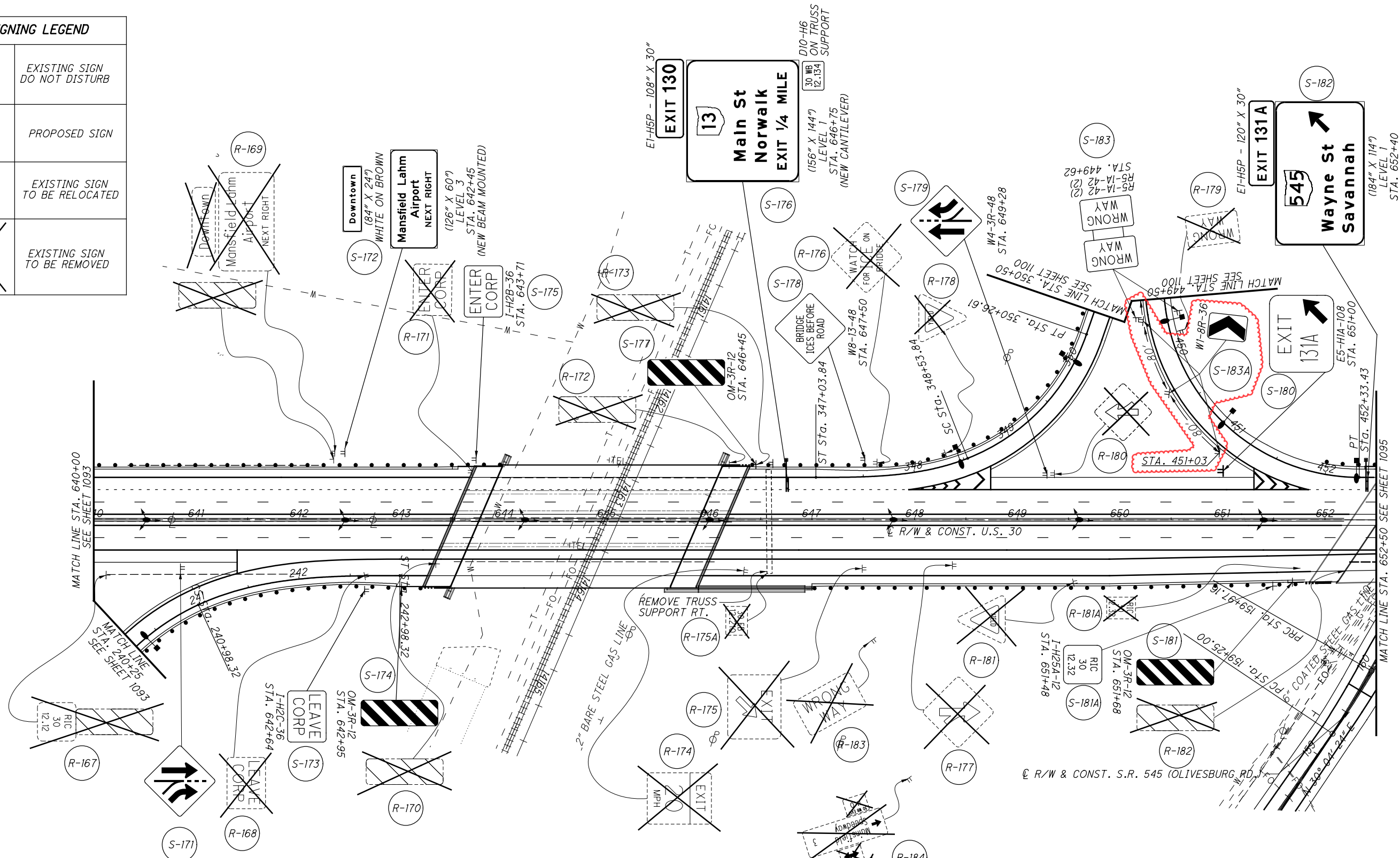


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REF NO.	SHEET NO.	STATION	SIDE	CODE	SIZE	625	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630				
						GROUND ROD	GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, NO. 4 POST	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W6X9	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X22	ONE WAY SUPPORT, NO. 3 POST	SIGN POST REFLECTOR	BREAKAWAY STRUCTURAL BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 4, AS PER PLAN	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 8	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 10	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN ATTACHMENT ASSEMBLY	SIGN, FLAT SHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION							
US 30						EACH	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SF	SF	SF	EACH	EACH	EACH							
S-150				NOT USED																																
S-151				NOT USED																																
S-152	1092	618+28	RT	D10-H6	180"x156"																															
				E1-H5P	108"x30"																															
S-153	1092	618+22	LT	W4-2R-48	48"x48"																															
S-154	1092	622+64	LT	W9-1R-48	48"x48"																															
S-155	1092	626+80	RT	W13-2-48	48"x60"																															
S-156	1093	629+36	LT	W4-3R-48	48"x48"																															
S-156A	1093	11+34	RT	W1-8R-36	36"x48"																															
S-156B	1093	12+14	RT	W1-8R-36	36"x48"																															
S-157	1093	631+45	LT	W8-13-48	48"x48"																															
S-158	1093	633+03	LT	E5-H1A-96	96"x60"																															
S-158A	1093	18+90	RT	W1-8R-36	36"x48"																															
S-158B	1093	18+10	RT	W1-8R-36	36"x48"																															
S-159	1093	633+56	RT	W13-3-48	48"x60"																															
					144"x52"																															
					204"x176"																															
S160	1093	633+85	RT	D10-H6	18"x12"																															
				E1-H5P	108"x30"																															
				E1-H5P	96"x30"																															
				W13-2-48	48"x60"																															
S-161	1093	634+06	LT	D10-H8-12	12"x12"																															
					156"x152"																															
S-162	1093	634+50	LT	D10-H6	18"x12"																															
				E1-H5P	108"x30"																															
S-163	1093	636+68	RT	E5-H1A-96	96"x60"																															
S-164	1093	139+72	LT&RT	R5-1A-42 (4)	42"x30"																															
S165	1093	637+50	LT	R2-1-48	48"x60"																															
					150"x104"																															
S-166	1093	639+80	LT	D10-H6	18"x12"																															
				W13-2-48	48"x60"																															
				E1-H5P (2)	108"x30"																															
S-167	1093	137+25	LT	W1-8R-36	36"x48"																															
S-168	1093	138+05	LT	W1-8R-36	36"x48"																															
S-169	1093	138+85	LT	W1-8R-36	36"x48"																															
S-170	1093	139+65	LT	W1-8R-36	36"x48"																															
S-171	1094	640+94	RT	W4-3R-48	48"x48"																															
S-172	1094	642+45	LT		84"x24"																															
					126"x60"																															
S-173	1094	642+64	RT	I-H2C-36	36"x24"																															
S-174	1094	642+95	RT	OM-3R-12	12"x36"																															
S-175	1094	643+71	LT	I-H2B-36	36"x24"																															
					156"x144"																															
S-176	1094	646+75	LT	D10-H6	18"x12"																															
				E1-H5P	108"x30"																															
S-177	1094	646+45	LT	OM-3R-12	12"x36"																															
S-178	1094	647+50	LT	W8-13-48	48"x48"																															
S-179	1094	649+28	LT	W4-3R-48	48"x48"																															
S-180	1094	651+00	LT	E5-H1A-108	108"x60"																															
S-181	1094	651+68	RT	OM-3R-12	12"x36"																															
S-181A	1094	651+48	RT	I-H25A-12	12"x12"																															
S-182	1094	652+40	LT		184"x114"																															
				E1-H5P	12																															

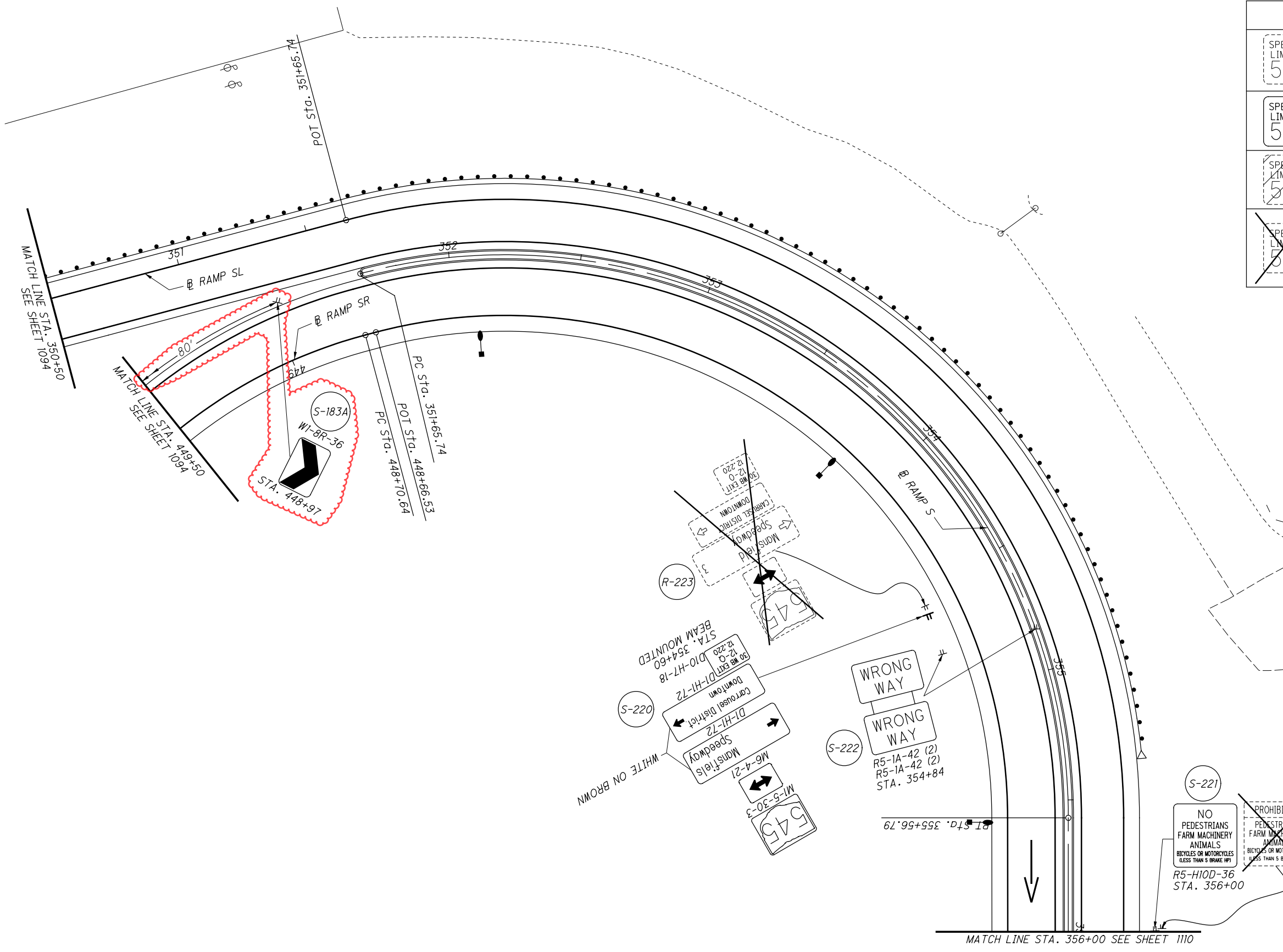
SIGNING LEGEND	
	EXISTING SIGN DO NOT DISTURB
	PROPOSED SIGN
	EXISTING SIGN TO BE RELOCATED
	EXISTING SIGN TO BE REMOVED



