

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

HOPEWELL TOWNSHIP

**MUSKINGUM AND
LICKING COUNTIES**

INDEX OF SHEETS:

TITLE SHEET 1
 GENERAL NOTES 2, 2A
 MAINTENANCE OF TRAFFIC NOTES 3-6
 ASPHALT CONCRETE DATA 7
 PAVED SHOULDER DATA 8
 RAMP/EXTRA AREA DATA 9
 BRIDGE TREATMENT DATA 10
 PAVEMENT MARKING DATA 11
 PAVEMENT MARKING DETAILS 12
 RAISED PAVEMENT MARKER DATA 13
 BRIDGE LOCATION MAP 14
 BRIDGE REPAIR NOTES 15
 BRIDGE REPAIR QUANTITIES 16
 BRIDGE REPAIR DETAILS 17-22
 LOCATION SUB-SUMMARIES 23-25
 GENERAL SUMMARY 26-27

PROJECT DESCRIPTION:

4 LANE DIVIDED ASPHALT CONCRETE RESURFACING AND RELATED WORK ON I.R. 70 IN MUSKINGUM AND LICKING COUNTIES.

Project Earth Disturbed Area =
 N/A (Maintenance Project)
 Estimated Contractor Earth Disturbed Area =
 N/A (Maintenance Project)
 Notice of Intent Earth Disturbed Area =
 N/A (Maintenance Project)

LOCATION	COUNTY	ROUTE	BEGIN	END	LENGTH	VILLAGE/CITY
			SLM	SLM	MILES	
1	MUS	I.R. 70	0.76	5.56	4.80	
2	LIC	I.R. 70	28.93	29.42	0.49	
3	MUS	C.R. 30	2.15	2.34	0.19	

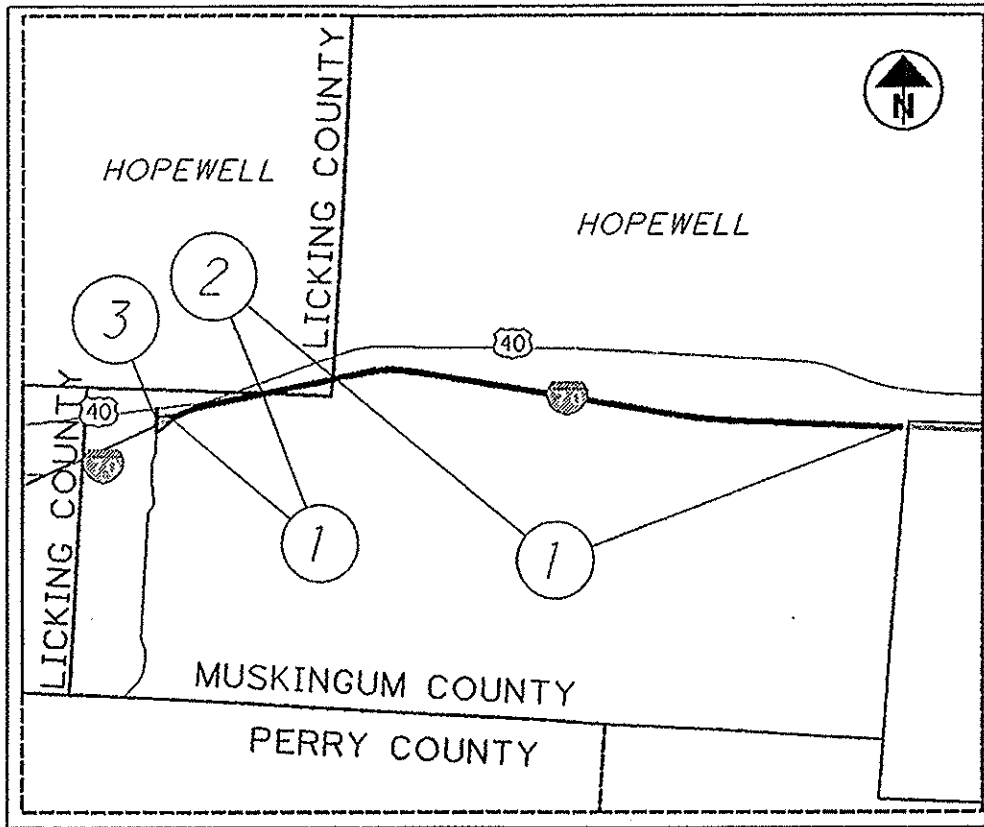
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



LON/LAT: 82° 09' 46" / 39° 56' 56"

PORTION TO BE IMPROVED

DESIGN DESIGNATION	MUS-70	LIC-70
		0.76-5.56
Functional Classification	INTERSTATE	INTERSTATE
Opening Year ADT (2015)	36,000	36,000
Design Year ADT (2027)	42,000	42,000
Design Hourly Volume (2027)	4,200	4,200
Directional Distribution	53%	53%
Trucks (24 Hour B&C)	29%	29%
Design Speed	70mph	70mph
Legal Speed	70mph	70mph

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
 CONTACT BOTH SERVICES
 CALL TWO WORKING DAYS
 BEFORE YOU DIG

CALL
 1-800-362-2764
 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
 NON-MEMBERS
 MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
 SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
 OHIO DEPARTMENT OF TRANSPORTATION
 DISTRICT 5 PRODUCTION OFFICE

ENGINEER'S SEAL

SIGNED: *Douglas N. Morgan*
 DATE: 6-16-2014

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-2.1	7-19-13	MT-98.28	7-19-13	800	7-18-14
BP-2.2	7-18-08	MT-98.29	7-19-13	821	4-20-12
BP-2.5	7-19-13	MT-99.20	7-19-13	832	1-17-14
BP-3.1	4-20-12	MT-101.90	7-19-13		
BP-9.1	7-19-13	MT-105.10	7-19-13		
MT-95.30	7-19-13	TC-65.10	1-17-14		
MT-97.10	7-19-13	TC-65.11	1-17-14		
MT-98.10	7-19-13	TC-71.10	1-17-14		
MT-98.11	7-19-13	TC-72.20	7-20-12		
MT-98.20	7-19-13				
MT-98.22	7-19-13				

APPROVED *Dave Ray*
 DATE 6-16-14 DISTRICT DEPUTY DIRECTOR

APPROVED *George Wright*
 DATE 7-21-14 DIRECTOR, DEPARTMENT OF TRANSPORTATION

MUS - /LIC-IR 70-00.76/28.93
 140496 PID - 25684
 Dist 5 10/2/2014

Contract Proposal Available @ www.
 contracts.dot.state.oh.us/home

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FEDERAL PROJECT NO.
E140(412)

FID NO.
25684

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

MUS-70-0.76
 LIC-70-28.93
 MUS-C.R. 30-2.15

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (I.E. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS.

ITEM 209 LINEAR GRADING

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE, TO PERFORM THE WORK, TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

AREAS WITH GUARDRAIL SHALL NOT BE EXCLUDED FROM LINEAR GRADING. ALL LINEAR GRADING WORK SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSES AND TO REPAIR EXISTING AGGREGATE SHOULDERS AS DIRECTED BY THE ENGINEER.

ITEM 209 LINEAR GRADING
LOCATION 1 – 19.20 MILE
LOCATION 2 – 1.96 MILE

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING SHALL BE 3.25" FOR MAINLINE (INCLUDING PAVED SHOULDERS) AND 1.75" FOR RAMPS (INCLUDING PAVED SHOULDERS) UNLESS OTHERWISE SHOWN IN THE PLAN OR AS DIRECTED BY THE ENGINEER.

THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE LANE LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 253 PAVEMENT REPAIR

ALL REPAIRS SHALL TAKE PLACE PRIOR TO THE PLANING/PAVING OPERATIONS. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE 8". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH ITEM 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 8" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED).

REPAIR QUANTITIES MAY BE USED ON THE MAINLINE PAVEMENT OR ON PAVED SHOULDERS. ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR
LOCATION 1 – 800 CU.YD. LOCATION 2 – 50 CU.YD.

ITEM 407 TACK COAT
ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT AND 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD AND 0.05 GALLONS PER SQUARE YARD, RESPECTIVELY, FOR ESTIMATING PURPOSES ONLY.

ITEM SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

THIS ITEM SHALL BE USED TO REINFORCE TRANSVERSE JOINT CRACKS. PLACE REINFORCING MESH ON PLANED SURFACE, 5.0' WIDE FROM EDGE LINE TO EDGE LINE (24' LENGTH) CENTERED OVER TRANSVERSE JOINT CRACK. THE ENTIRE ROADWAY SHALL BE OVERLAYED WITH 3.25" ASPHALT CONCRETE AFTER PLACING OF THE REINFORCING MESH. THE JOINTS TO BE TREATED SHALL BE LOCATED PRIOR TO CONSTRUCTION BY THE PROJECT ENGINEER IN COORDINATION WITH THE DESIGN DEPARTMENT. REINFORCING MATERIAL SHALL BE GLASGRID CG100 OR EQUIVALENT AND SHALL BE PLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND THIS NOTE.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS.

4 LANE:
LOCATION 1 - SLM 0.76 TO SLM 4.80: 100 JOINTS
100 JOINTS X 24' X 5' WIDE / 9 = 1,334 SQ. YD.

E.B. ON RAMP – 866' / 60 = 15 JOINTS
15 X 16' X 5' WIDE / 9 = 134 SQ. YD.

W.B. OFF RAMP – 784' / 60 = 13 JOINTS
13 X 16' X 5' WIDE / 9 = 116 SQ. YD.

LOCATION 2 - SLM 28.93 TO SLM 29.42: 10 JOINTS
10 JOINTS X 24' X 5' WIDE / 9 = 134 SQ. YD.

ITEM 690 SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

LOCATION 1 – 1,334 SQ.YD. LOCATION 2 – 134 SQ.YD.

ITEM 690 – SPECIAL- MISC.: REMOVAL AND STORAGE OF ROADWAY SENSOR

ITEM 690 – SPECIAL-MISC.: INSTALLATION OF ROADWAY WEATHER INFORMATION SENSOR

THE CONTRACTOR WILL CONTACT THE SENSOR MANUFACTURER'S REPRESENTATIVE, WHO WILL BE PRESENT WHILE THE EXISTING SENSORS ARE BEING REMOVED AND WHILE THE NEW SENSORS ARE BEING INSTALLED.

SENSOR MANUFACTURER'S REPRESENTATIVE
M.H. CORBIN, INC.
9042 HERITAGE DRIVE
PLAIN CITY, OH 43064
PHONE: (614)-873-5216 ATTN: BILL CORBIN OR MACK JR.

THE EXISTING SENSORS SHALL BE REMOVED PRIOR TO THE PLANING OF THE PAVEMENT. THE FOUR (4) SENSORS ARE LOCATED ON I.R. 70, ONE (1) SENSOR IN EACH LANE, AT THE FOLLOWING APPROXIMATE SLM'S:

I.R. 70 WB SLM 1.22 (NEAR MILE MARKER 144) – 2 SENSORS
I.R. 70 EB SLM 1.22 (NEAR MILE MARKER 144) – 2 SENSORS

THE REMOVAL AND STORAGE OF THE SENSORS WILL BE PAID FOR UNDER ITEM 690 SPECIAL- MISC.: REMOVAL AND STORAGE OF ROADWAY SENSOR, EACH. THE OLD SENSORS SHALL BECOME THE PROPERTY OF M.H. CORBIN, INC. ONCE THEY ARE REMOVED. THE CONTRACTOR SHALL TURN OVER THE OLD SENSORS TO THE MANUFACTURER'S REPRESENTATIVE.

THE NEW SENSORS SHALL BE LOCATED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE MANUFACTURER WILL PROVIDE THE CONTRACTOR WITH INSTALLATION PROCEDURES INCLUDING ANY NECESSARY DRAWINGS.

THE ODOT DISTRICT 5 CONSTRUCTION ENGINEER (KEITH GEIGER, 740-323-5241) SHALL BE NOTIFIED WHEN THE SENSORS ARE REMOVED FROM THE PAVEMENT AND WHEN THE NEW INSTALLATION IS COMPLETE. THE DISTRICT WILL MONITOR THE SENSORS PERFORMANCE FOR A MINIMUM OF FIVE WORKING DAYS TO VERIFY PROPER OPERATION. IF THE SENSORS DO NOT PERFORM PROPERLY WITHIN THIS TEST PERIOD, THE CONTRACTOR SHALL VERIFY THAT THE INSTALLATION IS CORRECT. IF A SENSOR FAILS AFTER IT IS REMOVED FROM THE PAVEMENT, THE CONTRACTOR SHALL REPLACE THE FAILED SENSOR UNIT.

- 4 – REMOVAL AND STORAGE**
- 4 – INSTALLATION OF NEW VX21-2 SENSOR**
- 1 – INSTALLATION OF VXTXRX RECEIVER RADIO**

ITEM 516 2" DEEP JOINT SEALER, AS PER PLAN

THE CONTRACTOR SHALL PLACE A 1" X 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

ITEM 621 RAISED PAVEMENT MARKER REMOVED

RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CALCULATED
LIME
CHECKED
DNM

GENERAL NOTES

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

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ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN

THIS ITEM INCLUDES THE REPAIR OF TRANSVERSE CRACKS IN EXISTING CONCRETE PAVEMENT AND TRANSVERSE JOINT REPAIR ON MT. PERRY ROAD (COUNTY ROAD 30) AT THE I.R. 70 INTERCHANGE. ALL REPAIRS SHALL CONFORM TO CMS 255. LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

TRANSVERSE JOINT REPAIRS SHALL CONFORM TO SCD BP-2.5.

ALL REINFORCING STEEL SHALL BE EPOXY COATED AND CONFORM TO CMS 709. ALL CONCRETE SHALL BE CLASS FS AND CONFORM TO CMS 499.05(B).

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AT THE DISCRETION OF THE ENGINEER:

LOCATION 3

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS, AS PER PLAN.....280 SQ. YD.

ITEM 255, FULL DEPTH PAVEMENT SAWING..... 1300 FT.

AGGREGATE SHOULDER REPAIR AND MAINTENANCE

THE FOLLOWING QUANTITIES HAS BEEN PROVIDED TO REPAIR THE EXISTING AGGREGATE SHOULDERS ALONG THE CONCRETE SECTION OF MT. PERRY ROAD (COUNTY ROAD 30) PRIOR TO, DURING AND UPON COMPLETION OF THE CONCRETE REPAIR WORK SHOWN ON THIS SHEET.

PRIOR TO ANY WORK ON MT. PERRY ROAD, THE CONTRACTOR SHALL PLACE ITEM 617, COMPACTED AGGREGATE, AS PER PLAN ALONG ADJACENT TO THE CONCRETE PAVEMENT IN ORDER TO PROVIDE A SMOOTH TRANSITION BETWEEN THE CONCRETE PAVEMENT AND THE AGGREGATE SHOULDER. THE MINIMUM WIDTH OF THE COMPACTED AGGREGATE SHALL BE 4 FEET.

THE AGGREGATE SHOULDER WILL BE USED TO HELP MAINTAIN TRAFFIC THROUGH THIS AREA DURING THE CONCRETE REPAIRS AND THE DIAMOND GRINDING. THE AGGREGATE SHOULDER SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER.

LOCATION 3

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN...50 CU. YD.

ITEM 617, SHOULDER PREPARATION.....600 SQ. YD.

PAVEMENT DIAMOND GRINDING					
LOCATION	DESCRIPTION	DISTANCE FT	PAVEMENT WIDTH FT	257	646
				DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT SQ YD	CENTER LINE MILE
3	FROM U.S. 40 TO BRIDGE APPROACH SLAB	514	18	1,028	0.10
	FROM BRIDGE APPROACH SLAB TO END OF CONCRETE PAVEMENT	182	18	364	0.04
TOTALS CARRIED TO GENERAL SUMMARY				1,392	0.14

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN (LONGITUDINAL JOINT REPAIR)

THIS ITEM INCLUDES THE REPAIR OF LONGITUDINAL JOINTS IN EXISTING CONCRETE PAVEMENT ON MT. PERRY ROAD (COUNTY ROAD 30) AT THE I.R. 70 INTERCHANGE.

LONGITUDINAL JOINTS THAT HAVE SEPERATIONS THREE (3) INCHES OR GREATER. THE LONGITUDINAL JOINT REPAIR SHALL CONFORM TO CMS 255 AND THE DETAIL ON ON THIS SHEET. LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

THE LONGITUDINAL JOINT REPAIR SHALL EXTEND THE ENTIRE CONCRETE PANEL LENGTH BETWEEN TWO EXISTING TRANSVERSE JOINTS. IF CONSECUTIVE CONCRETE PANELS NEED REPAIRED THEN A NEW TRANSVERSE JOINT SHALL BE INSTALLED PER BP-2.2. ANY WIDTH OVER THE 2' MINIMUM, WILL BE DETERMINED BY THE ENGINEER DURING LAYOUT.

ALL REINFORCING STEEL SHALL BE EPOXY COATED AND CONFORM TO CMS 709. ALL CONCRETE SHALL BE CLASS MS AND CONFORM TO CMS 499.05(B).

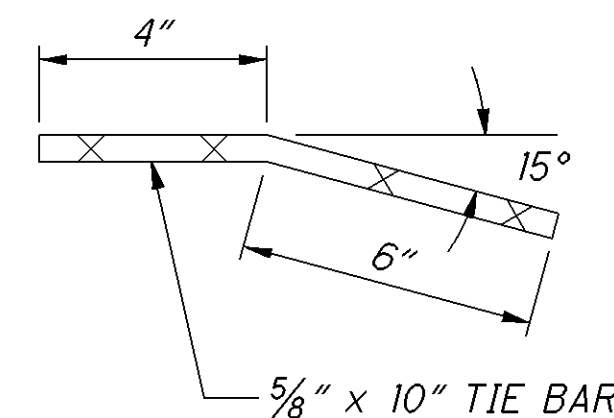
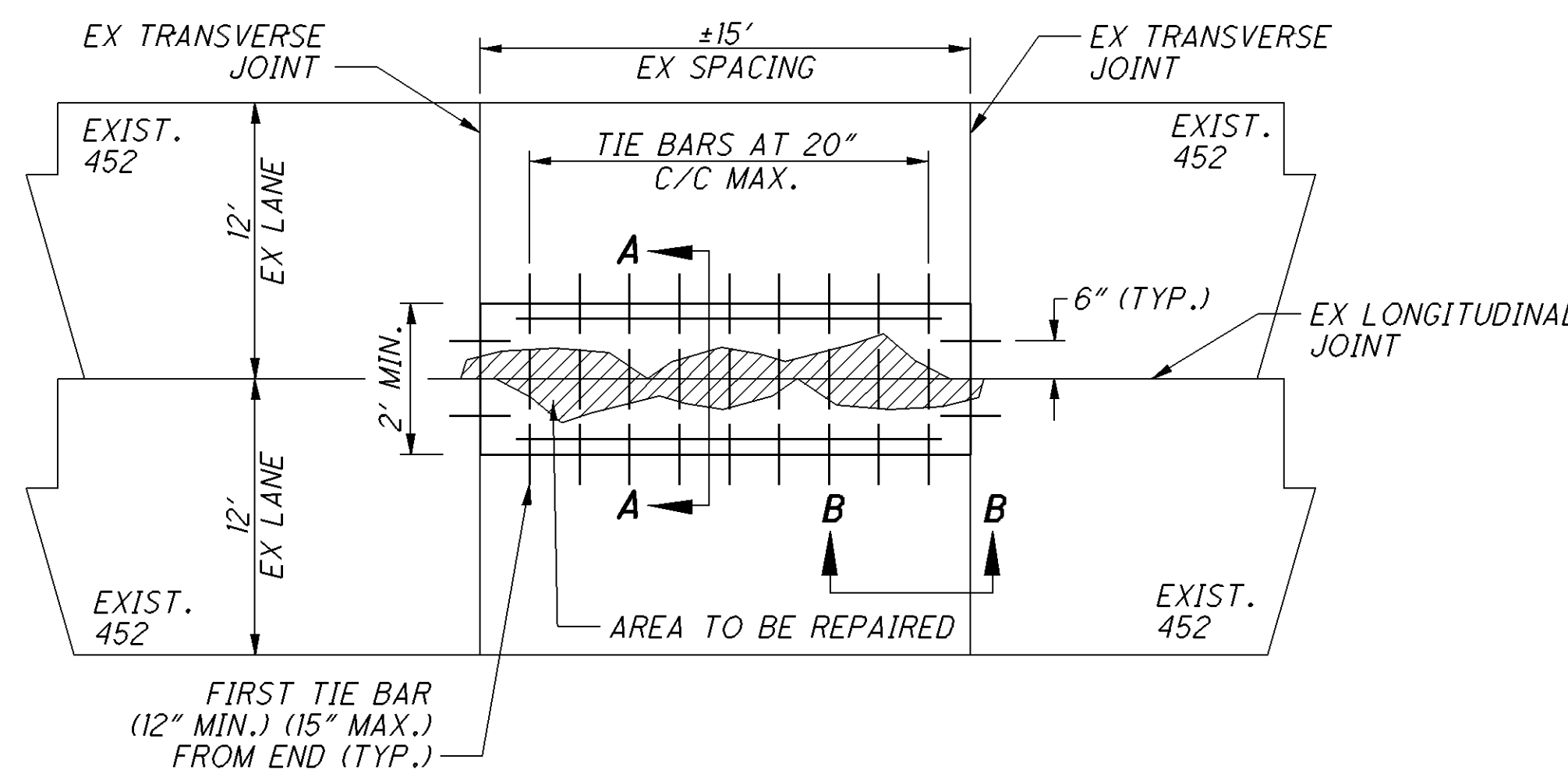
PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AT THE DISCRETION OF THE ENGINEER:

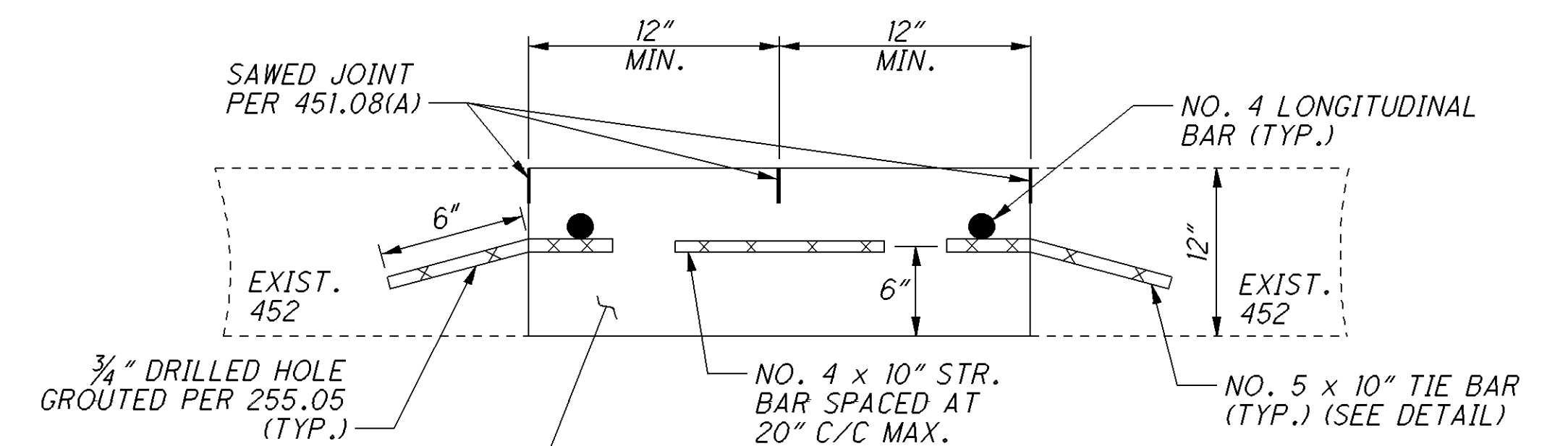
LOCATION 3

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS, AS PER PLAN (LONGITUDINAL JOINT REPAIR)..... 90 SQ. YD.