CALCULATED
JAS
CHECKED
SSK

0 50 100
25
HORIZONTAL
SCALE IN FEET

SIGNING PLAN
U.S. 30 - STA. 640+00 TO STA. 652+50



SIGNING LEGEND	
	EXISTING SIGN DO NOT DISTURB
	PROPOSED SIGN
	EXISTING SIGN TO BE RELOCATED
	EXISTING SIGN TO BE REMOVED

CALCULATED JAS
CHECKED SSK

0 20 40
10
HORIZONTAL
SCALE IN FEET

SIGNING PLAN
RAMP S - STA. 350+50 TO STA. 356+00

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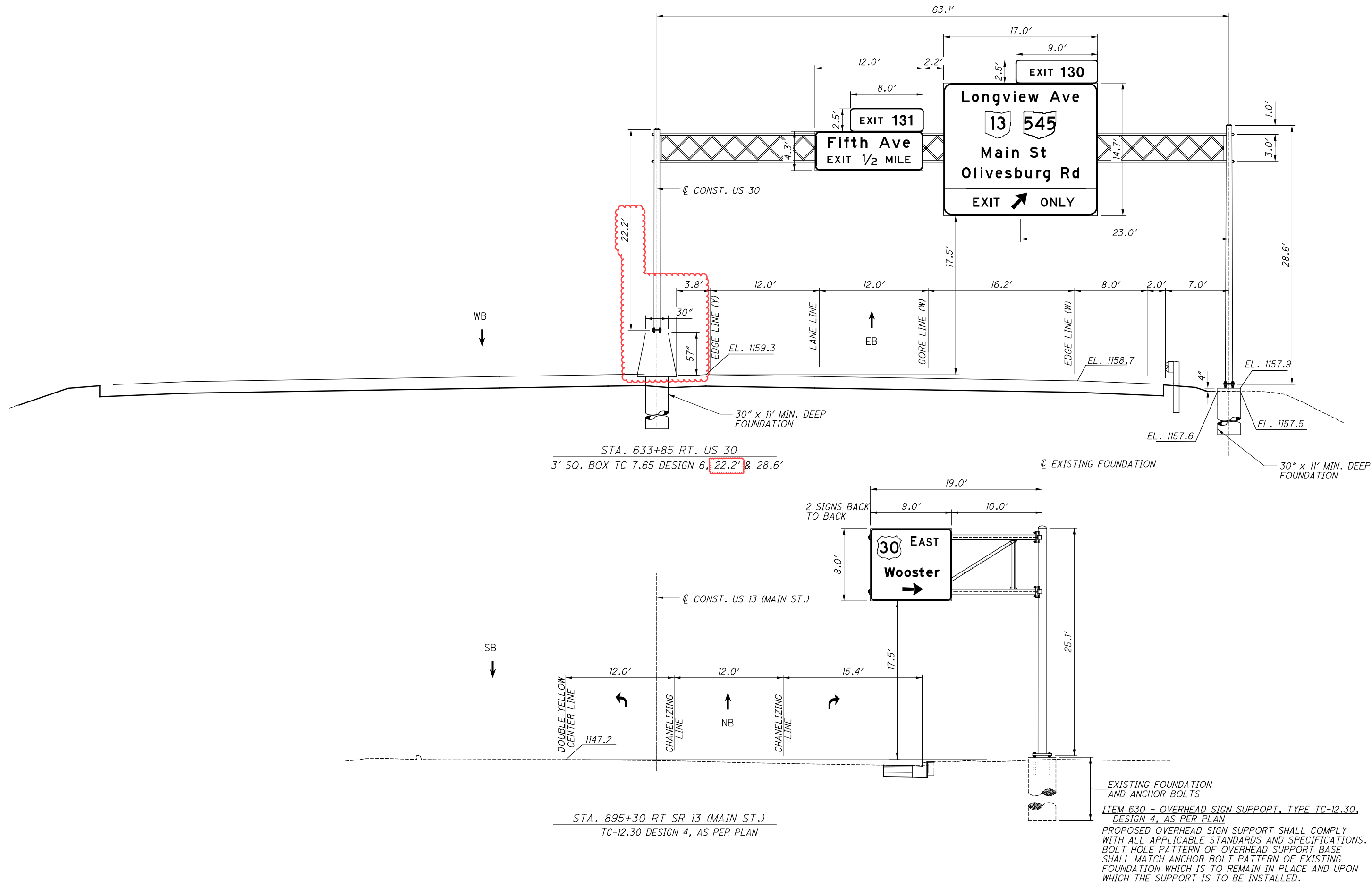
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CHECKED	BBB

0 5 10
2.5
HORIZONTAL
SCALE IN FEET

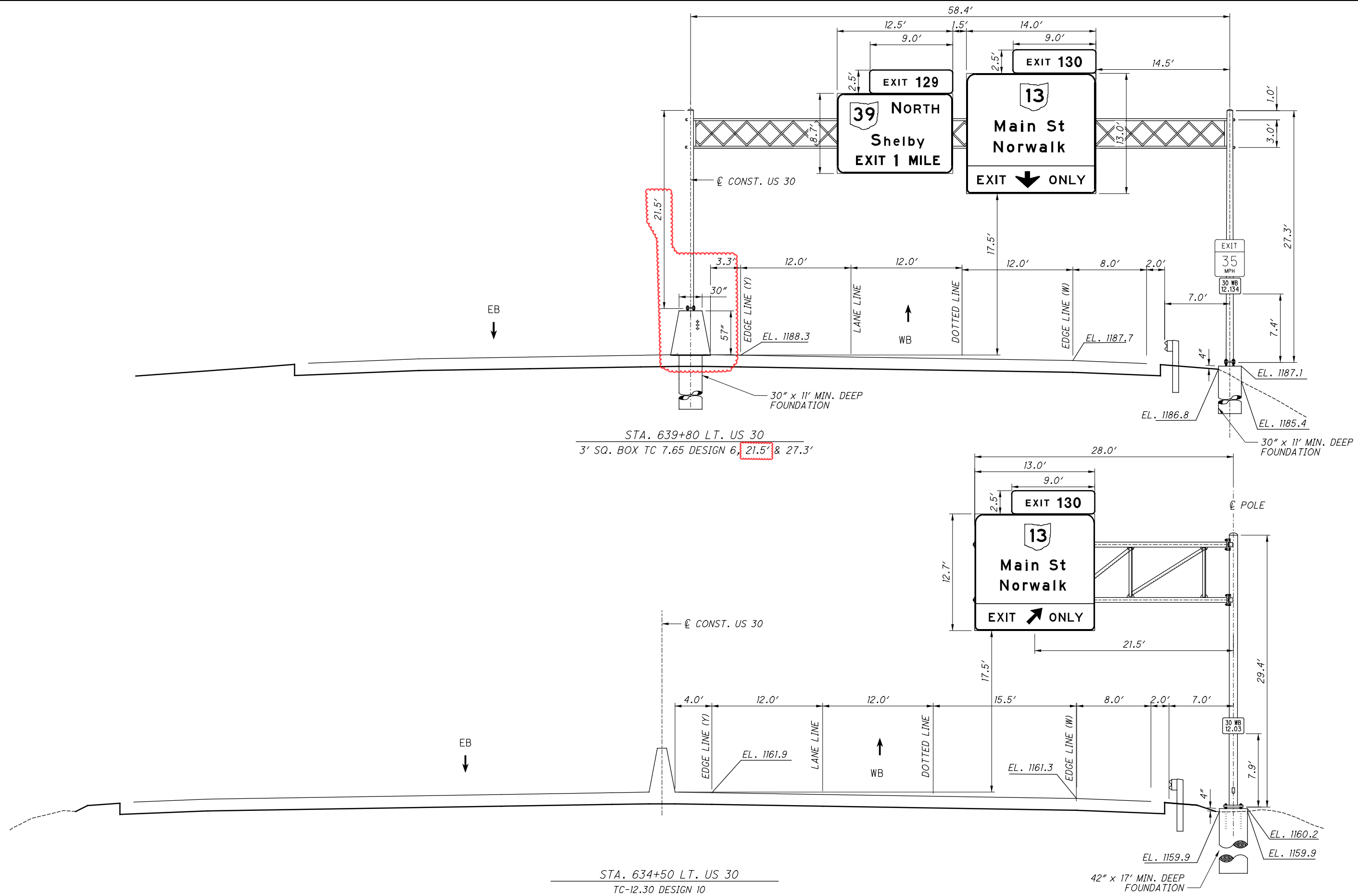
SIGN ELEVATION DETAIL

RIC-30-9.26

1134
1669



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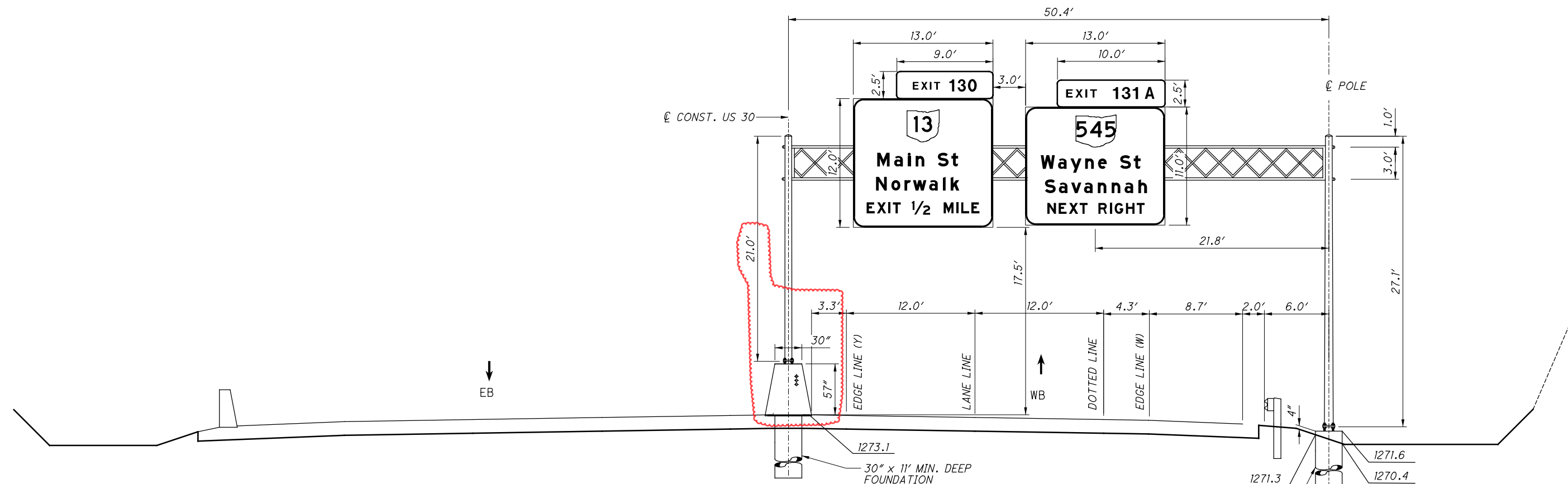
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CHECKED	BBB

0 5 10
2.5'
HORIZONTAL SCALE IN FEET

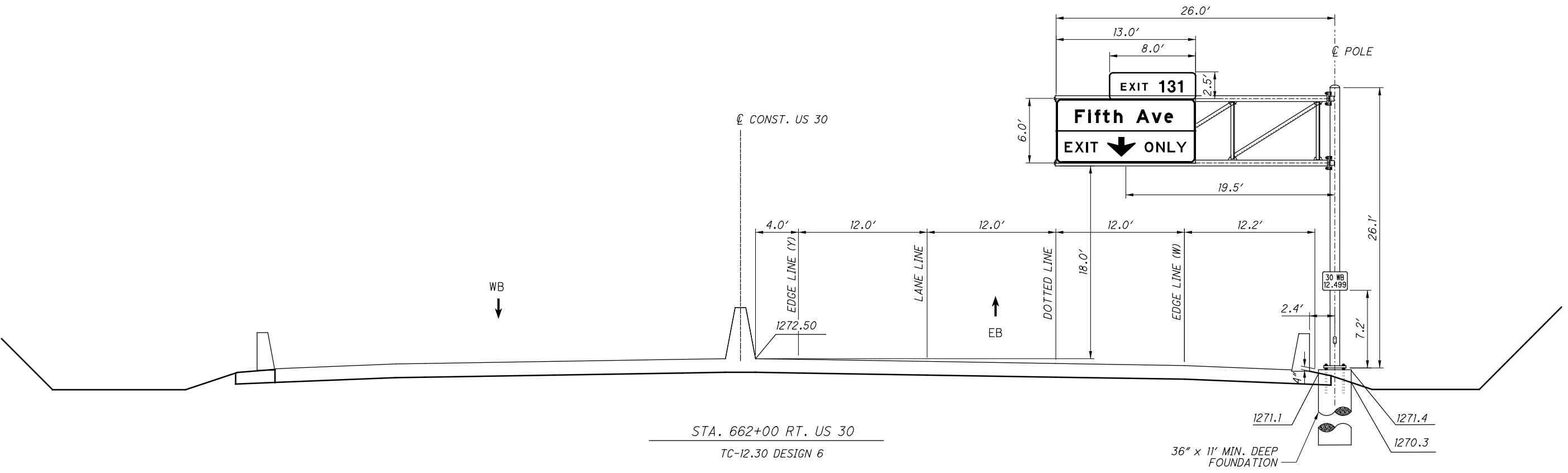
RIC-30-9.26

1135
1669

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STA. 662+60 LT. US 30
 3' SQ. BOX TC 7.65 DESIGN 6, 21.0' & 27.1'



STA. 662+00 RT. US 30
 TC-12.30 DESIGN 6

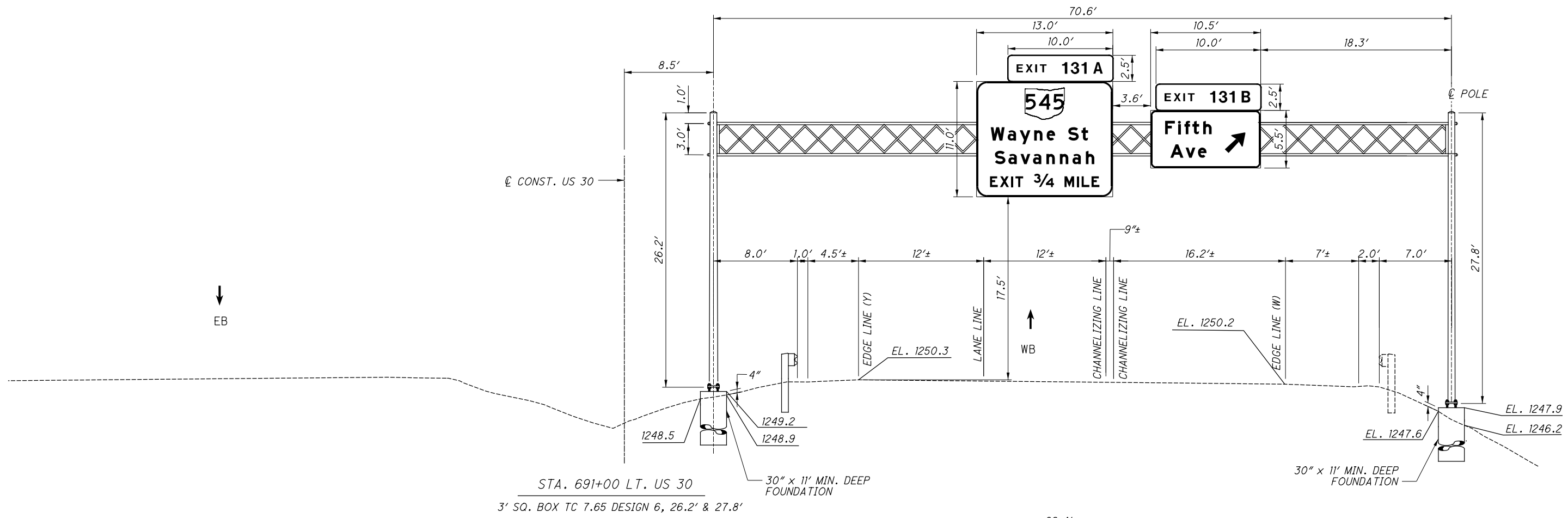
CALCULATED	JAS
CHECKED	BBB

SIGN ELEVATION DETAIL

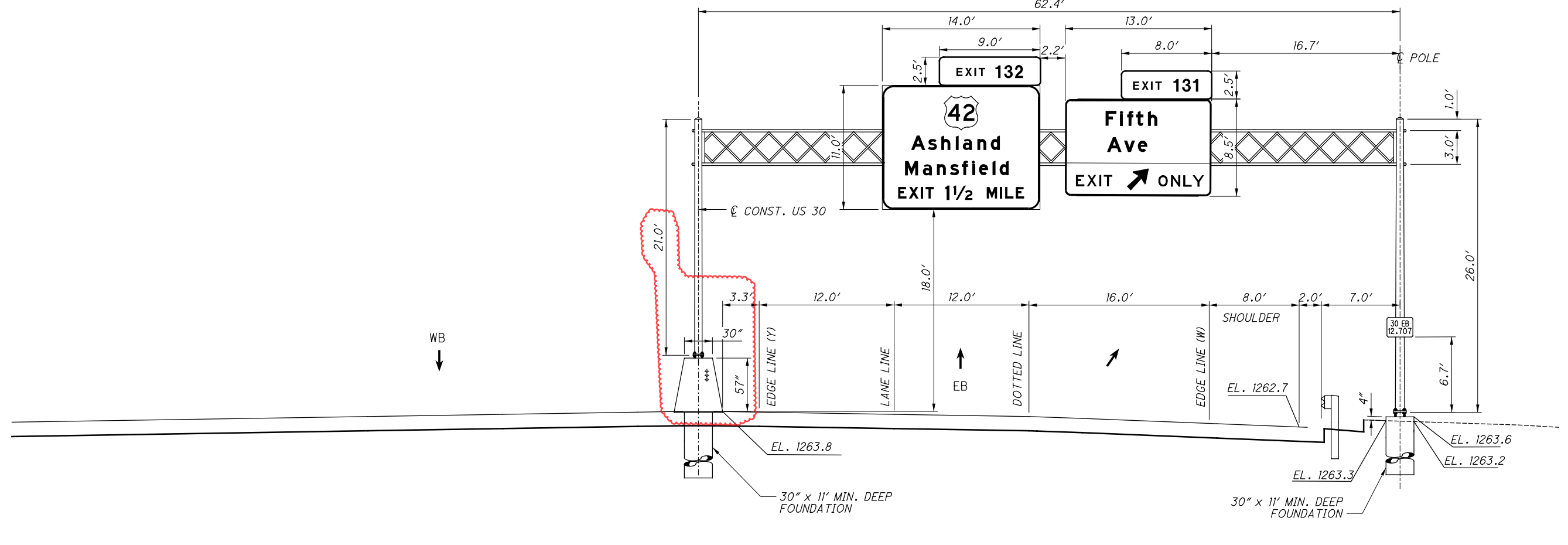
RIC-30-9.26

1137
1669

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STA. 691+00 LT. US 30
 3' SQ. BOX TC 7.65 DESIGN 6, 26.2' & 27.8'



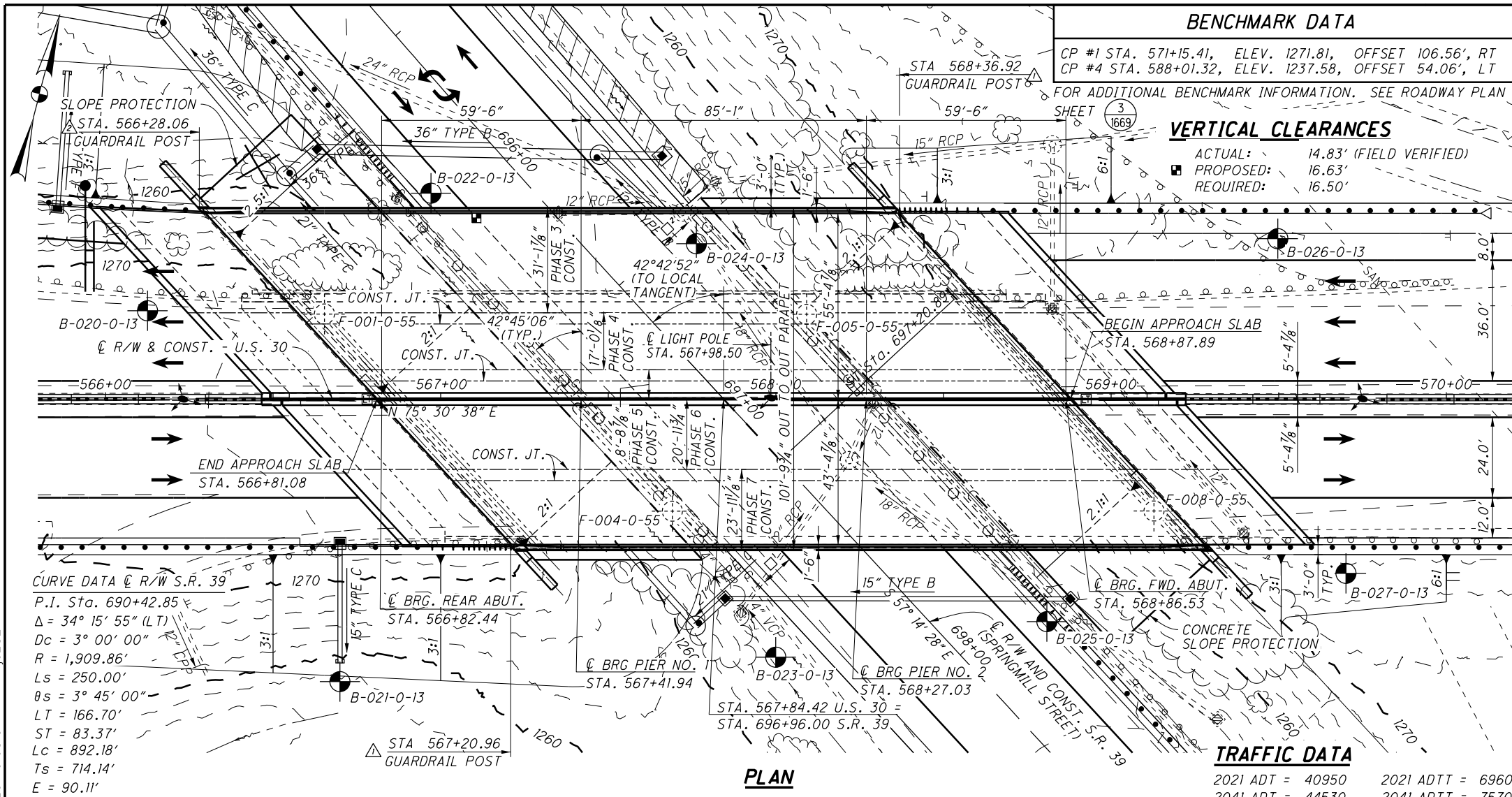
STA. 671+90 RT. US 30
 3' SQ. BOX TC 7.65 DESIGN 6, 21.0' & 26.0'