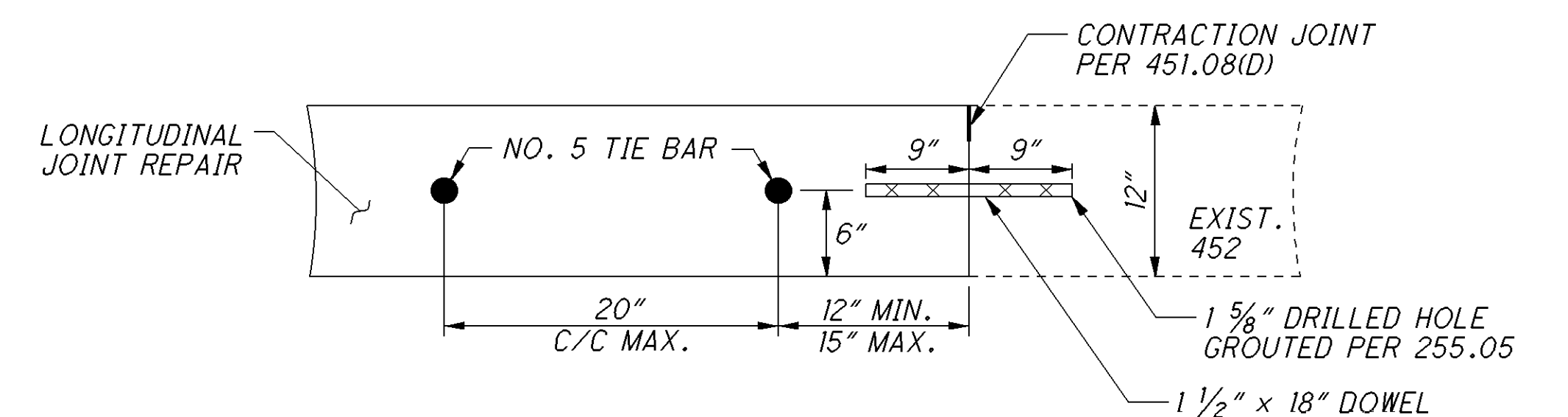
ITEM 255, FULL DEPTH PAVEMENT SAWING..... 820 FT.



TIE BAR DETAIL



SECTION A-A



SECTION B-B

CALCULATED
DNM
CHECKED
DNM

GENERAL NOTES

MUS-70-0-76
LIC-70-28.93
MUS-C.R. 30-2.15

2A
27

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NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT D05.PIO@DOT.STATE.OH.US

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT BRIAN.BOSCH@DOT.STATE.OH.US

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT HAULING.PERMITS@DOT.STATE.OH.US

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

ITEM 614 MAINTAINING TRAFFIC

AREAS THAT ARE PLANED SHALL NOT BE OPENED TO TRAFFIC. ALL PLANED AREAS MUST BE INLAID WITH A PROPOSED COURSE OF ITEM 442 ASPHALT CONCRETE PRIOR TO BEING OPENED TO TRAFFIC.

OVERNIGHT CLOSURES MUST MEET SPECIFICATIONS AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. THE ROADWAY SHALL NOT BE OPENED TO TRAFFIC WITHOUT EITHER THE PERMANENT OR WORK ZONE MARKINGS IN PLACE.

TRAFFIC SHALL BE MAINTAINED ON MT. PERRY ROAD (COUNTY ROAD 30) WITH FLAGGERS AS PER MT-97.10 DURING THE CONCRETE REPAIRS AND DIAMOND GRINDING AS SHOWN ON SHEET 2A OF 27. THE EXISTING AGGREGATE SHOULDERS SHALL BE USED TO HELP MAINTAIN TRAFFIC DURING THESE REPAIRS. A QUANTITY OF ITEM 617, COMPACTED AGGREGATE, AS PER PLAN, HAS BEEN INCLUDED IN THE PLANS TO REPAIR THE EXISTING AGGREGATE SHOULDERS PRIOR TO, DURING AND UPON COMPLETION OF THE CONCRETE REPAIR WORK ON MT. PERRY ROAD.

TWO LANES OF TRAFFIC IN EACH DIRECTION WILL BE MAINTAINED ON I.R. 70 AT ALL TIMES, EXCEPT AS NOTED BELOW:

LANE CLOSURES WILL ONLY BE IMPLEMENTED AT THE TIMES LISTED ON THE OHIO DEPARTMENT OF TRANSPORTATION'S WEB SITE, "PERMITTED LANE CLOSURE TIMES" SECTION, LOCATED AT THE ADDRESS SHOWN BELOW:

<http://plcm.dot.state.oh.us/>

THE PERMITTED CLOSURE TIMES LISTED ON THE WEBSITE, 14 CALENDAR DAYS PRIOR TO THE BID LETTING DATE WILL BE IN EFFECT FOR THIS PROJECT.

NO WORK WITHIN ACTIVE TRAVEL LANES OR WHICH WILL SLOW TRAFFIC IS PERMITTED AT ANY OTHER TIMES.

LANE CLOSURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD DRAWINGS. THE WORK ZONE CLOSURES SHALL BE NO LONGER THAN 2 MILES OR AS DIRECTED BY THE ENGINEER IN CONSIDERATION OF THE TRAFFIC FLOW.

IT IS THE INTENT TO RESTRICT LANE CLOSURES TO THE MINIMUM AMOUNT OF TIME NECESSARY TO PERFORM THE WORK AS DESCRIBED IN THE PLANS. THE CONTRACTOR WILL NOT COMMENCE ANY LANE CLOSURE BEFORE THE HOURS AS SPECIFIED OR COMMENCE ANY CLOSURE AT A TIME WHICH WILL NOT ALLOW COMPLETION OF THE WORK PRIOR TO THE HOURS SPECIFIED. SHOULD THE CONTRACTOR

ITEM 614 MAINTAINING TRAFFIC (CONTINUED)

CLOSE THE LANES BEFORE THE ALLOWABLE TIME AND/OR FAIL TO RE-OPEN ALL LANES TO TRAFFIC BY THE ALLOWABLE TIME A DISINCENTIVE OF \$50.00 PER MINUTE SHALL BE ASSESSED FOR EACH MINUTE OUTSIDE THE PERMITTED LANE CLOSURE.

THE CONTRACTOR WILL HAVE ON SITE AND IN WORKING AND OR SUITABLE CONDITION; ALL EQUIPMENT, TOOLS, LABORERS, LEO'S, TRAFFIC CONTROL DEVICES AND INCIDENTALS NECESSARY TO EFFICIENTLY PERFORM THE CLOSURE BEFORE INITIALIZING THE LANE CLOSURE.

THERE SHALL BE NO LANE CLOSURES ON HOLIDAYS OR HOLIDAY WEEKENDS. THE FOLLOWING ARE CONSIDERED HOLIDAYS:

MEMORIAL DAY, FOURTH OF JULY, LABOR DAY, THANKSGIVING, CHRISTMAS, NEW YEARS, EASTER.

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

DAY OF THE WEEK	TIMES ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N FRIDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$75 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

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

ITEM 614 WORK ZONE PAVEMENT MARKINGS

THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS IN ACCORDANCE WITH THE CURRENT CMS MANUAL AND STANDARD CONSTRUCTION DRAWINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

WORK ZONE PAVEMENT MARKINGS HAVE NOT BEEN ITEMIZED IN THE PLAN AND SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS. PAYMENT FOR GRINDING BUTT JOINTS SHALL BE INCLUDED WITH PAVEMENT PLANING.

MINIMUM 10' WEDGE LENGTH FOR ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC AT ALL BUTT JOINTS.

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				CU. YD.
1	I.R. 70	BEGIN WORK	0.00	4.0
1	I.R. 70	BRIDGE:MUS-70-0198L	1.98	1.9
1	I.R. 70	BRIDGE:MUS-70-0198R	1.98	1.9
1	I.R. 70	BRIDGE:MUS-70-0299L	2.99	1.9
1	I.R. 70	BRIDGE:MUS-70-0299R	2.99	1.9
1	I.R. 70	END WORK	5.56	4.0
1	I.R. 70	TOTAL		15.6

ITEM 614 WORK ZONE MARKING SIGNS

IN ACCORDANCE WITH CMS SECTION 614.04, A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES) - 10 EACH

ITEM 614 WORK ZONE MARKING SIGN - LOCATION 1 - 10 EACH

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET (75M) IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS ON EACH ENTRANCE RAMP AND AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

ITEM 614 REPLACEMENT DRUM

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

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

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

MAINTENANCE OF TRAFFIC NOTES

CALCULATED
LME
CHECKED
DNM

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

P:\MUS\25684\Design\25684_mgn_002.dgn 07-JUL-2014 8:47AM dmergan

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (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) SHOULD BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS **UPON APPROVAL 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. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.
- WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

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 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.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT 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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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.

LAW ENFORCEMENT OFFICERS (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 QUANTITY HAS BEEN CARRIED TO THE LOCATION 1 SUB-SUMMARY:**

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
LOCATION 1 - 500 HOURS
LOCATION 2 - 10 HOURS

THE HOURS PAID SHALL INCLUDE 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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FEET AND 475 FEET, RESPECTIVELY.

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

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

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

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

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

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

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (CONTINUED)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

A TOTAL OF 4 PCMS SHALL BE REQUIRED FOR THIS PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO LOCATION SUB-SUMMARIES:

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN LOCATION 1 - 12 SIGN MONTH

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED URING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE **LUMP SUM** BID FOR **ITEM 614, MAINTAINING TRAFFIC.**

DROPOFFS IN WORK ZONES

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR **ITEM 614, MAINTAINING TRAFFIC.**

WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (60 SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE(S). THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK THAT CAUSES THE WARRANTING CONDITION(S) TO OCCUR. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING REMOVAL OF THE WARRANTING CONDITION(S), OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY REMOVAL OF WARRANTING CONDITION(S) SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE.

CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT THE TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED REDUCTION IN THE OPPOSITE DIRECTION. A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF THE WARRANTING CONDITION, AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF THE LANE REDUCTION, SHIFT TAPER, OR OTHER ROADWAY OR SHOULDER RESTRICTION THAT WARRANTED THE WORK ZONE SPEED ZONE. ON UNDIVIDED HIGHWAYS THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, APPROXIMATELY 250 FEET IN ADVANCE OF SUCH RESTRICTIONS. THE SIGN SHALL BE REPEATED EVERY 1 MILE FOR 60 AND 55 MPH ZONES AND EVERY ONE-HALF MILE FOR 50 MPH AND 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE.

THE SPEED LIMIT REDUCTION SHALL BE LIMITED TO ONLY THE PORTION OF THE PROJECT AND THE WORK THAT WARRANTED THE WORK ZONE SPEED LIMIT REDUCTION.

SPEED REDUCTION (SPEED ZONE AHEAD SYMBOL) SIGNS (W3-5) SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1250 FEET ON MULTI-LANE HIGHWAYS AND 500 FEET ON TWO-LANE HIGHWAYS.

A SIGN(S) TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD CONDITION, PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS, UNLESS MOUNTED ON A TEMPORARY SIGN SUPPORT PER SCD MT 105.10.

WORK ZONE SPEED LIMIT SIGN (CONTINUED)

WORK ZONE SPEED LIMIT AND RELATED SIGN SIZES, PLACEMENT, SUPPORTS, ETC. SHALL BE PER THE OMUTCD, WITH TWO EXCEPTIONS: 1) EXPRESSWAY SIZE SPEED LIMIT SIGNS MAY BE USED ON FREEWAYS AND EXPRESSWAYS, IF NECESSARY; 2) THE HEIGHT OF SIGNS MOUNTED ON PORTABLE SUPPORTS SHOULD BE THE HEIGHT REQUIRED FOR GROUND-MOUNTED SIGNS BUT SHALL NOT BE MORE THAN 1 FOOT LOWER THAN THE HEIGHT REQUIRED BY THE OMUTCD, OR AS DIRECTED BY THE ENGINEER. PORTABLE SUPPORTS SHOULD NOT BE USED FOR A DURATION OF MORE THAN 3 DAYS.

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND RE-ERECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE, SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS. SPEED LIMIT SIGNING FOR THE POINT OF RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE PAID FOR AS WORK ZONE SPEED LIMIT SIGNS.

THE FOLLOWING PROVIDES DETAILS ON WORK ZONE SPEED ZONES APPROVED FOR USE ON THIS PROJECT:

WZSZ REVISION NUMBER: WZ-30462

COUNTY-ROUTE: MUS/LIC-70

SLM FROM / TO: (0.76 TO 5.56)(28.93 TO 29.42)

PHASE/PART & DIRECTION: ALL PHASES

APPROVED SPEED LIMIT (MPH): 60

SPECIFIC WARRANTING CONDITIONS AND FACTORS:

UNPROTECTED WORKERS WILL BE PRESENT FOR EXTENDED PERIODS (MORE THAN THREE HOURS) IN THE CLOSED LANE DURING PAVEMEENT PLANING, PAVEMENT RESURFACING AND PAVEMENT MARKING OPERATIONS.

WORK ZONE SPEED ZONE TRACKING REPORT:

THE PROJECT ENGINEER OR DESIGNEE SHALL FILL OUT THIS REPORT WEEKLY AND SUBMIT IT TO THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM). THE FORM IS LOCATED IN ODOT'S TRAFFIC ENGINEERING MANUAL, SECTION 1296, FORMS INDEX, FORM 1296-18.

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CALCULATED	LME		
	CHECKED		
DMM	DNM		
MAINTENANCE OF TRAFFIC NOTES			
MUS-70-0.76 LIC-70-28.93 MUS-C.R. 30-2.15			
<table border="1"> <tr> <td>5</td> </tr> <tr> <td>27</td> </tr> </table>		5	27
5			
27			

SEQUENCE OF OPERATIONS

NOTE: FULL DEPTH PAVEMENT REPAIRS SHALL BE COMPLETED PRIOR TO PLANING, DURING THE SEQUENCE OF OPERATIONS FOR PAVING OR PRIOR TO THE PAVING OPERATION USING A SIMILAR SEQUENCE OF OPERATIONS AS SHOWN BELOW.

PHASE 1: BEGIN PROJECT TO END PROJECT

- (1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER.
- (2) FILL IN RUMBLE STRIPS ON OUTSIDE SHOULDER WITH ITEM 448 INTERMEDIATE COURSE TO ALLOW FOR MAINTAINING TRAFFIC ON SHOULDER.
- (3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 2: BEGIN PROJECT TO END PROJECT

- (1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER.
- (2) PLANE INSIDE LANE AND SHOULDER, 3.25" DEEP AS DETAILED.
- (3) PLACE JOINT/CRACK REINFORCING MATERIAL
- (4) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR INSIDE LANE AND SHOULDER. COMPLETE ALL OTHER RELATED WORK AS PER TYPICAL SECTION.
- (5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 3: BEGIN PROJECT TO END PROJECT

- (1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER.
- (2) PLANE OUTSIDE LANE AND SHOULDER 3.25" DEEP AS DETAILED.
- (3) PLACE JOINT/CRACK REINFORCING MATERIAL
- (4) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR OUTSIDE LANE AND SHOULDER, RAMP AREAS WHERE APPLICABLE, COMPLETE ALL OTHER RELATED WORK AS PER TYPICAL SECTION.
- (5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 4: BEGIN PROJECT TO END PROJECT

- (1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER.
- (2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON INSIDE LANE AND SHOULDER AS PER TYPICAL SECTION.
- (3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 5: BEGIN PROJECT TO END PROJECT

- (1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER.
- (2) PLACE 1.5" OF ITEM 442, ASPHALT CONCRETE SURFACE COURSE ON OUTSIDE LANE, 10.0' WIDE PAVED SHOULDER AND RAMP AREAS, WHERE APPLICABLE, AS PER TYPICAL SECTION.
- (3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 6: BEGIN PROJECT TO END PROJECT

- (1) INSTALL RUMBLE STRIPS, PLACE ALL PERMANENT PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS. OPEN ROADWAY TO UNRESTRICTED TRAFFIC.

GENERAL:

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC (SEE MAINTAINING TRAFFIC NOTE ON SHEET 3). IT MAY BE NECESSARY FOR THE CONTRACTOR TO ALTERNATE BETWEEN PHASES IN ORDER TO MEET WORK RESTRICTIONS FOUND IN ODOT'S "DROP-OFFS IN WORK ZONES" STANDARD DRAWING MT-101.90.

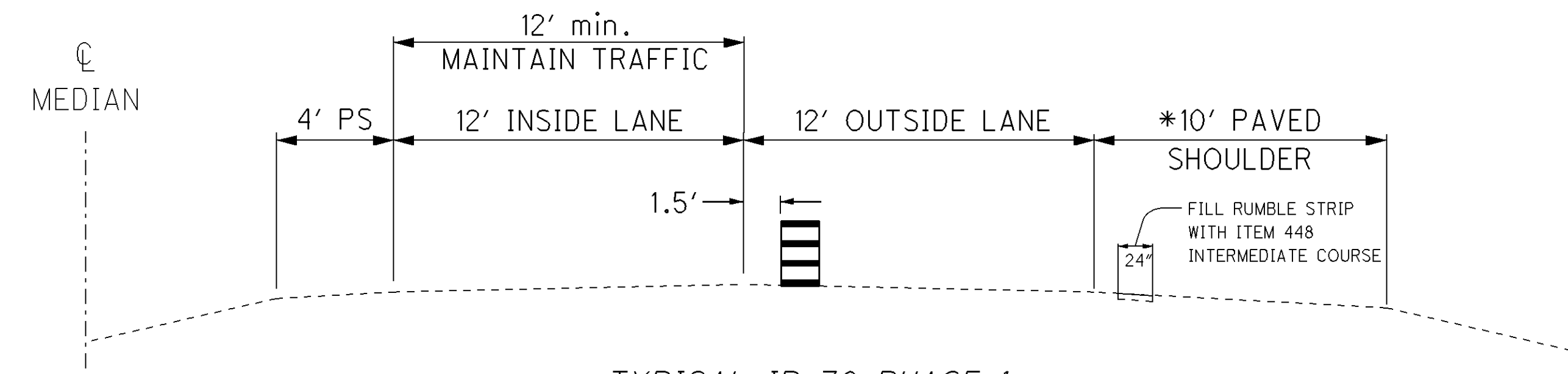
IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE ENGINEER.

ALL TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE ANY PAVEMENT IS OPENED TO TRAFFIC.

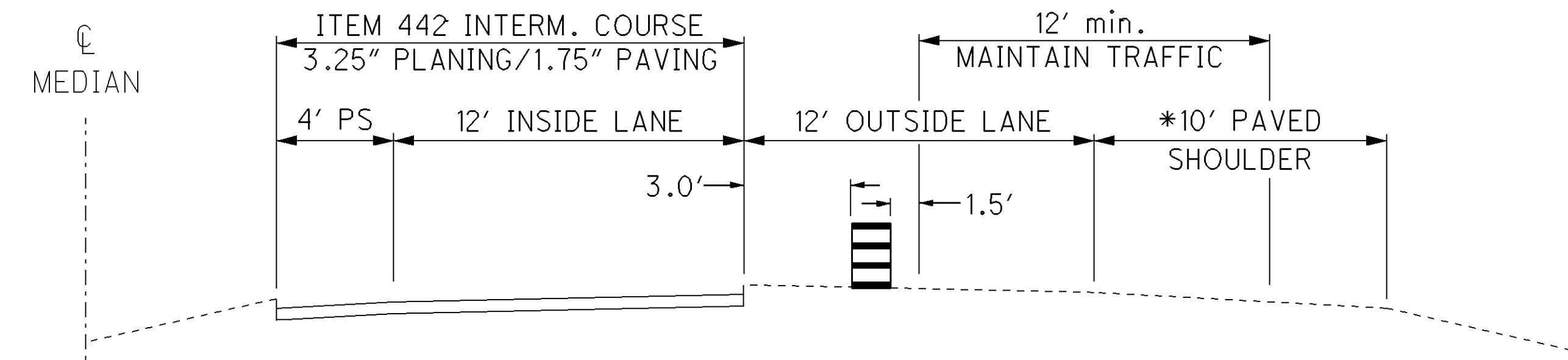
ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22

THIS ITEM SHALL BE USED TO FILL IN RUMBLE STRIPS FOR MAINTAINING TRAFFIC AS DESCRIBED IN PHASE 1 ABOVE. AVERAGE THICKNESS FOR CALCULATION PURPOSES IS 0.75". THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE SUB-SUMMARIES.

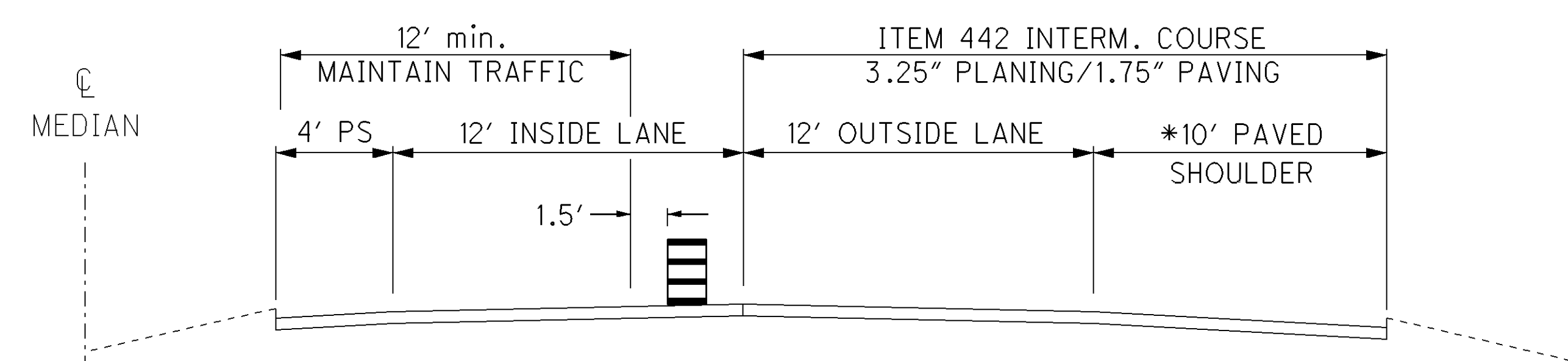
ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
 LOCATION 1: $(2(25,344' \times 2.0' / 9 \times 0.75"/36)) = 235 \text{ CU.YD.}$, LOCATION 2: $(2(2,587' \times 2.0' / 9 \times 0.75"/36)) = 24 \text{ CU.YD.}$