CALCULATED	JAS
CHECKED	BBB

SCALE IN FEET
 2.5
 5
 10
 HORIZONTAL

RIC-30-9.26
 1138
 1669

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BENCHMARK DATA

CP #1 STA. 571+15.41, ELEV. 1271.81, OFFSET 106.56', RT
 CP #4 STA. 588+01.32, ELEV. 1237.58, OFFSET 54.06', LT

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 1669

VERTICAL CLEARANCES

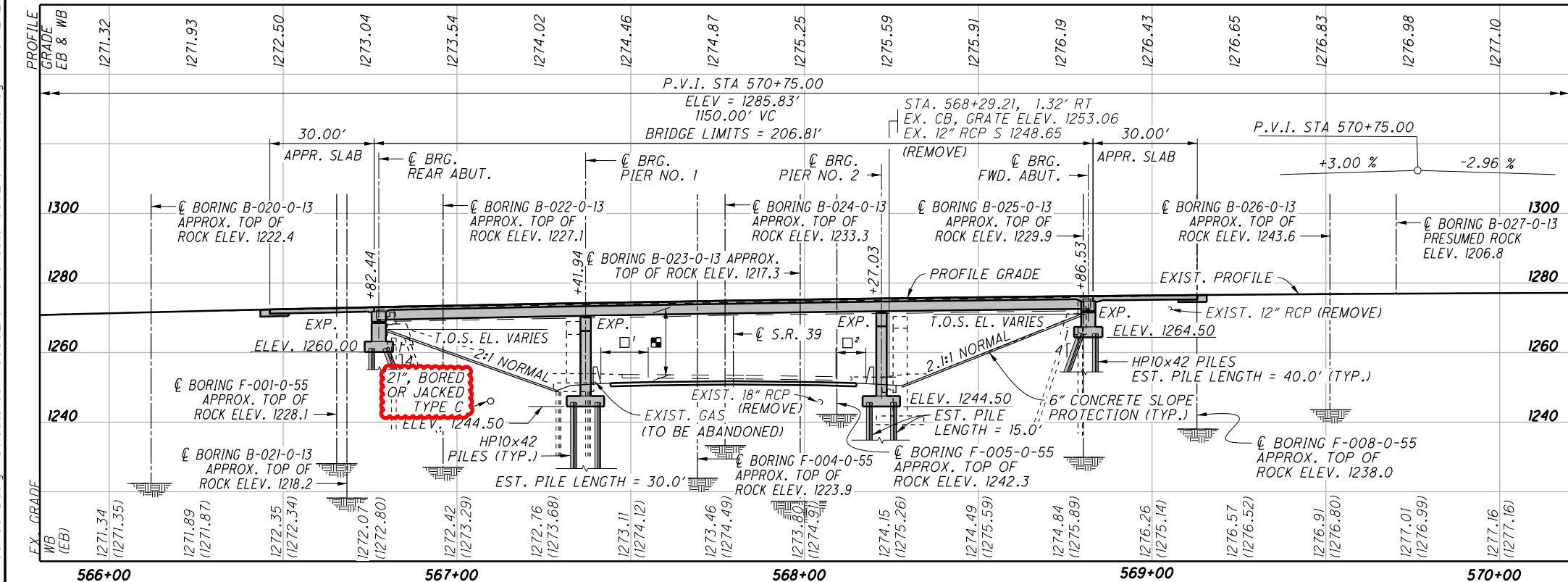
ACTUAL: 14.83' (FIELD VERIFIED)
 PROPOSED: 16.63'
 REQUIRED: 16.50'

NOTES
 EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

BORING	STATION	OFFSET	GROUND ELEVATION
B-020-0-13	566+11.95	29.0' LT	1271.2
B-021-0-13	566+68.30	85.5' RT	1257.4
B-022-0-13	566+95.96	61.1' LT	1255.1
B-023-0-13	567+98.65	78.6' RT	1252.3
B-024-0-13	567+77.06	46.8' LT	1253.3
B-025-0-13	568+80.11	66.6' RT	1253.5
B-026-0-13	569+51.05	48.1' LT	1276.1
B-027-0-13	569+70.09	52.0' RT	1275.5
F-001-0-55	566+65.3±	25.3'± LT	1258.1± *
F-004-0-55	567+69.1±	33.5'± LT	1261.4± *
F-005-0-55	568+09.2±	25.3'± LT	1266.5± *
F-008-0-55	569+12.8±	33.5'± RT	1273.5± *

* ELEVATIONS TAKEN FROM HISTORIC BORING LOGS

- LEGEND**
- HISTORIC BORING LOCATION
 - PROJECT BORING LOCATION
 - VERTICAL CLEARANCE
 - △ MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (SEE ROADWAY PLAN FOR PAYMENT)
 - △ MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 (SEE ROADWAY PLAN FOR PAYMENT)
 - ¹ REQUIRED HORIZONTAL CLEARANCE: 10'-0" ACTUAL HORIZONTAL CLEARANCE: 10'-0 1/4"
 - ² REQUIRED HORIZONTAL CLEARANCE: 10'-0" ACTUAL HORIZONTAL CLEARANCE: 10'-0"



TRAFFIC DATA

2021 ADT = 40950 2021 ADTT = 6960
 2041 ADT = 44530 2041 ADTT = 7570

EXISTING STRUCTURE

TYPE: CONTINUOUS ROLLED BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.

SPANS: 49'-9 7/8", 93'-10 7/8", 49'-9 1/2" C/C BEARING

ROADWAY: 70'-0"± F/F CURB

LOADING: CF-2000

SKEW: 42° 32' 47"± (AVERAGE) R.F.

WEARING SURFACE: 2"± (SDC) SUPERPLASTICIZED DENSE CONCRETE

APPROACH SLABS: 20'-0"± LONG

ALIGNMENT: TANGENT

CROWN: 3/16"± PER FOOT

STRUCTURE FILE NUMBER: 7001118

DATE BUILT: 1957

DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: THREE SPAN CONTINUOUS STEEL BEAM (A709, GRADE 50) WITH COMPOSITE REINFORCED CONCRETE DECK SLAB, REINFORCED CONCRETE CAP AND COLUMN PIERS AND SEMI-INTEGRAL ABUTMENTS.

SPANS: 59'-6", 85'-1", 59'-6" C/C BEARING

ROADWAY: 41'-6 7/8" EB 53'-6 7/8" WB TOE/TOE PARAPET

LOADING: HL-93 AND FUTURE WEARING SURFACE OF 60 PSF

SKEW: 42° 45' 06" RIGHT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-15, AS-2-15 TYPE C (30' LONG) (MODIFIED)

ALIGNMENT: TANGENT

CROWN: VARIES

LOCATION: LATITUDE 40°46'33.64"N
 LONGITUDE 82°32'04.60"W

DECK AREA: LEFT BRIDGE = 11,754 S.F.
 RIGHT BRIDGE = 9,272 S.F.

DESIGN AGENCY: ENGINEERING ASSOCIATES, INC.
 1935 EAGLE PASS - WOOSTER, OHIO 44691
 TELEPHONE: (330) 345-6556
 FAX: (330) 346-8077

DATE: 9-24-19

REVIEWED: SDS

DRAWN: TAC

DESIGNED: HK

CHECKED: BDH

RICHLAND COUNTY
 STA. 566+81.08
 STA. 568+87.89

SITE PLAN
 BRIDGE NO. RIC-30-1074
 OVER S.R. 39

RIC-30-9-26
 PID No. 93455

1/66

1204
 1669

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CALC:	RLE	DATE:	5/28/2019
CHECKED:	TAC	DATE:	6/1/2019

ESTIMATED QUANTITIES

ITEM	EXTENSION	TOTAL 01/NHS/BR	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3/56
202	22900	258	SY	APPROACH SLAB REMOVED				258	
202	23500	258	SY	WEARING COURSE REMOVED				258	
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS	3/56
503	21100	384	CY	UNCLASSIFIED EXCAVATION	384				
504	11100	3840	SF	STEEL SHEET PILING LEFT IN PLACE, Sx = 34.8 IN ³ /FT				3840	
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS	
507	00100	2530	FT	STEEL PILES HPI0X42, FURNISHED	2530				
507	00150	2300	FT	STEEL PILES HPI0X42, DRIVEN	2300				
509	10001	199496	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	21843	30975	146678		23/56
510	10000	24	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	24				
511	21523	645	CY	CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE, AS PER PLAN			645		5/56 & 33/56
511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE			4		
511	41012	153	CY	CLASS OC1 CONCRETE WITH OC/OA, PIER ABOVE FOOTINGS		153			
511	44112	85	CY	CLASS OC1 CONCRETE WITH OC/OA, ABUTMENT NOT INCLUDING FOOTING	85				
511	46512	148	CY	CLASS OC1 CONCRETE WITH OC/OA, FOOTING	148				
512	10100	1155	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	48	397	654	56	
512	10300	233	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			204	29	
512	33000	16	SY	TYPE 2 WATERPROOFING	16				
513	10260	371800	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			371800		
513	20000	8676	EACH	WELDED STUD SHEAR CONNECTORS			8676		
514	00800	371800	LB	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			371800		
514	00851	371800	LB	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN			371800		3/56
514	10000	19	EACH	FINAL INSPECTION REPAIR			19		
516	10010	176	FT	ARMORLESS PREFORMED JOINT SEAL				176	
516	13600	26	SF	1" PREFORMED EXPANSION JOINT FILLER			26		
516	13900	285	SF	2" PREFORMED EXPANSION JOINT FILLER			60	225	
516	14020	261	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	261				
516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 2 13/16"x1'-2"x1'-5" W/ 1 x1'-3"x1'-6" BEVELED LOAD PLATE		24			28/56
516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 2 1/2"x11"x1'-0" W/ 1 5/8"x1'-0"x1'-1" BEVELED LOAD PLATE	24				28/56
518	21200	97	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	97				
518	40001	220	FT	6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN	220				15/56 & 19/56
518	40010	22	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	22				
524	95434	84	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK WITH OC/OA		84			
524	95442	278	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK WITH OC/OA		278			
526	15001	390	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN				390	43/56 THRU 47/56
526	90030	176	FT	TYPE C INSTALLATION				176	
601	21000	932	SY	CONCRETE SLOPE PROTECTION				932	
607	39900	289	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			289		