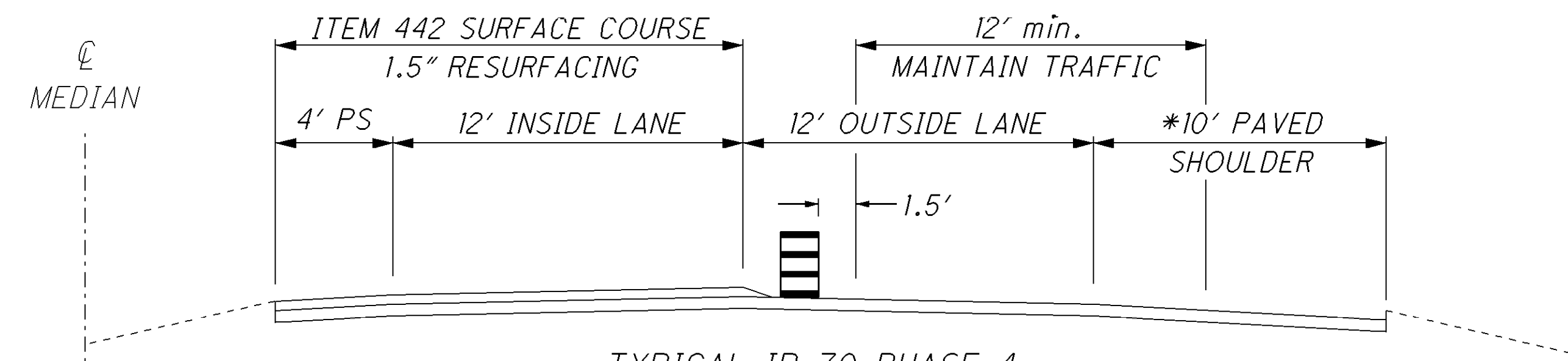
TYPICAL IR 70 PHASE 1



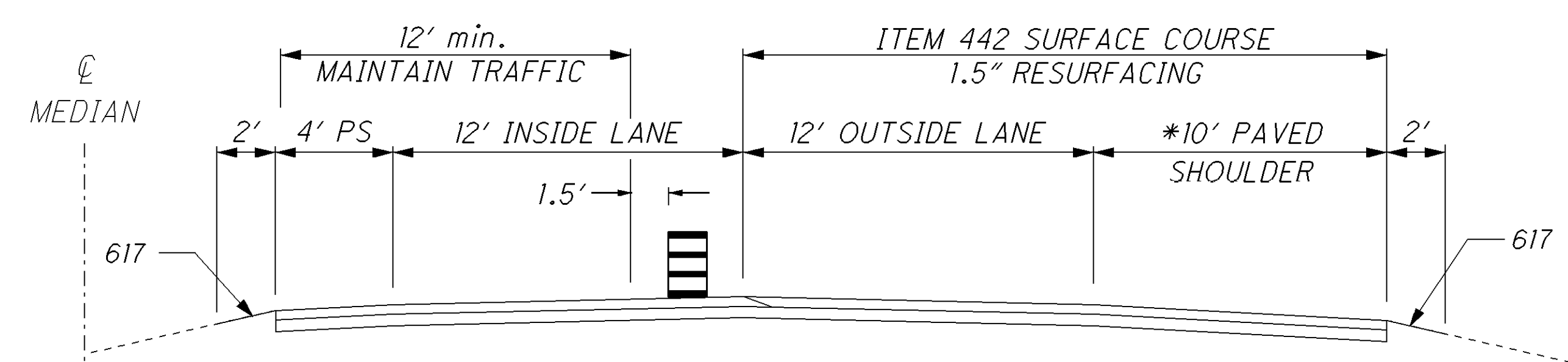
TYPICAL IR 70 PHASE 2



TYPICAL IR 70 PHASE 3



TYPICAL IR 70 PHASE 4



TYPICAL IR 70 PHASE 5

* SHOULDER WIDTH VARIES IN RAMP AREAS

CALCULATED
JLS
CHECKED
DNM

MAINTENANCE OF TRAFFIC NOTES

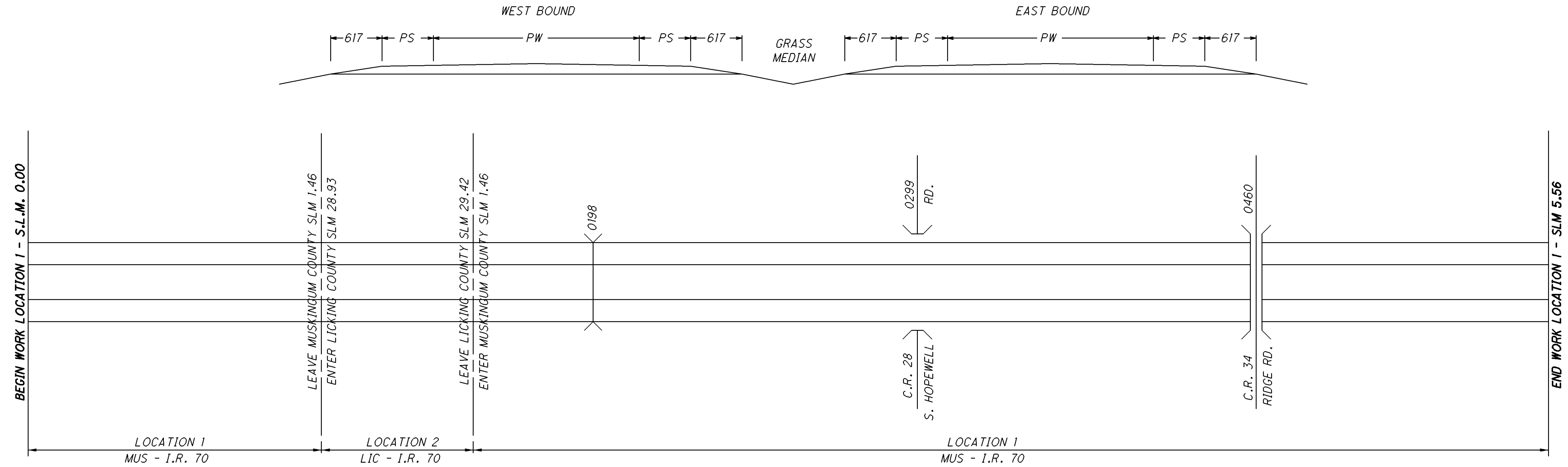
MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

6
27

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TYPICAL 1

PW = PAVEMENT WIDTH
PS = PAVED SHOULDER



PAVEMENT DATA

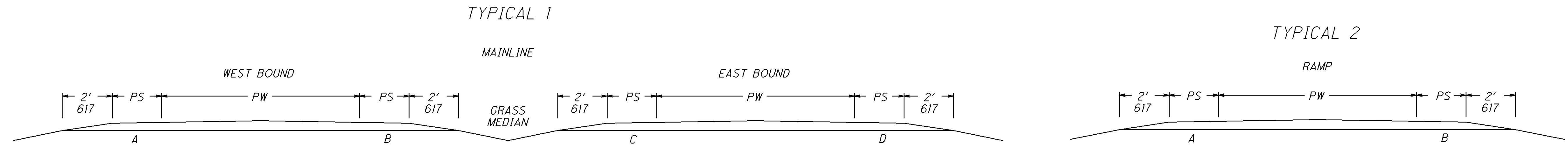
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254		407		442				
											THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, 19 MM, TYPE A (446)	THICKNESS	SURFACE COURSE, 12.5 MM, TYPE A (446)	
																			SQ. YD.
1	MUS	I.R. 70 E.B.	0.76	5.56	4.80	25,344.00	24.0	1	446	67,584.0	3.25	67,584.0	5,068.8	3,379.2	1.75	3,285.4	1.50	2,816.0	
1	MUS	I.R. 70 W.B.	0.76	5.56	4.80	25,344.00	24.0	1	446	67,584.0	3.25	67,584.0	5,068.8	3,379.2	1.75	3,285.4	1.50	2,816.0	
BRIDGE DEDUCTIONS (FROM SHEET 12)										(1,616.8)		(1,616.8)	(121.3)	(40.5)	1.75	(39.3)	1.50	(67.4)	
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)													133,551.2	10,016.3	6,717.9		6,531.5		5,564.6
2	LIC	I.R. 70 E.B.	28.93	29.42	0.49	2,587.20	24.0	1	446	6,899.2	3.25	6,899.2	517.5	345.0	1.75	335.4	1.50	287.5	
2	LIC	I.R. 70 W.B.	28.93	29.42	0.49	2,587.20	24.0	1	446	6,899.2	3.25	6,899.2	517.5	345.0	1.75	335.4	1.50	287.5	
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)													13,798.4	1,035.0	690.0		670.8		575.0

ASPHALT CONCRETE DATA

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

CALCULATED
LME
CHECKED
DNM

PW = PAVEMENT WIDTH
PS = PAVED SHOULDER



SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)				SHOULDER AREA SQ. YD.	254		407		442			617		618				
								MILES	LIN. FT.	A	B		C	D	THICKNESS IN.	PAVEMENT PLANING, ASPHALT CONCRETE SQ. YD.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y. GAL.	THICKNESS IN.	INTERMEDIATE COURSE, 19 MM, TYPE A (446) CU. YD.	THICKNESS IN.	SURFACE COURSE, 12.5 MM, TYPE A (446) CU. YD.	THICKNESS IN.	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH) CU. YD.	SHOULDER PREPARATION (2' WIDTH) SQ. YD.	RUMBLE STRIPS (ASPHALT CONCRETE) MILE
1	MUS	I.R. 70 E.B.	0.76	5.56	4.80	25,344	1			4	10	39,424.0	3.25	39,424.0	2,956.8	1,971.2	1.75	1,916.5	1.50	1,642.7	2.00	625.8	11,264.0	9.60		
			EASTBOUND ON RAMP FROM C.R. 30			866	2	3	8			1,058.4	1.75	1,058.4	79.4	53.0	1.75	51.5	1.50	44.1	2.00	21.4	384.9			
1	MUS	I.R. 70 W.B.	0.76	5.56	4.80	25,344	1	10	4			39,424.0	3.25	39,424.0	2,956.8	1,971.2	1.75	1,916.5	1.50	1,642.7	2.00	625.8	11,264.0	9.60		
			WESTBOUND OFF RAMP TO C.R. 30			784	2	3	3			522.7	1.75	522.7	39.3	26.2	1.75	25.5	1.50	21.8	2.00	19.4	348.4			
			BRIDGE DEDUCTIONS (FROM SHEET 12)									(943.1)		(943.1)	(70.7)	(23.5)	1.75	(22.9)	1.50	(39.2)	2.00	(16.1)	(290.6)	(0.12)		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)														79,486.0		5,961.6		3,998.1		3,887.1		3,312.1		1,276.3	22,970.7	19.08
2	LIC	I.R. 70 E.B.	28.93	29.42	0.49	2,587	1			4	10	4,024.2	3.25	4,024.2	301.9	201.3	1.75	195.7	1.50	167.7	2.00	63.9	1,149.8	0.98		
2	LIC	I.R. 70 W.B.	28.93	29.42	0.49	2,587	1	10	4			4,024.2	3.25	4,024.2	301.9	201.3	1.75	195.7	1.50	167.7	2.00	63.9	1,149.8	0.98		
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)														8,048.4		603.8		402.6		391.4		335.4		127.8	2,299.6	1.96

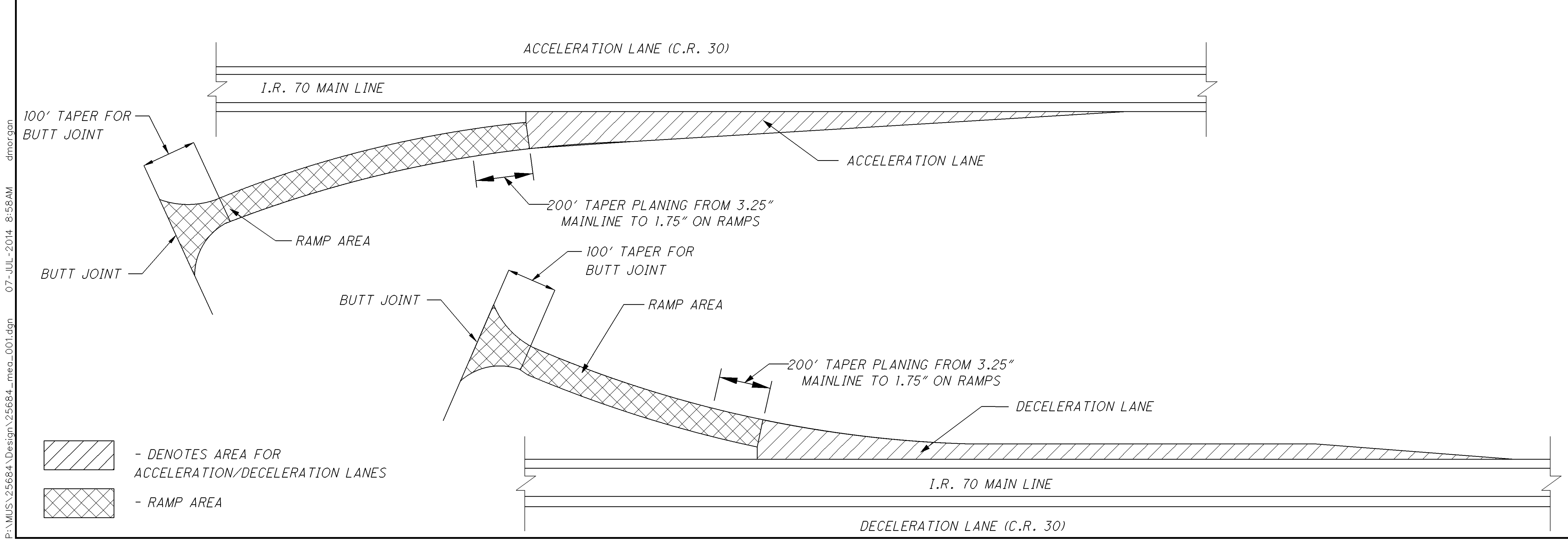
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CALCULATED LME CHECKED DNM
PAVED SHOULDER DATA
 MUS-70-0.76
 LIC-70-28.93
 MUS-C.R. 30-2.15
 8
 27

RAMP/EXTRA AREA DATA

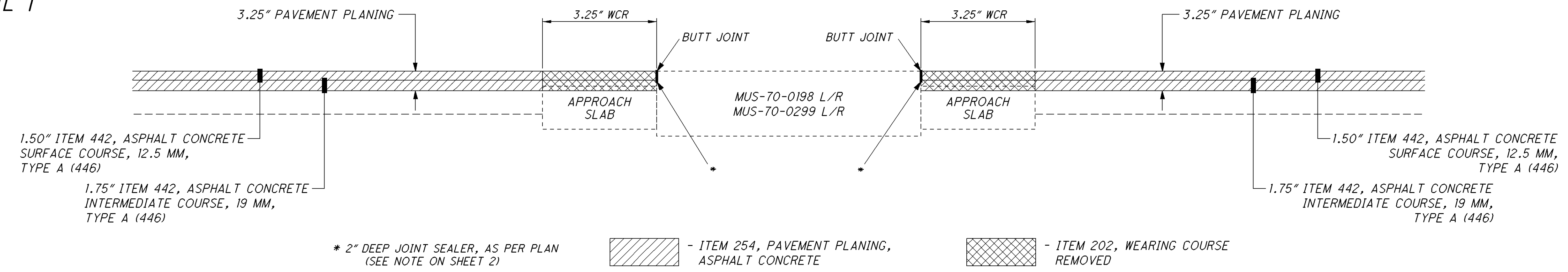
LOCATION	COUNTY	ROUTE	DESCRIPTION	RAMP LENGTH	RAMP WIDTH (AVG.)	AREA (INCLUDES EXTRA AREA FOR APRON)	202	254		407		442			
							WEARING COURSE REMOVED	THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./SQ. YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ. YD.	THICKNESS	INTERMEDIATE COURSE, 19 MM, TYPE A (446)	THICKNESS	SURFACE COURSE, 12.5 MM, TYPE A (446)
				FEET	FEET	SQ. YDS.	SQ. YDS.	IN.	SQ. YDS.	GAL.	GAL.	IN.	CU. YDS.	IN.	CU. YDS.
1	MUS	I.R. 70 E.B.	ON RAMP FROM C.R. 30	866.0	16.0	1,698.6		1.75	1,698.6	128.0	85.0	1.75	82.6	1.50	70.8
1	MUS	I.R. 70 E.B.	ACCELERATION LANE FROM C.R. 30			2,950.4		3.25	2,950.4	222.0	148.0	1.75	143.5	1.50	123.0
1	MUS	I.R. 70 W.B.	DECELERATION LANE TO C.R. 30			1,591.4		3.25	1,591.4	120.0	80.0	1.75	77.4	1.50	66.4
1	MUS	I.R. 70 W.B.	OFF RAMP TO C.R. 30	784.0	16.0	1,520.8		1.75	1,520.8	115.0	77.0	1.75	74.0	1.50	63.4
1	MUS	I.R. 70	MEDIAN CROSS-OVER @ SLM 1.23			375.0	375.0			29.0				1.50	15.7
1	MUS	I.R. 70	MEDIAN CROSS-OVER @ SLM 3.34			368.1	368.1			28.0				1.50	15.4
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)							743.1		7,761.2	642.0	390.0		377.5		354.7