ESTIMATED QUANTITIES

BRIDGE NO. RIC-30-1135
OVER BOWMAN STREET

RIC-30-9-26
PID No. 93455

4/56

1273
1669

DESIGNED: HK
CHECKED: BDH

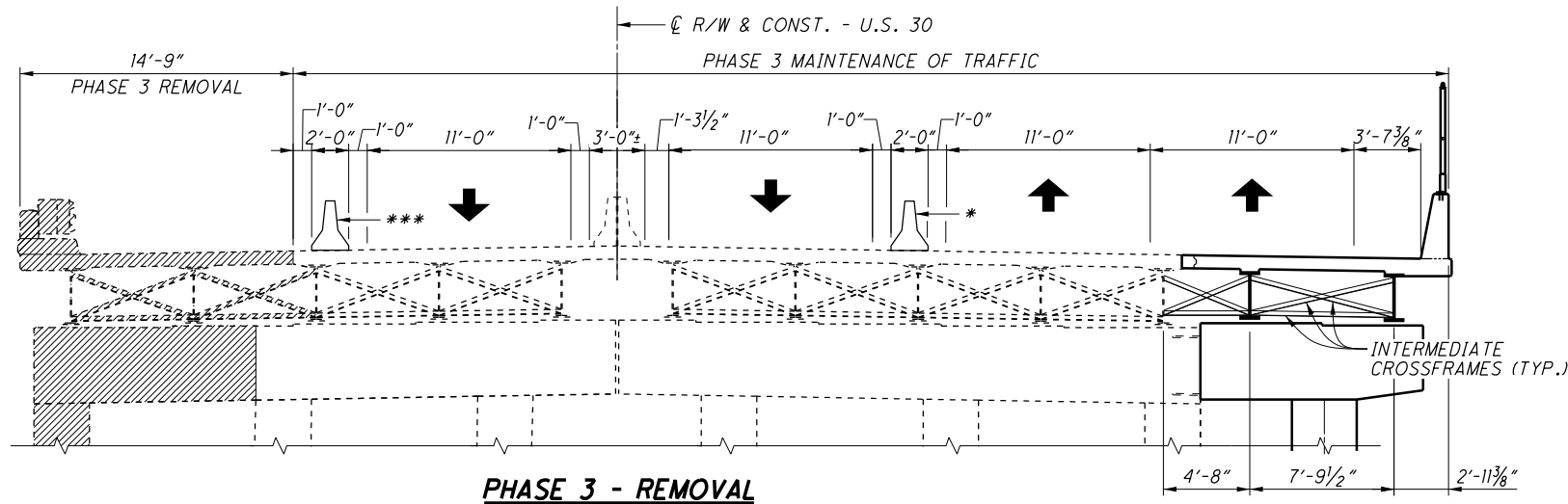
DRAWN: TAC
REVISED: XXX

REVIEWED: SDS
STRUCTURE FILE NUMBER: 700143

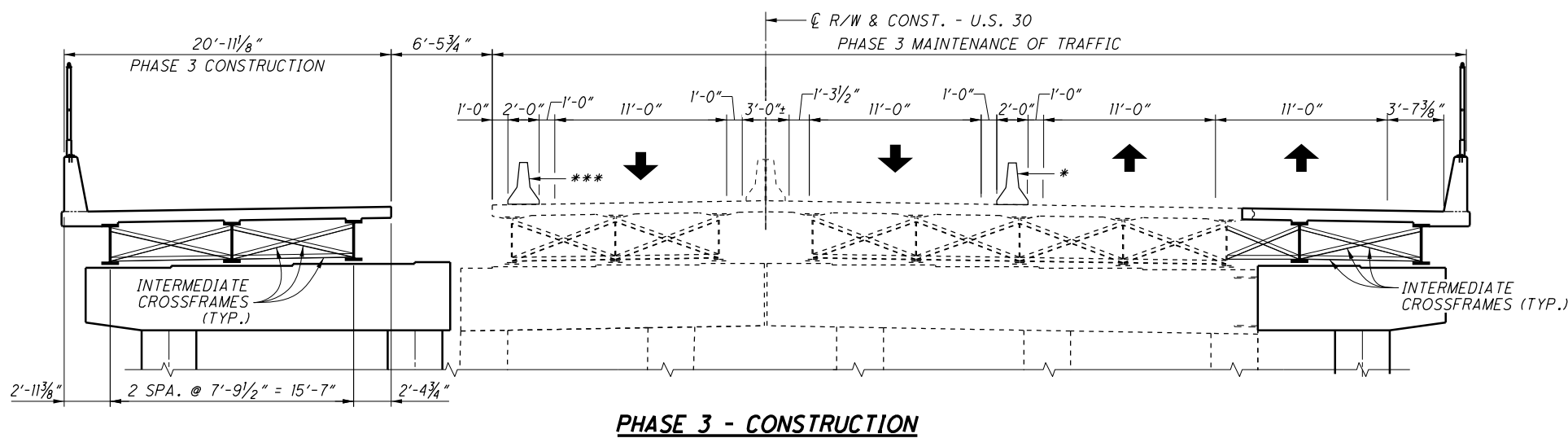
DATE: 9-24-19

DESIGN AGENCY: **ENGINEERING ASSOCIATES, INC.**
935 EAGLE PASS - WOOSTER, OHIO 44691
TELEPHONE: (330) 345-6556
FAX: (330) 345-9077

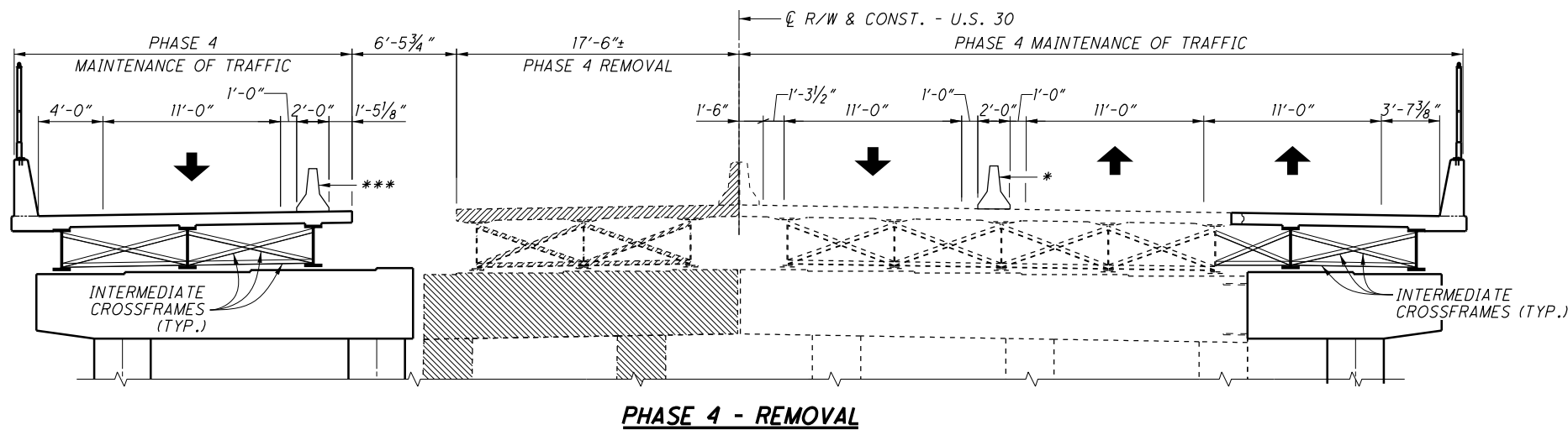
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PHASE 3 - REMOVAL



PHASE 3 - CONSTRUCTION



PHASE 4 - REMOVAL

PHASE CONSTRUCTION NOTES

PHASE 3 MAINTENANCE OF TRAFFIC

1. PLACE PORTABLE CONCRETE BARRIERS ON EXISTING EASTBOUND AND WESTBOUND BRIDGES AS SHOWN IN THE PLANS.
2. SHIFT ONE LANE OF WESTBOUND TRAFFIC ON TO THE EASTBOUND BRIDGE AS SHOWN IN THE PLANS. MAINTAIN TWO LANES OF TRAFFIC AT ALL TIMES EASTBOUND AND WESTBOUND.

PHASE 3 REMOVAL

1. DRIVE TEMPORARY SHORING AS NECESSARY. REMOVE LEFT PORTION OF EXISTING WESTBOUND BRIDGE AS SHOWN IN THE PLANS.

PHASE 3 CONSTRUCTION

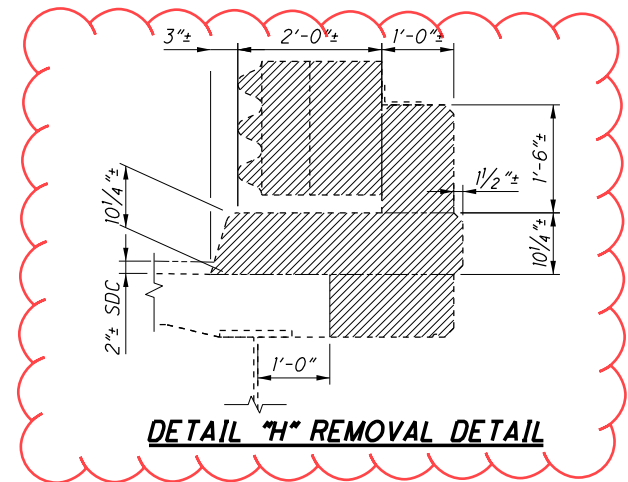
1. CONSTRUCT LEFT PORTION OF PROPOSED WESTBOUND BRIDGE AS SHOWN IN THE PLANS.

PHASE 4 MAINTENANCE OF TRAFFIC

1. PLACE PORTABLE CONCRETE BARRIER ON PROPOSED WESTBOUND DECK AS SHOWN IN THE PLANS.
2. SHIFT TRAFFIC FROM EXISTING WESTBOUND BRIDGE TO NEW WESTBOUND BRIDGE. MAINTAIN TWO LANE TRAFFIC PATTERN IN BOTH DIRECTIONS.

PHASE 4 REMOVAL

1. DRIVE TEMPORARY SHORING AS NECESSARY. REMOVE REMAINING WESTBOUND BRIDGE AS SHOWN IN THE PLANS.



DETAIL "H" REMOVAL DETAIL

LEGEND

- * - PORTABLE CONCRETE BARRIER, NO ANCHORS REQUIRED
- *** - PORTABLE CONCRETE BARRIER (4 ANCHORS REQUIRED PER SEGMENT)
- [Hatched Area] - AREAS OF EXISTING STRUCTURE TO BE REMOVED

NOTES

1. MAINTENANCE OF TRAFFIC, SEE SHEETS 39/1689 THRU 35/1689
2. ITEM 622 - PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED IS CARRIED IN THE ROADWAY QUANTITY.
3. FOR ADDITIONAL PHASE CONSTRUCTION DETAILS AND NOTES SEE SHEETS 5/56, 7/56 & 8/56.
4. NO THROUGH BOLTING OF BARRIER ANCHORS IS PERMITTED ON PROPOSED BRIDGE.
5. FOR ADDITIONAL DETAILS OF PORTABLE CONCRETE BARRIER, SEE STANDARD DRAWING PCB-91.
6. PROPOSED CROSSFRAMES DEPICTED IN THE DRAWINGS DO NOT REFLECT THE ACTUAL CONFIGURATION TO BE ERECTED.

DESIGN AGENCY: ENGINEERING ASSOCIATES, INC.
 1935 EAGLE PASS - WOOSTER, OHIO 44691
 TELEPHONE: (330) 345-6556
 FAX: (330) 345-8077

DATE: 9-24-19
 SDS
 STRUCTURE FILE NUMBER: 7001143

DESIGNED: HK
 CHECKED: BDH

PHASE CONSTRUCTION DETAILS
 BRIDGE NO. RIC-30-1135
 OVER BOWMAN STREET

RIC-30-9-26
 PID No. 98911

6/56
 1275
 1669

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**REINFORCING STEEL LIST
PIERS**

MARK	NUMBER										TOTAL	LENGTH	TYPE	A	B	C	D	E	INC.	WEIGHT
	PIER NO. 1					PIER NO. 2														
	WESTBOUND		EASTBOUND			WESTBOUND		EASTBOUND												
	PHASE 3	PHASE 4	PHASE 1A	PHASE 6	PHASE 7	PHASE 3	PHASE 4	PHASE 1A	PHASE 6	PHASE 7										
P901			4					4			8	12'-11"	18	3'-7"	8'-0"	1'-1 3/8"			351	
P902			4					4			8	5'-5"	19	4'-5"	9 1/4"	9 1/4"			147	
P903	4	4		4		4	4		4		24	10'-10"	18	3'-7"	5'-11 1/4"	10"			884	
P904			4					4			8	5'-1"	19	4'-0"	1'-0 1/2"	3 3/8"			138	
P906			5					5			10	13'-11"	1	11'-4"	2'-10"				473	
P907	4							4			8	19'-9"	38	19'-9"					537	
P908	5							5			10	25'-11"	47	23'-3"	2'-11"				881	
P909		4						4			8	14'-11"	39	14'-11"					406	
P910		5						5			10	21'-2"	46	18'-6"	2'-11"				720	
P912				4					4		8	22'-8"	38	22'-8"					617	
P913				5					5		10	28'-10"	47	26'-2"	2'-11"				980	
P914					9					9	18	4'-3"	39	4'-3"					260	
P1001	11		11								22	18'-8"	STR						1767	
P1002	11			11							22	18'-11"	STR						1791	
P1003		11		11							22	19'-1"	STR						1807	
P1004						11		11			22	16'-9"	STR						1586	
P1005						11			11		22	17'-0"	STR						1609	
P1006							11		11		22	17'-3"	STR						1633	
DSP411	2	1	1	2							6	35'-2"	27	4 1/2"	3'-0"	35'-2"			3612***	
DSP412						2	1	1	2		6	24'-9"	27	4 1/2"	3'-0"	24'-9"			2575***	
DS1001	44	22	22	44							132	23'-7"	STR						13395***	
DS1002						22	11	11	22		66	30'-9"	STR						8733***	
																		SUBTOTAL	16587	
																		TOTAL	30975	

*** INCLUDED WITH ITEM 524 DRILLED SHAFTS FOR PAYMENT

NOTES

- FOR ABBREVIATIONS SEE SHEET 3/56.
- FOR BENDING DIAGRAMS AND ADDITIONAL NOTES SEE SHEET 56/56.

DESIGN AGENCY
ENGINEERING ASSOCIATES, INC.
8955 EAGLE PASS - WOOSTER, OHIO 44691
TELEPHONE: (330) 345-6556
FAX: (330) 345-9077

DATE: 9-24-19
REVIEWED: SDS
STRUCTURE FILE NUMBER: 7001143
DRAWN: TAC
CHECKED: BDH

REINFORCING STEEL LISTS
BRIDGE NO. RIC-30-1135
OVER BOWMAN STREET

RIC-30-9.26
PID No. 93455

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

PCB-91 REVISED 01-18-13

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

867 DATED 01-18-19

DESIGN LOADING:

250 PSF LIVE LOAD SURCHARGE

PROPOSED WORK:

THE PROPOSED WORK CONSISTS OF BUILDING TEMPORARY MECHANICALLY STABILIZED EARTH WALLS AND PLACING FILL TO SUPPORT TRAFFIC DURING CONSTRUCTION.

MAINTENANCE OF TRAFFIC:

FOR MAINTENANCE OF TRAFFIC DETAILS, SEE THE ROADWAY PLANS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

REMOVE PORTIONS OF EXISTING STRUCTURE AS SHOWN IN THE PHASE CONSTRUCTION DETAILS. THIS ITEM SHALL INCLUDE: THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05. PAYMENT FOR THIS ITEM SHALL ALSO INCLUDE APPROACH SLAB REMOVAL.

ITEM 516, BEARING DEVICE, MISC.: JACKING, TEMPORARY SUPPORT AND SHIMMING BRIDGE:

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO FACILITATE PLACING OF SHIM PLATES UNDER THE BEARINGS AS DIRECTED BY THE ENGINEER TO ALLEVIATE DIFFERENTIAL SETTLEMENT APPROACHING 1/2" OR GREATER AND TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK PER EACH OCCURRENCE OF JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE EVENT. AN OCCURRENCE SHALL BE CONSIDERED NECESSARY EACH TIME DIFFERENTIAL SETTLEMENT BETWEEN THE BEAMS EQUALS OR IS GREATER THAN 1/2". AN OCCURRENCE SHALL ALSO BE CONSIDERED AS THE JACKING AND TEMPORARY SUPPORT OF ALL NECESSARY BEAMS AT ALL NECESSARY SUBSTRUCTURE UNITS TO ALLEVIATE THE DIFFERENTIAL SETTLEMENT BETWEEN THE SUBSTRUCTURE UNITS. THE COST SHALL INCLUDE FURNISHING AND PLACEMENT OF ALL NECESSARY SHIMS NEEDED DURING THE OCCURRENCE TO ELIMINATE DIFFERENTIAL SETTLEMENT 1/2" OR GREATER AT THE BEAM SUPPORTS. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE PER EACH FOR ITEM 516- BEARING DEVICE, MISC.: JACKING, TEMPORARY SUPPORT AND SHIMMING BRIDGE.

ITEM 867, TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN:

WALL WILL BE LEFT IN PLACE AND BURIED BY THE PROPOSED FILL.

PROPRIETARY RETAINING WALL DATA:

DESIGN THE INTERNAL STABILITY OF A TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 867. THE FACTORED BEARING RESISTANCE AT THE BASE OF THE REINFORCED SOIL MASS IS 7.0 KSF (STRENGTH)

ITEM SPECIAL - SETTLEMENT PLATFORMS:

THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT [HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/ENGINEERING/GEOTECHNICAL/GEOTECHNICAL_DOCUMENTS/BLANK_SETTLEMENT_READING_PLOTS-ENGLISH.XLS](http://www.dot.state.oh.us/divisions/engineering/geotechnical/geotechnical_documents/blank_settlement_reading_plots-english.xls) ON THE OFFICE OF GEOTECHNICAL ENGINEERING WEBSITE PUBLICATIONS AND DOCUMENTS SECTION. MARK THE TOP OF EACH SETTLEMENT PLATFORM SECTION AND OBTAIN THE SETTLEMENT PLATFORM READING AT THE SAME LOCATION FOR EACH CONSECUTIVE READING. COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE DISTRICT GEOTECHNICAL ENGINEER AND THE OFFICE OF GEOTECHNICAL ENGINEERING, ATTENTION: GEOTECHNICAL DESIGN COORDINATOR, AFTER EACH SETTLEMENT READING IS RECORDED.

CONSTRUCTION METHODS: THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

PRIOR TO PAVING, THE TOP OF THE SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF 600MM (TWO FEET) BELOW THE FINISHED SURFACE OF THE SUBGRADE OR FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

NOTES

1. SETTLEMENT PLATFORMS SHALL BE PLACED AT THE LOCATIONS SHOWN IN THE TABLE OR AS DIRECTED BY THE ENGINEER.
2. CONTRACTOR HAS OPTION OF USING EITHER STEEL OR PLYWOOD PLATFORM BASE.
3. CONTRACTOR SHALL FURNISH MATERIALS AND LABOR TO EXTEND PIPE UP THROUGH ENTIRE FILL.
4. SETTLEMENT PLATFORMS SHALL BE ANCHORED BY STAKES DRIVEN AT EACH CORNER TO PREVENT OVERTURNING.
5. SETTLEMENT MONITORING PLAN: ANTICIPATED MAXIMUM SETTLEMENT IS 5/2". PRIMARY SETTLEMENT SHOULD BE CONSIDERED COMPLETE WHEN SURVEY MONITORING OF THE SETTLEMENT PLATFORMS INDICATE THAT THE ABOVE NOTED SETTLEMENT HAS OCCURRED OR UNTIL THE SURVEY SHOWS LESS THAN 1/4" OF TOTAL MOVEMENT OVER A TWO WEEK PERIOD AND THE SETTLEMENT PLOTS SHOW THAT THE SETTLEMENT IS LEVELING OFF. FINAL GRADING AND PLACEMENT OF THE PAVEMENT CAN BEGIN ONCE THESE CRITERIA ARE MET UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

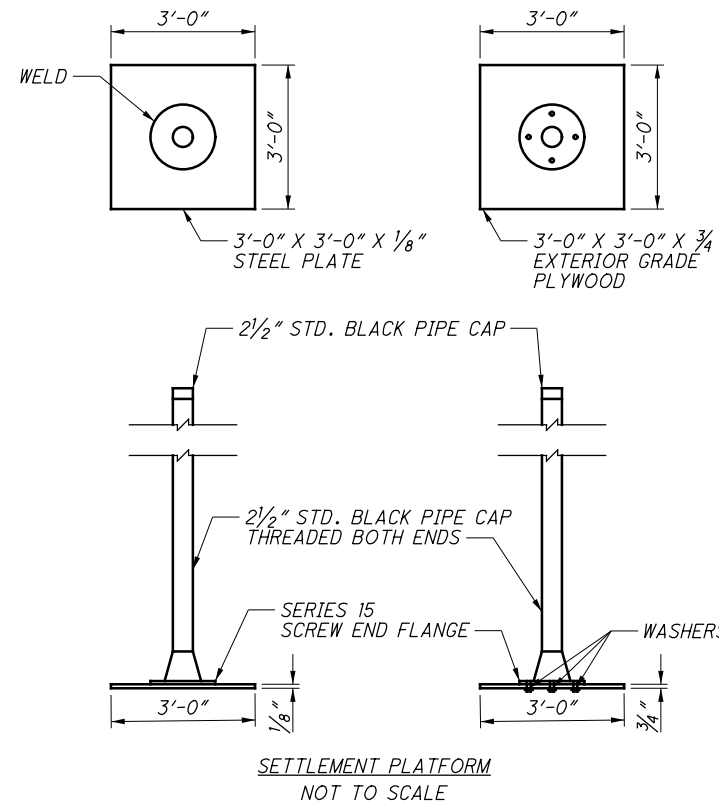
CALCULATED BY: JGM DATE: 10/23/2019
CHECKED BY: NCK DATE: 10/23/2019

ESTIMATED QUANTITIES

ITEM	EXT.	PARTICIPATION 01/NHS/BR	UNIT	DESCRIPTION	SEE SHEET NO.
202	11201	LUMP		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	2
SPECIAL	203E65000	6	EACH	SETTLEMENT PLATFORM	2
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING	
516	46900	3	EACH	BEARING DEVICE, MISC.: JACKING, TEMPORARY SUPPORT AND SHIMMING BRIDGE	2
867	90101	LUMP		TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN	2

NOTE: SEE ROADWAY PLANS FOR ITEM 203 EMBANKMENT QUANTITIES & SEE LIGHTING PLANS FOR LIGHT POLE REMOVAL AND REPLACEMENT.