CALCULATED LIME CHECKED DNM
RAMP / EXTRA AREA DATA
 MUS-70-0.76
 LIC-70-28.93
 MUS-C.R. 30-2.15
 9
 27



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DETAIL 1



FOR BRIDGE REPAIR PLANS, SEE SHEETS 11-19

BRIDGE TREATMENT

- MUS-70-0198L: REMOVE 3.25"± ASPHALT CONCRETE FROM APPROACH SLAB, PLACE 3.25"± ASPAHLT CONCRETE, BUTT JOINT AT BRIDGE DECK.
- MUS-70-0198R: REMOVE 3.25"± ASPHALT CONCRETE FROM APPROACH SLAB, PLACE 3.25"± ASPAHLT CONCRETE, BUTT JOINT AT BRIDGE DECK.
- MUS-70-0299L: REMOVE 3.25"± ASPHALT CONCRETE FROM APPROACH SLAB, PLACE 3.25"± ASPAHLT CONCRETE, BUTT JOINT AT BRIDGE DECK.
- MUS-70-0299R: REMOVE 3.25"± ASPHALT CONCRETE FROM APPROACH SLAB, PLACE 3.25"± ASPAHLT CONCRETE, BUTT JOINT AT BRIDGE DECK.
- MUS-70-0460: OVERHEAD (MILL & FILL MAINLINE)

BRIDGE DEDUCTIONS = (BRIDGE LENGTH + APPROACH SLABS) X PAVEMENT/SHOULDER WIDTH

FOR BRIDGE REPAIR PLANS, SEE SHEETS 11-19

BRIDGE TREATMENT AND REPAIR DATA

NO	LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAIL (THIS SHEET)	PAVEMENT DEDUCTIONS (CARRIED TO SHEET 7)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 8)	202		407		442			516	
												WEARING COURSE REMOVED	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	INTERMEDIATE COURSE, 19 MM, TYPE A (446)	SURFACE COURSE, 12.5 MM, TYPE A (446)	2" DEEP JOINT SEALER, AS PER PLAN			
			FT	FT	SQ YD	FT	FT	SQ YD		SQ YD	SQ YD	SQ YD	GALLON	GALLON	IN.	CU YD	IN.	CU YD	FT	
1		MUS-70-0198L	197.66	43.33	951.7	25.0	40.0	222.3	1	660.4	385.2	222.3	16.7	11.1	1.75	10.8	1.50	9.3	80	
1		MUS-70-0198R	197.66	43.33	951.7	25.0	40.0	222.3	1	660.4	385.2	222.3	16.7	11.1	1.75	10.8	1.50	9.3	80	
1		MUS-70-0299L	139.07	43.33	669.6	25.0	40.0	222.3	1	504.2	294.1	222.3	16.7	11.1	1.75	10.8	1.50	9.3	80	
1		MUS-70-0299R	119.57	43.33	575.7	25.0	40.0	222.3	1	452.2	263.8	222.3	16.7	11.1	1.75	10.8	1.50	9.3	80	
1		MUS-70-0460	OVERHEAD																	
BRIDGE DEDUCTIONS										1,616.8	943.1									
SUBTOTALS																				
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)												889.2	66.8	44.4		43.2		37.2	320	

BRIDGE TREATMENT AND REPAIR DATA

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

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EDGE LINE PAVEMENT MARKINGS

LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	ITEM 648						REMARKS		
						EDGE LINE, 6" (WHITE)			EDGE LINE, 6" (YELLOW)				TOTAL EDGE LINE MILES	
			FROM	TO		TOTAL MILES	HIGHWAY MILES	RAMP MILES	TOTAL MILES	HIGHWAY MILES	RAMP MILES		6"	
1	MUS	I.R. 70 E.B.	0.76	5.56	4.80	4.80	4.80		4.80	4.80		9.60	4-LANE DIVIDED	
			EASTBOUND ON RAMP FROM C.R. 30			0.16		0.16	0.16		0.16		0.32	
1	GUE	I.R. 70 W.B.	0.76	5.56	4.80	4.80	4.80		4.80	4.80		9.60	4-LANE DIVIDED	
			WESTBOUND OFF RAMP TO C.R. 30			0.15		0.15	0.15		0.15		0.30	
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)												19.82		
2	LIC	I.R. 70 E.B.	28.93	29.42	0.49	0.49	0.49		0.49	0.49		0.98	4-LANE DIVIDED	
2	LIC	I.R. 70 W.B.	28.93	29.42	0.49	0.49	0.49		0.49	0.49		0.98	4-LANE DIVIDED	
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)												1.96		

LANE LINE AND AUXILIARY PAVEMENT MARKINGS

LOCATION	COUNTY	ROUTE	S.L.M.		ITEM 648			ITEM 644	REMARKS	
					LANE LINE, 6"	CHANNELIZING LINE, 12"	DOTTED LINE, 6"	STOP LINE		
			FROM	TO	MILE	FEET	FEET	FEET		
1	MUS	I.R. 70 E.B.	0.76	5.56	4.80				4-LANE DIVIDED	
			EASTBOUND ON RAMP FROM C.R. 30				930	1,080		ACCELERATION LANE
1	MUS	I.R. 70 W.B.	0.76	5.56	4.80				4-LANE DIVIDED	
			WESTBOUND OFF RAMP TO C.R. 30				648	469	55	DECELERATION LANE
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)					9.60	1,578	1,549	55		
2	LIC	I.R. 70 E.B.	28.93	29.42	0.49				4-LANE DIVIDED	
2	LIC	I.R. 70 W.B.	28.93	29.42	0.49				4-LANE DIVIDED	
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)					0.98					

CALCULATED
LME
CHECKED
DNM

PAVEMENT MARKING DATA

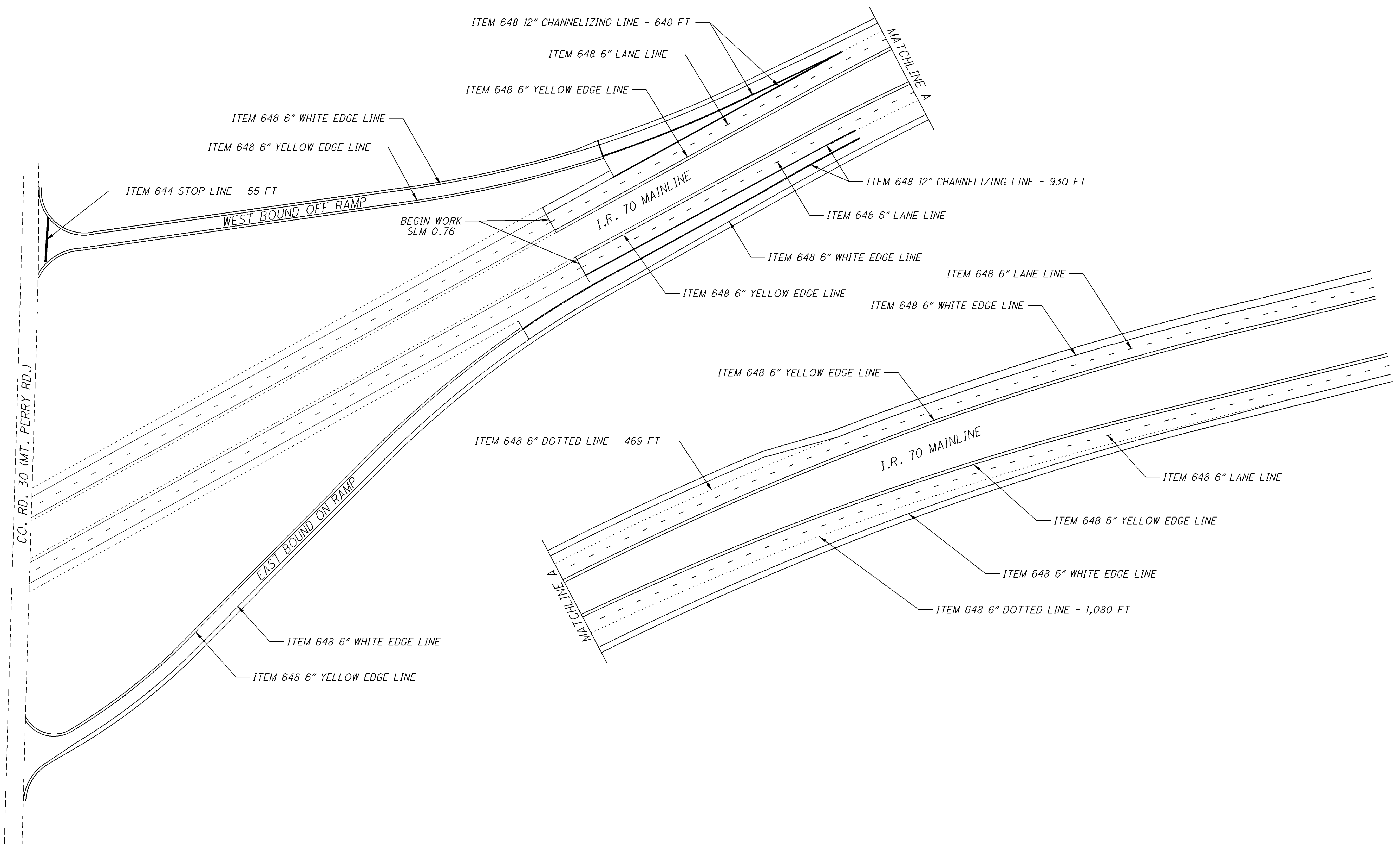
MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

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CALCULATED	DNM
CHECKED	DNM

PAVEMENT MARKING DETAILS

MUS-70-0.76
 LIC-70-28.93
 MUS-C.R. 30-2.15



I.R. 70 AND CO. RD. 30 (MT. PERRY RD.)