6. PROVIDE SHIM PLATES AT BEARINGS TO ALLEVIATE ANY DIFFERENTIAL SETTLEMENT APPROACHING 1/2" OR GREATER.



SETTLEMENT PLATFORM LOCATIONS			
	STATION	OFFSET	CONSTRUCTED IN STAGE
SP-1	640+93.31	15' LT.	3
SP-2	641+44.49	15' LT.	3
SP-3	640+87.75	15' RT.	3
SP-4	641+38.93	15' RT.	3
SP-5	640+81.91	46.5' RT.	3
SP-6	641+33.09	46.5' RT.	3

ABBREVIATIONS:

- ABUT. - ABUTMENT
- A.S. - APPROACH SLAB
- BRG. - BEARING
- C/C - CENTER TO CENTER
- C.J. - CONSTRUCTION JOINT
- C.I.P. - CAST-IN-PLACE
- CONC. - CONCRETE
- CONST. - CONSTRUCTION
- DIA. - DIAMETER
- EL. - ELEVATION
- EX. - EXISTING
- EXP. - EXPANSION
- F.A. - FORWARD ABUTMENT
- F/F - FACE TO FACE
- FWD. - FORWARD
- IN. - INCH
- IN-BET. - IN-BETWEEN
- INCR. - INCREMENT
- JNT. - JOINT
- L.F. - LEFT FORWARD
- LT. - LEFT
- MID. - MIDDLE
- MIN. - MINIMUM
- NB - NORTHBOUND
- NO. - NUMBER
- NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE
- PCB - PORTABLE CONCRETE BARRIER
- PCPP - PERFORATED CORRUGATED PLASTIC PIPE
- PEJF - PREFORMED EXPANSION JOINT FILLER
- PRESS. - PRESSURE
- PROP. - PROPOSED
- R.A. - REAR ABUTMENT
- REQ'D - REQUIRED
- RT. - RIGHT
- SB - SOUTHBOUND
- SPA. - SPACES
- STA. - STATION
- STR. - STRAIGHT
- SUPER. - SUPERSTRUCTURE
- T/T - TOE TO TOE
- TYP. - TYPICAL
- VERT. - VERTICAL
- W/ - WITH

RESOURCE INTERNATIONAL INC.
 6850 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
Rii
 DATE: 10/2019
 REVIEWED: SSK
 DRAWN: JGM
 DESIGNED: JGM
 CHECKED: NCK
 STRUCTURE FILE NUMBER: 7001207
STRUCTURE NOTES AND QUANTITIES
 BRIDGE NO. - RIC-30-1212
 OVER PRIVATE DRIVE
RIC-30-9-26
 PID No. 93455
 2 / 10
 1335
 1669

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STANDARD DRAWINGS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	7-17-15
AS-2-15	REVISED	1-18-19
GSD-1-19	DATED	1-18-19
PCB-91	REVISED	1-18-13
SBR-1-13	REVISED	7-20-18
SBR-2-13	REVISED	7-20-18
SICD-1-96	REVISED	7-18-14
SICD-2-14	DATED	7-18-14
VPF-1-90	REVISED	7-20-18

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017, 8TH EDITION AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN LOADING

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

DESIGN DATA

CONCRETE CLASS OC2 WITH OC/OA - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS OCI WITH OC/OA - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2 1/2" CONCRETE COVER

MONOLITHIC WEARING SURFACE

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

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05

PILES DRIVEN TO TIP ELEVATION FOR SOIL/PILE SETUP

THE ULTIMATE BEARING VALUE IS 220 KIPS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE AT PIERS IS 352.0 KIPS PER PILE LEFT BRIDGE AND 338.5 KIPS PER PILE RIGHT BRIDGE. PART OF THE ULTIMATE BEARING VALUE WILL BE ACHIEVED THROUGH PILE/SOIL SETUP, WHICH IS A TIME DEPENDENT INCREASE IN RESISTANCE THAT OCCURS IN SOME SOILS.

NOTIFY THE ENGINEER AT LEAST 5 DAYS BEFORE DRIVING PILES SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

DRIVE THE FIRST TWO PILES IN EACH SUBSTRUCTURE TO THE TIP ELEVATION GIVEN BELOW FOR THE SUBSTRUCTURE, DRIVE THE THIRD AND FOURTH PILES TO 75% AND 85% OF THE LENGTH OF THE FIRST TWO PILES. PERFORM DYNAMIC LOAD TESTING ON ALL FOUR PILES WHILE DRIVING. AFTER DRIVING THE FOUR PILES, CEASE ALL DRIVING OPERATIONS AT THE SUBSTRUCTURE FOR A MINIMUM OF 7 DAYS. INCLUDE THE WAITING PERIOD AS A SEPARATE ACTIVITY IN THE PROGRESS SCHEDULE. AFTER THE WAITING PERIOD, PERFORM PILE RESTRIKES ON THE FOUR PILES (TWO RESTRIKE ITEMS). SUBMIT ALL TEST RESULTS TO THE ENGINEER. THE ENGINEER WILL REVIEW THE TEST RESULTS AND ESTABLISH DRIVING CRITERIA FOR THE PILING IN THE SUBSTRUCTURE WITH THE ASSISTANCE OF THE DISTRICT GEOTECHNICAL ENGINEER, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

THE DRIVING CRITERIA WITH PILE SETUP SHALL BE PERFORMED FOR THE FIRST STAGE OF BRIDGE CONSTRUCTION. THE CONTRACTOR SHALL NOT ORDER PILES FOR SUBSEQUENT PHASES UNTIL AFTER THE DRIVING CRITERIA HAS BEEN ESTABLISHED WITH SETUP. THE DEPARTMENT WILL ADJUST THE FURNISHED PILE QUANTITIES BASED ON THE RESTRIKE TEST RESULTS.

IF THE DYNAMIC LOAD TESTING INDICATES A PILE HAS ACHIEVED THE ULTIMATE BEARING VALUE ABOVE THE TIP ELEVATION DURING THE INITIAL DRIVING, (BEFORE THE WAITING PERIOD), STOP DRIVING AND NOTIFY THE ENGINEER. IF THE RESTRIKE TEST RESULTS ON THE FOUR PILES INDICATE THAT A PILE DID NOT ACHIEVE THE REQUIRED ULTIMATE BEARING VALUE, DRIVE THE PILE TO THE ESTABLISHED DRIVING CRITERIA. SPLICING OF THE PILES BEYOND THE ESTIMATED LENGTH PROVIDED IN THE PLANS WILL BE PAID BY THE DEPARTMENT UNDER CMS 109.05 WITH A NEGOTIATED PRICE PER SPLICE.

LEFT BRIDGE:	NO. OF PILES	PILE TIP ELEV.	ORDER LENGTH
REAR ABUTMENT	14	1142.9	60'
PIER NO. 1	30	1104.1	75'
PIER NO. 2	30	1104.7	80'
FORWARD ABUTMENT	14	1149.8	60'

RIGHT BRIDGE:	NO. OF PILES	PILE TIP ELEV.	ORDER LENGTH
REAR ABUTMENT	17	1142.9	60'
PIER NO. 1	36	1106.9	80'
PIER NO. 2	36	1109.3	75'
FORWARD ABUTMENT	28	1149.8	60'

ABUTMENT PILES: (12" DIA. C-I-P CONCRETE)

1 DYNAMIC LOAD TEST

PIER PILES: (16" DIA. C-I-P CONCRETE)

1 STATIC LOAD TEST

2 DYNAMIC LOAD TESTS

2 RESTRIKES

PILE DRIVING CONSTRAINTS

PILE DRIVING MAY NOT BEGIN UNTIL SUFFICIENT EMBANKMENT SETTLEMENT HAS OCCURRED AS DOCUMENTED BY THE SETTLEMENT PLATFORMS. THE ANTICIPATED WAITING PERIOD TO PERMIT SUFFICIENT EMBANKMENT SETTLEMENT IS 30 DAYS. THE DISTRICT GEOTECHNICAL ENGINEER MAY REDUCE OR EXTEND THE WAITING PERIOD BASED ON THE MAGNITUDE AND RATE OF THE EMBANKMENT SETTLEMENT AS DETERMINED BY THE SETTLEMENT PLATFORMS. THE SETTLEMENT WAITING PERIOD BEGINS ONCE THE APPROACH EMBANKMENT REACHES THE DESIGN SUBGRADE LEVEL FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. BEGIN PILE DRIVING ONLY FOLLOWING TERMINATION OF THE SETTLEMENT MONITORING WAITING PERIOD BY THE DISTRICT GEOTECHNICAL ENGINEER.

ITEM 507 - CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN

MINIMUM PIPE PILE WALL THICKNESS IS 0.375".

FOR ENCASED PILES, PILE SLEEVE MATERIAL SHALL BE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE CONFORMING TO EITHER 707.33 OR ASTM F2648, OR PVC CORRUGATED SMOOTH INTERIOR PIPE CONFORMING TO 707.42. INSIDE DIAMETER OF SLEEVE SHALL BE 14 INCHES. THE ESTIMATED SLEEVE LENGTH SHALL BE 15 FEET.

IF FURNISHING PLASTIC PIPE MANUFACTURED FROM RECYCLED POLYETHYLENE, SUBMIT CERTIFIED TEST DATA THAT SHOWS THE PIPE CONFORMS WITH ASTM F2648. CLEARLY MARK ALL PIPE MANUFACTURED FROM RECYCLED POLYETHYLENE SO THAT IT IS USED ONLY FOR PILE SLEEVES ON THE PROJECT.

AFTER PILES ARE DRIVEN, SLEEVES ARE TO BE FILLED WITH GRANULAR MATERIAL CONFORMING TO 703.11, STRUCTURAL BACKFILL TYPE 2, EXCEPT 100 PERCENT OF THE MATERIAL SHALL PASS THROUGH A 3/4-INCH SIEVE.

FOR ITEM SPECIAL, SETTLEMENT PLATFORM SEE SHEET 1335/1669.

SETTLEMENT PLATFORM LOCATIONS

POINT	STATION	OFFSET	CONSTRUCTED IN STAGE
1	645+94.24	41.36' LT	-
2	645+82.37	13.81' LT	-
3	645+70.51	13.75' RT	-
4	645+58.64	41.30' RT	-

DECK PLACEMENT ASSUMPTIONS

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.38 KIPS.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

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

STRUCTURE PAINTING: ALL BRIDGE FINISH COATS SHALL BE THE SAME COLOR.

ABBREVIATIONS

- ABUT. - ABUTMENT
- APPR. - APPROACH
- BRG. - BEARING
- BOT. - BOTTOM
- CONST. JT. - CONSTRUCTION JOINT
- CLR. - CLEAR
- CONST. - CONSTRUCTION
- CORR. - CORRUGATED
- DIA. - DIAMETER
- DIM. - DIMENSION
- DWG. - DRAWING
- EL. - ELEVATION
- E.F. - EACH FACE
- EXIST. - EXISTING
- F.A. - FORWARD ABUTMENT
- FWD. - FORWARD
- F.F. - FRONT FACE
- FT. - FEET
- LBS. - POUNDS
- MAX. - MAXIMUM
- MEAS. - MEASURED
- MIN. - MINIMUM
- OPT. - OPTIONAL
- P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
- R.A. - REAR ABUTMENT
- R.F. - REAR FACE
- REQ'D. - REQUIRED
- SPA. - SPACING
- STA. - STATION
- T.O.S. - TOP OF SLOPE
- TYP. - TYPICAL
- U.O.N. - UNLESS OTHERWISE NOTED
- VAR. - VARIES
- W/ - WITH

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DESIGN AGENCY
ENGINEERING ASSOCIATES, INC.
935 EAGLE PASS - WOOSTER, OHIO 44691
TELEPHONE: (330) 345-6556
FAX: (330) 345-8077



DATE 9-24-19
REVIEWED SDS
STRUCTURE FILE NUMBER 7001232

DRAWN TAC
CHECKED REVISED
DESIGNED HK
BDH

GENERAL NOTES
BRIDGE NO. RIC-30-1219
OVER ASHLAND RAILWAY

RIC-30-9-26
PID No. 93455

3 / 79

1346
1669

CALC: HK DATE: 6/28/2019
 CHECKED: TAC DATE: 6/28/2019

ESTIMATED QUANTITIES

ITEM	EXTENSION	TOTAL 01/NHS/BR	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3 / 79
202	22900	411	SY	APPROACH SLAB REMOVED				411	
202	23500	411	SY	WEARING COURSE REMOVED				411	
SPECIAL	20365000	4	EACH	SETTLEMENT PLATFORM				4	3 / 79
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS	2 / 79
503	21100	1967	CY	UNCLASSIFIED EXCAVATION	810	1157			
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS	
506	11100	LS		STATIC LOAD TEST		LS			
507	00501	4015	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	4015				3 / 79 & 23 / 79
507	00551	4380	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	4380				3 / 79 & 23 / 79
507	00701	9570	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN		9570			3 / 79
507	00751	10230	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN		10230			3 / 79
509	10000	411193	LB	EPOXY COATED REINFORCING STEEL	42869	136266	232058		
511	21523	1026	CY	CLASS OC2 CONCRETE WITH QC/OA, SUPERSTRUCTURE, AS PER PLAN			1026		42 / 79 & 61 / 79
511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE			4		
511	41012	437	CY	CLASS OC1 CONCRETE WITH QC/OA, PIER ABOVE FOOTINGS		437			
511	44112	203	CY	CLASS OC1 CONCRETE WITH QC/OA, ABUTMENT NOT INCLUDING FOOTING	203				
511	46512	496	CY	CLASS OC1 CONCRETE WITH QC/OA, FOOTING	256	240			
512	10100	2037	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	237	982	723	95	
512	10300	414	SY	SEALING CONCRETE BRIDGE DECKS WITH HMMM RESIN			381	33	
512	33000	42	SY	TYPE 2 WATERPROOFING	42				
513	10260	754305	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			754305		
513	20000	11778	EACH	WELDED STUD SHEAR CONNECTORS			11778		
514	00800	754305	LB	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			754305		
514	00851	754305	LB	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN			754305		3 / 79
514	10000	31	EACH	FINAL INSPECTION REPAIR			31		
516	10010	249	FT	ARMORLESS PREFORMED JOINT SEAL				249	
516	13600	75	SF	1" PREFORMED EXPANSION JOINT FILLER			75		
516	13900	646	SF	2" PREFORMED EXPANSION JOINT FILLER			245	401	
516	14020	300	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	300				
516	44101	28	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 3 1/8"x1'-4"x1'-7" WITH 2 3/8" (AVG)x1'-5"x1'-8" BEVELED LOAD PLATE		28			38 / 79
516	44101	28	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 2 1/2"x1'-0"x1'-2" WITH 1 3/4" (AVG)x1'-1"x1'-3" BEVELED LOAD PLATE	28				38 / 79
518	21200	225	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	225				
518	40000	320	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	320				
518	40010	45	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	45				
523	20000	3	EACH	DYNAMIC LOAD TESTING	1	2			
523	20500	2	EACH	RESTRIKE		2			
526	25001	657	SY	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN				657	63 / 79 THRU 65 / 79
526	90030	258	FT	TYPE C INSTALLATION				258	
601	20010	612	CY	CRUSHED AGGREGATE SLOPE PROTECTION				612	

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DESIGNED
 HK
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 BDH

DRAWN
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 REVISED

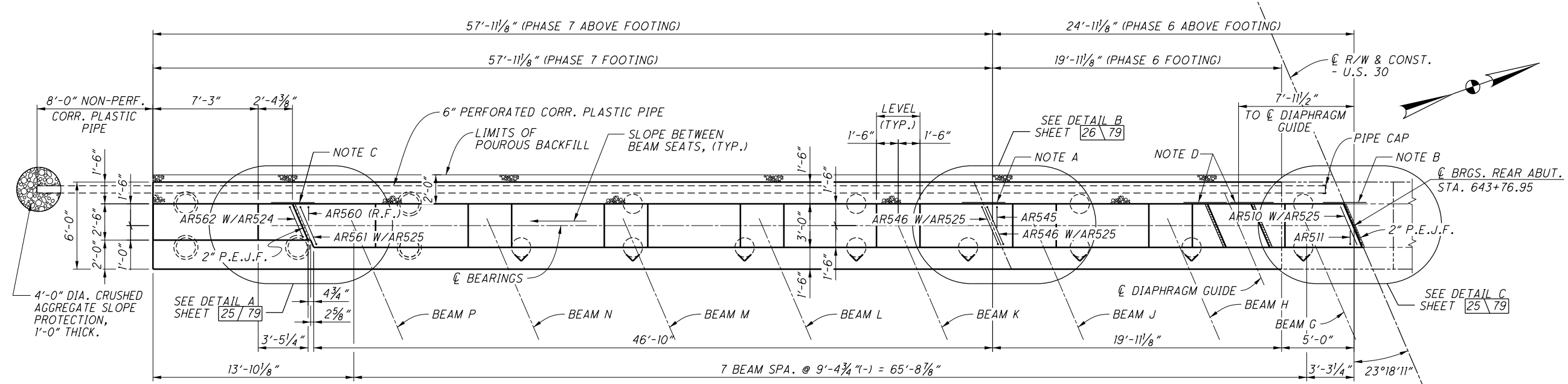
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 STRUCTURE FILE NUMBER
 7001232

DATE
 9-24-19

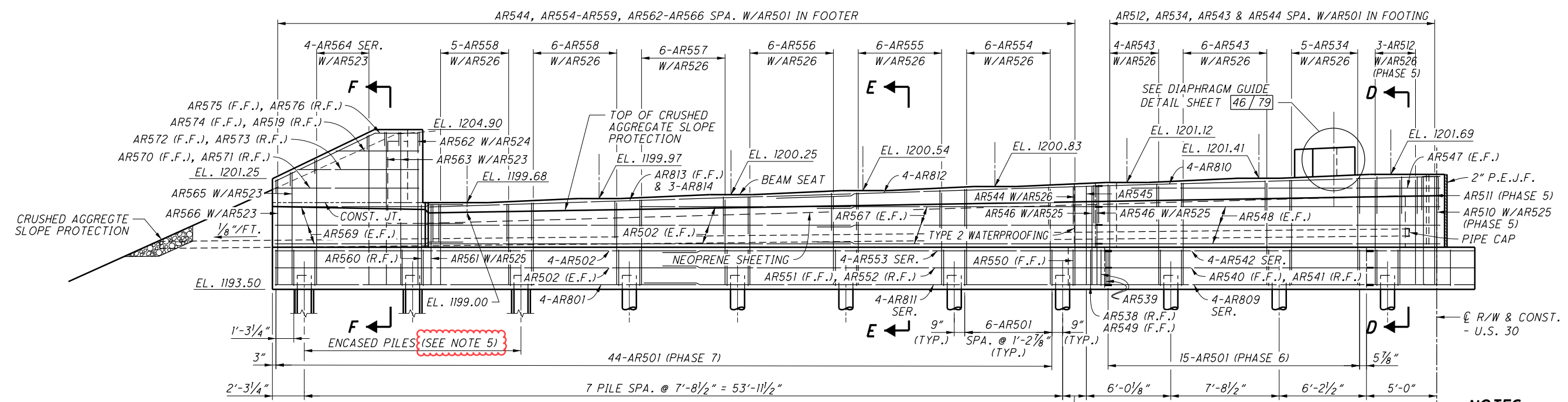
ESTIMATED QUANTITIES
 BRIDGE NO. RIC-30-1219
 OVER ASHLAND RAILWAY

RIC-30-9-26
 PID No. 93455

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REAR ABUTMENT PLAN
 (EASTBOUND STRUCTURE)



REAR ABUTMENT ELEVATION
 (EASTBOUND STRUCTURE)

WATERPROOFING NOTES

- NOTE A: TYPE 2 WATERPROOFING 3'-0" WIDE CENTERED ON JOINT FROM TOP OF FOOTING TO BOTTOM OF APPROACH SLAB
- NOTE B: NEOPRENE SHEETING 3'-0" WIDE CENTERED ON JOINT FROM TOP OF FOOTING TO BOTTOM OF APPROACH SLAB
- NOTE C: NEOPRENE SHEETING 3'-0" WIDE CENTERED ON JOINT FROM 1'-6" BELOW BEAM SEAT TO 3" BELOW FINISHED GRADE
- NOTE D: NEOPRENE SHEETING 3'-0" WIDE CENTERED ON JOINT FROM 1'-6" BELOW BEAM SEAT TO BOTTOM OF APPROACH SLAB

- NOTE E: TYPE 2 WATERPROOFING 3'-0" WIDE CENTERED ON JOINT FROM BOTTOM OF APPROACH SLAB TO 1'-6" BELOW BEAM SEAT
- NOTE F: TYPE 2 WATERPROOFING 3'-0" WIDE CENTERED ON JOINT FROM BOTTOM OF APPROACH SLAB TO 1'-6" ABOVE BEAM SEAT TO TOP OF FOOTING

LEGEND

- DENOTES MECHANICAL REBAR CONNECTOR
- ▨ LIMITS OF PREFORMED EXPANSION JOINT FILLER
- ~~~~~ TEMPORARY SHORING

NOTES

1. FOR ADDITIONAL ABUTMENT NOTES & SECTIONS D-D, E-E & F-F SEE SHEET 24/79.
2. MINIMUM REINFORCING STEEL SPLICE LENGTH:
 NO. 5 BAR = 2'-5"
 NO. 8 BAR = 3'-9"
 AR812 = 5'-4"
3. FOR ABBREVIATIONS SEE SHEET 3/79.
4. MINIMUM CONCRETE COVER IS 2" UNLESS OTHERWISE SHOWN.
5. PILE ENCASEMENT SHALL BE INCLUDED WITH ITEM 507 - 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN FOR PAYMENT AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK.

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CALC: BDH DATE: 8/30/2019
 CHECKED: HK DATE: 8/30/2019

ESTIMATED QUANTITIES

ITEM	EXTENSION	TOTAL 01/NHS/BR	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3 / 73
202	22900	347	SY	APPROACH SLAB REMOVED				347	
202	23500	167	SY	WEARING COURSE REMOVED				167	
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS	3 / 73
503	21100	1693	CY	UNCLASSIFIED EXCAVATION	1234	459			
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS	
507	00100	7515	FT	STEEL PILES HPI0X42, FURNISHED	4415	3100			
507	00150	6740	FT	STEEL PILES HPI0X42, DRIVEN	4015	2725			
507	92200	585	FT	PREBORED HOLES		585			
509	10000	294385	LB	EPOXY COATED REINFORCING STEEL	39137	56695	198553		
511	21523	943	CY	CLASS OC2 CONCRETE WITH QC/OA, SUPERSTRUCTURE, AS PER PLAN	122		821		35 / 73 & 36 / 73
511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE			4		
511	41012	189	CY	CLASS OC1 CONCRETE WITH QC/OA, PIER ABOVE FOOTINGS		189			
511	44112	190	CY	CLASS OC1 CONCRETE WITH QC/OA, ABUTMENT NOT INCLUDING FOOTING	190				
511	46512	357	CY	CLASS OC1 CONCRETE WITH QC/OA, FOOTING	226	131			
512	10100	1539	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	82	561	823	73	
512	10300	369	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			335	34	
512	33000	35	SY	TYPE 2 WATERPROOFING	35				
513	10260	560936	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			560936		
513	20000	10335	EACH	WELDED STUD SHEAR CONNECTORS			10335		
514	00800	560936	LB	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			560936		
514	00851	560936	LB	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN			560936		3 / 73
514	10000	25	EACH	FINAL INSPECTION REPAIR			25		
516	10010	256	FT	ARMORLESS PREFORMED JOINT SEAL				256	
516	13600	30	SF	1" PREFORMED EXPANSION JOINT FILLER			30		
516	13900	787	SF	2" PREFORMED EXPANSION JOINT FILLER			230	557	
516	14020	279	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	279				
516	44101	26	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 2 1/2"x1'-0"x1'-2" W/ 1 1/2"x1'-1"x1'-3" BEVELED LOAD PLATE	26				32 / 73
516	44101	26	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 3 1/8"x1'-3"x1'-6" W/ 2 5/16"(AVG)x1'-4"x1'-7" BEVELED LOAD PLATE		26			32 / 73
518	21200	190	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	190				
518	40000	339	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	339				
518	40010	66	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	66				
526	25001	617	SY	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN				617	53 / 73 THRU 58 / 73
526	90030	267	FT	TYPE C INSTALLATION				267	
601	21000	1154	SY	CONCRETE SLOPE PROTECTION				1154	
607	39900	320	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			320		

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 BDH

ESTIMATED QUANTITIES
 BRIDGE NO. RIC-30-1236
 OVER S.R. 545

RIC-30-9-26
 PID No. 93455