QUANTITIES SHOWN ON SHEET 11

PAVEMENT MARKINGS PLACED AS PER SCD TC - 72.20

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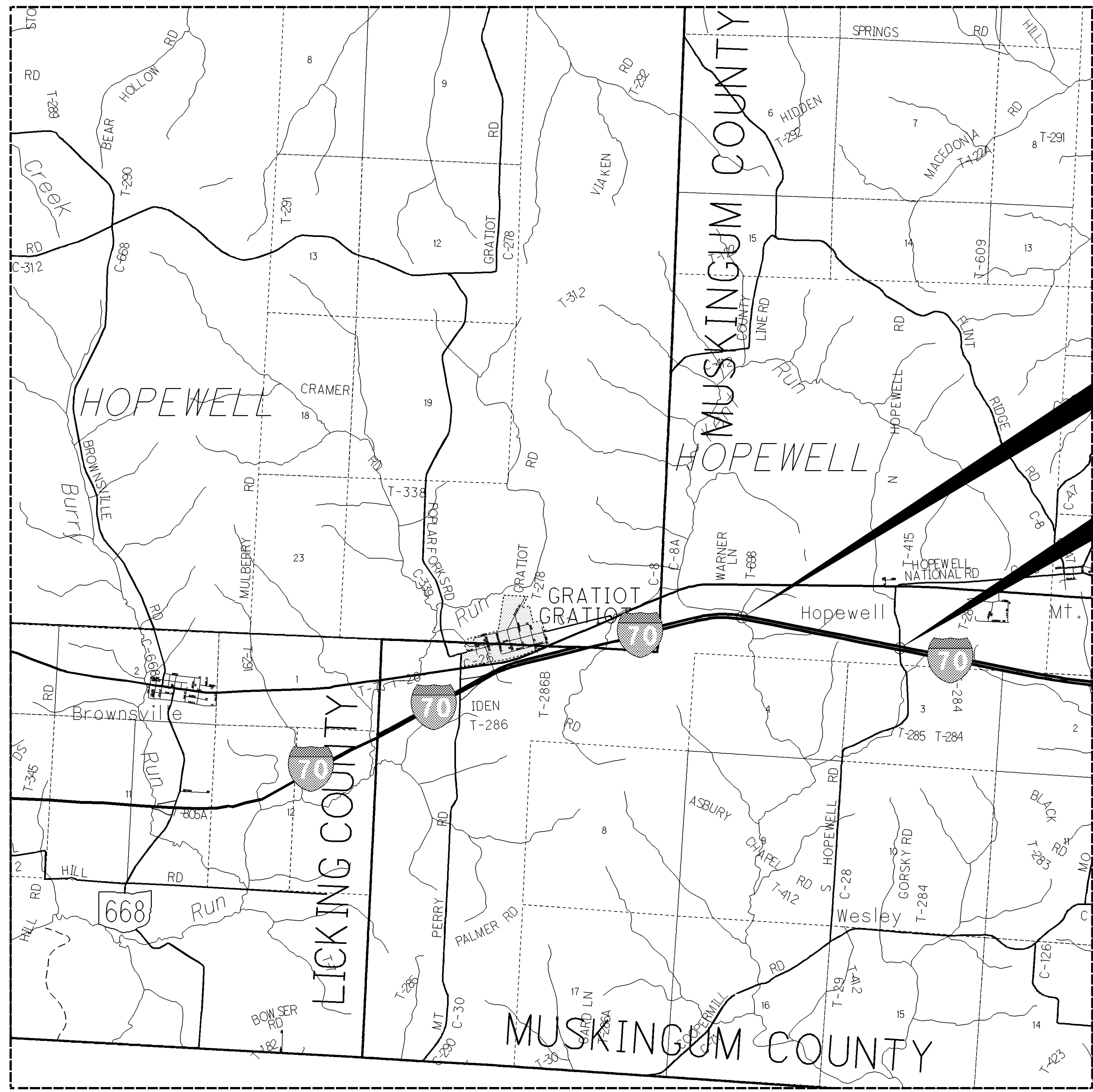
DETAIL	SEE STD. DWG. TC-65.11
1	ENTRANCE RAMP
2	EXIT RAMP
3	MULTILANE DIVIDED/ CONTROLLED ACCESS
4	4 LANE DIVIDED TO 2 LANE TRANSITION

DETAIL	SEE STD. DWG. TC-65.11
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THROUGH APPROACH
9	TWO-WAY LEFT-TURN LANE

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH WITH LEFT-TURN LANE
11	HORIZONTAL CURVES 5° UP TO 9°
12	HORIZONTAL CURVES 10° OR GREATER
GAP	CENTERLINE AT 80' TYP.

ITEM 621, RPM's DATA

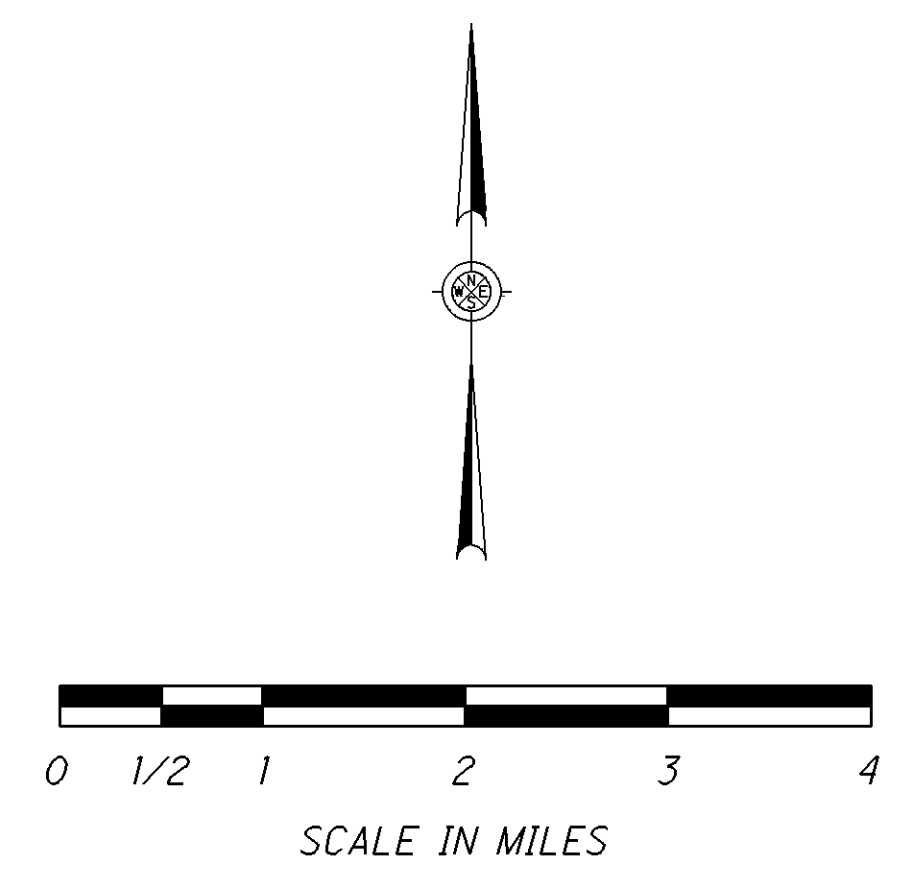
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621		PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
								RPM	RAISED PAVEMENT MARKER REMOVED	INFORMATION ONLY					
										ONE-WAY		TWO-WAY			
										WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED	
EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED									
1	MUS	I.R. 70 E.B.	0.76	5.56	4.80	25,344	3	212	212	212					120' SPACING ON LANE LINE
			EASTBOUND ON RAMP FROM S.R. 723			866	1	35	35						
1	MUS	I.R. 70 W.B.	0.76	5.56	4.80	25,344	3	212	212	212					120' SPACING ON LANE LINE
			WESTBOUND OFF RAMP TO S.R. 723			784	2	27	27						
SUBTOTALS										424			21		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								486	486						
2	LIC	I.R. 70 E.B.	28.93	29.42	0.49	2,587	3	22	22	22					120' SPACING ON LANE LINE
2	LIC	I.R. 70 W.B.	28.93	29.42	0.49	2,587	3	22	22	22					120' SPACING ON LANE LINE
SUBTOTALS										44					
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)								44	44						



MUS-70-0198L
(SFN 6002315)
MUS-70-0198R
(SFN 6002374)

MUS-70-0299L
(SFN 6002404)
MUS-70-0299R
(SFN 6002439)

LOCATION	CNTY	ROUTE	BRIDGE NUMBER	LATITUDE	LONGITUDE
1	MUS	IR 70	0198 L/R	39°57'12"	-82°11'18"
2	MUS	IR 70	0299 L/R	39°57'01"	-82°10'13"



① ITEM 202 - PORTION OF STRUCTURE REMOVED, AS PER PLAN

UPON REMOVAL OF THE EXISTING ASPHALT, THE FIELD ENGINEER WILL SOUND THE ENTIRE ABUTMENT BACKWALL AND APPROACH SLAB SURFACE TO DETERMINE, AND INDICATE TO THE CONTRACTOR, THE PORTIONS OF STRUCTURE TO BE REMOVED AND REPLACED.

ALL CONCRETE REMOVED SHALL BE REMOVED BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. FOLLOW C.M.S. SECTION 519 TO PROPERLY EXTEND THE LIMITS OF REMOVAL DIRECTED BY THE ENGINEER OR SHOWN IN THIS PLAN AND FOR PREPARING THE REMOVED AREAS FOR THE PLACEMENT OF ITEM #2 SHOWN ON THIS SHEET.

② ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH AN ACCELERATING ADMIXTURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 12 HRS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME.

THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEMS TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. THE CLOCK STARTS FOR THE WET CURE WHEN THE CONCRETE PLACEMENT IS COMPLETE.

TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE

③ ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

FOR THE BRIDGE LOCATIONS PROVIDED REMOVE ANY EXISTING SEAL MATERIAL, FOREIGN MATERIAL, AND DEBRIS FROM THE EXISTING JOINT BETWEEN THE APPROACH SLAB OR CONCRETE ROADWAY AND THE ABUTMENT BACKWALL. ANY SPALLS ADJACENT TO THE JOINT LESS THAN OR EQUAL TO 2" SHALL BE CLEANED AND SEALED WITH THIS ITEM. FOR SPALLS GREATER THAN 2" SEE ITEMS #1 AND #2 SHOWN ON THIS SHEET.

IF ONLY A SAWCUT EXISTS AT THIS LOCATION, PERFORM A NEW SAWCUT TO ESTABLISH A 1/2" WIDE BY 2 1/4" DEEP JOINT ALONG THIS INTERFACE. ONCE THE JOINT HAS BEEN OPENED OR CREATED, AIRBLAST THOROUGHLY PRIOR TO PLACEMENT OF HOT APPLIED JOINT SEALER AS PER 705.04 AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN.

④ ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

SAWCUT FINAL PROPOSED ASPHALT 1" WIDE X 2" DEEP AND SEAL WITH HOT APPLIED JOINT SEALER AS PER 705.04 AS DIRECTED BY THE ENGINEER. (SEE ROADWAY QUANTITIES FOR PAYMENT OF THIS ITEM.)

⑤ ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 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 CMS 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 ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

⑤ ITEM 516 - REFURBISH AND RESET BEARING, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN AND/OR ADJUST BRIDGE BEARINGS, AS DETAILED IN THIS PLAN, AS WELL AS THEIR CLEANING AND PAINTING.

INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), SURFACE CLEANING, PAINTING ACCORDING TO C.M.S. 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD, INSTALLATION OF ANY NECESSARY, VARIOUS THICKNESS, STEEL SHIMS OF THE SAME PLAN DIMENSIONS SIZE AS THE EXISTING BEARING PLATES TO PROVIDE A SNUG FIT, BUSHHAMMER OR GRINDING OF BEARING SEAT TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS.

THIS ITEM SHALL INCLUDE PAINTING AS WELL AS THE SURFACE PREPARATION OF THE MAIN AND SECONDARY MEMBERS IN THE FIELD WITH PRIME, INTERMEDIATE AND SURFACE COATS OF THE MAIN AND SECONDARY MEMBERS AS DIRECTED BY THE ENGINEER. THE PAINT MAY BE APPLIED BY BRUSH ACCORDING TO 514.17.E. SOLVENT CLEAN THE MAIN AND SECONDARY MEMBERS AS PER SSPC-SP 1 AND SSPC-SP 2, RESPECTIVELY, PRIOR TO PAINTING ACCORDING TO ITEM 514. THE CONTRACTOR SHALL PROVIDE CONTAINMENT TO MAINTAIN PROPER CURING TEMPERATURES.

ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH AND RESET BEARING, AS PER PLAN.

⑥ ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION

APPROXIMATE LOCATIONS AND DISTANCES ARE ESTIMATED FOR EPOXY INJECTION BETWEEN THE BOTTOM OF EXISTING DECK HAUNCHES AND TOP OF EXISTING STRINGERS. THESE LOCATIONS SHALL BE VERIFIED OR ADJUSTED BY THE ENGINEER AND THE CONTRACTOR SHALL PERFORM EPOXY INJECTION AT LOCATIONS SPECIFIED BY THE ENGINEER.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE C.M.S. 512 AND THE FOLLOWING NOTES:

THE CONTRACTOR SHALL PERFORM THE BEARING WORK, AS DETAILED IN THE PLAN, BEFORE PERFORMING THIS WORK ITEM.

THIS WORK WILL BE PERFORMED UNDER LIVE TRAFFIC. IF REQUIRED BY THE MANUFACTURER, IT MAY BE PERMISSIBLE TO SHIFT VEHICLE TRAFFIC ON THE BRIDGE SO VEHICLES DO NOT DRIVE DIRECTLY OVER THE BEAM UNDER CONSTRUCTION. SEE MAINTENANCE OF TRAFFIC NOTES FOR DETAILS. ALTERNATIVELY OR IN COMBINATION WITH THE PREVIOUS M.O.T. SCHEME OUTLINED, ANY TEMPORARY JACKING, SHORING, OR STABILIZATION OF THE DECK OR BEAMS, AS REQUIRED BY THE MANUFACTURER, TO SATISFACTORILY COMPLETE THIS ITEM IS INCLUDED FOR PAYMENT WITH THIS ITEM. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY (BEAMS ARE NUMBERED FROM LEFT TO RIGHT AND LENGTHS ARE MEASURED FROM EACH BEAM END IN TO THE SPAN):

MUS-70-0198L (REAR) = 0 FT
MUS-70-0198L (FWD.) BEAM 2 = 13 FT., BEAM 3 = 13 FT., BEAM 4 = 13 FT.
MUS-70-0198R (REAR) BEAM 2 = 15 FT., BEAM 3 = 15 FT., BEAM 4 = 15 FT.
MUS-70-0198R (FWD.) BEAM 2 = 10 FT., BEAM 3 = 10 FT.
MUS-70-0299L (REAR) = 0 FT
MUS-70-0299L (FWD.) BEAM 2 = 11 FT., BEAM 3 = 11 FT., BEAM 4 = 11 FT.
MUS-70-0299R (REAR) = 0 FT
MUS-70-0299R (FWD.) BEAM 2 = 11 FT., BEAM 3 = 11 FT., BEAM 4 = 11 FT.

⑦ ITEM 516 SPECIAL - STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE FOAM

THIS ITEM CONSISTS OF PLACING OF EVAZOTE FOAM IN THE EXPANSION JOINTS OF THE FOLLOWING BRIDGE:

MUS-70-0198L

THE EVAZOTE FOAM SHALL BE:

WABO® EVAZOTE UV
WATSON AND BOWMAN ACME CORP.
95 PINVIEW DRIVE
AMHERST, NY 14228
1-800-677-4922

OR AN APPROVED EQUAL.

AT THE EXPANSION JOINT SHOWN, REMOVE ALL EXISTING EXPANSION JOINT MATERIAL BEFORE PLACING THE EVAZOTE FOAM. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER PREPARATION AND INSTALLATION PROCEDURES AND SPECIFICATIONS.

SECTION 1 AND SECTION 2, AS REFERENCED IN DETAIL A, SHALL BE MODEL 3 3/4" x 2 1/2".

IF EXISTING VERTICAL DIMENSIONS OF THE JOINT VARY LESS THAN THOSE SHOWN BELOW, SECTION 2 SHALL HAVE A PORTION REMOVED, BY NEAT SAWCUTTING, FROM THE HEIGHT IN ORDER TO ACHIEVE 1/4" CLEARANCE FROM TOP OF ARMOR PLATE TO THE TOP OF SECTION 2.

FOR APPROVED EQUAL:

THE CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION AFTER THE AWARD OF THE CONTRACT. THE MANUFACTURER WILL BE REQUIRED TO FURNISH A REPRESENTATIVE SAMPLE OF MATERIAL TO BE SUPPLIED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

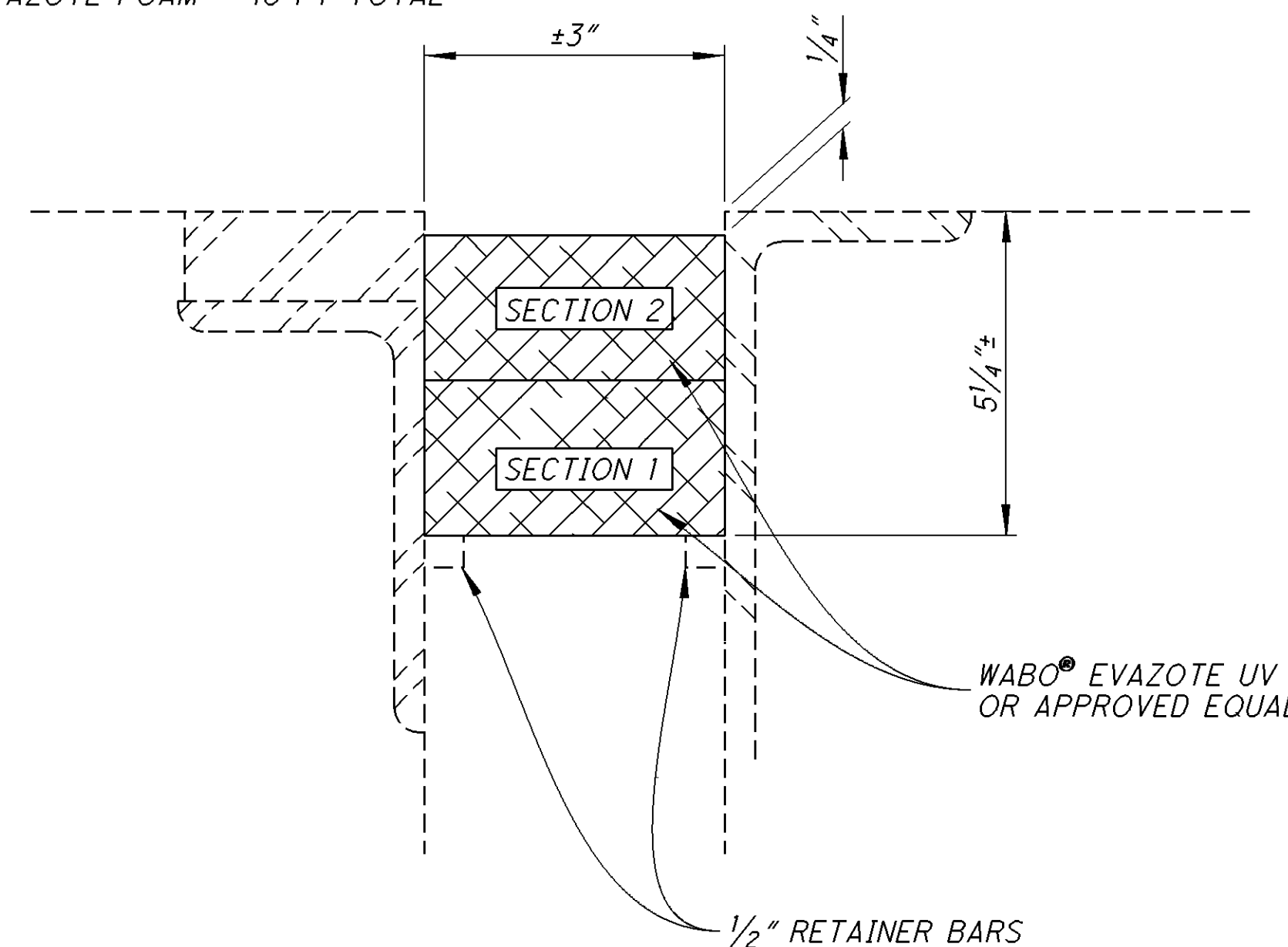
THE MANUFACTURER SHALL PROVIDE INSTRUCTIONS FOR THE PROPER INSTALLATION OF THE EVAZOTE FOAM. EVAZOTE FOAM SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER

THE CONTRACTOR SHALL PERFORM THE BEARING WORK, AS DETAILED IN THE PLAN, BEFORE PERFORMING THIS WORK ITEM.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT PER FOOT UNIT PRICE FOR ITEM 516 SPECIAL - STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE FOAM

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 516 SPECIAL - STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE FOAM = 46 FT TOTAL



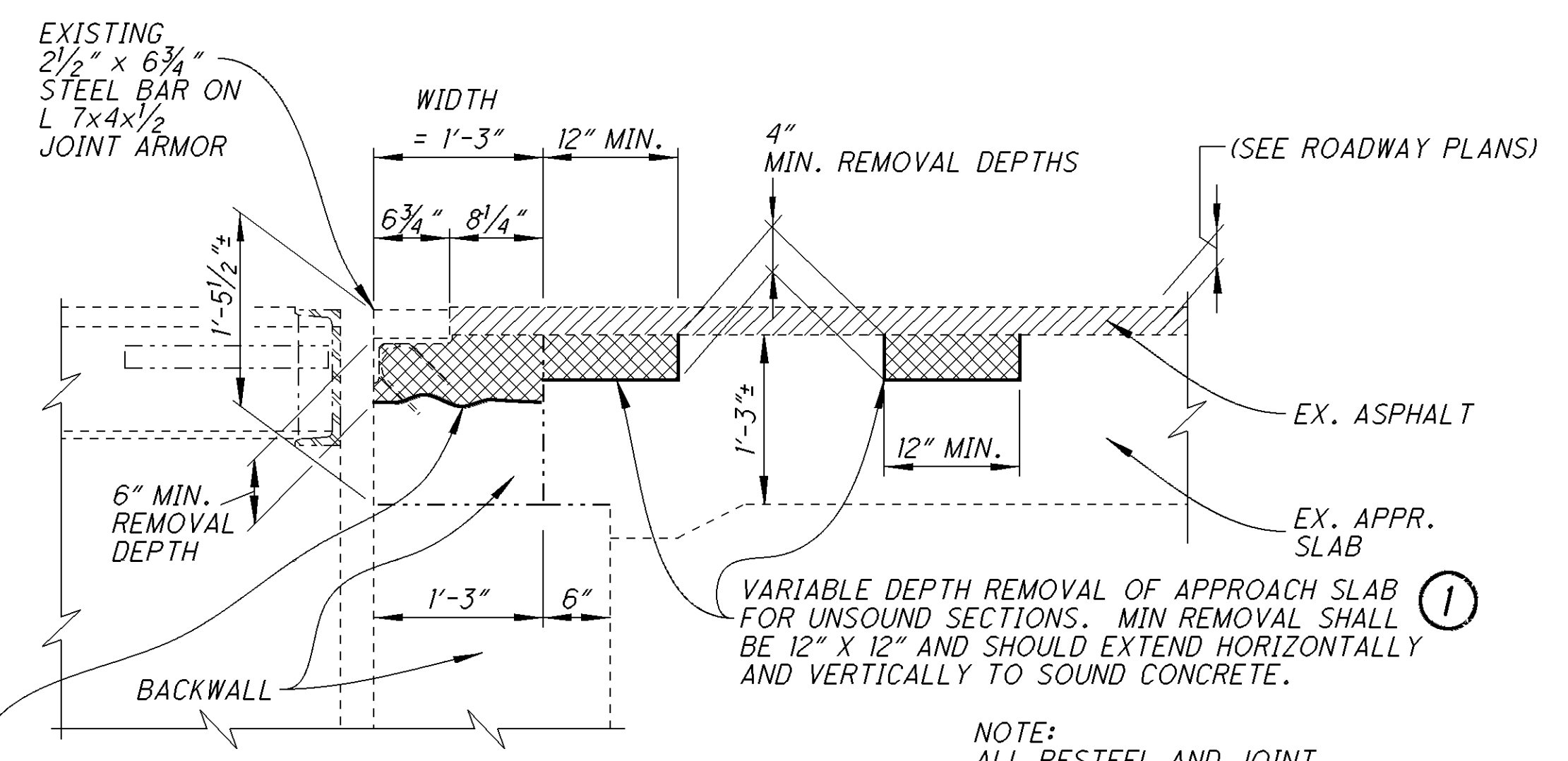
DETAIL A

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FUNDING SPLIT 01/IMS/PV/	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
					STRUCTURE 20 FOOT AND OVER (BRIDGE NO. MUS-70-0198L)	
3	202	11301	3	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	24
3	511	53012	3	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	24
39	512	10600	39	FT	CONCRETE REPAIR BY EPOXY INJECTION	
46	516	14600	46	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE FOAM	
53	516	31011	53	FT	2" DEEP JOINT SEALER, AS PER PLAN	24
10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	24
LUMP	516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	24
					STRUCTURE 20 FOOT AND OVER (BRIDGE NO. MUS-70-0198R)	
4	202	11301	4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	24
4	511	53012	4	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	24
65	512	10600	65	FT	CONCRETE REPAIR BY EPOXY INJECTION	
53	516	31011	53	FT	2" DEEP JOINT SEALER, AS PER PLAN	24
10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	24
LUMP	516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	24
					STRUCTURE 20 FOOT AND OVER (BRIDGE NO. MUS-70-0299L)	
2	202	11301	2	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	24
2	511	53012	2	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	24
33	512	10600	33	FT	CONCRETE REPAIR BY EPOXY INJECTION	
51	516	31011	51	FT	2" DEEP JOINT SEALER, AS PER PLAN	24
10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	24
LUMP	516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	24
					STRUCTURE 20 FOOT AND OVER (BRIDGE NO. MUS-70-0299R)	
4	202	11301	4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	24
4	511	53012	4	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	24
33	512	10600	33	FT	CONCRETE REPAIR BY EPOXY INJECTION	
51	516	31011	51	FT	2" DEEP JOINT SEALER, AS PER PLAN	24
10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	24
LUMP	516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	24

CALCULATED JDR CHECKED TAG	BRIDGE ESTIMATED QUANTITIES	MUS-70-0.76 LIC-70-28.93 MUS-C.R. 30-2.15	16 27
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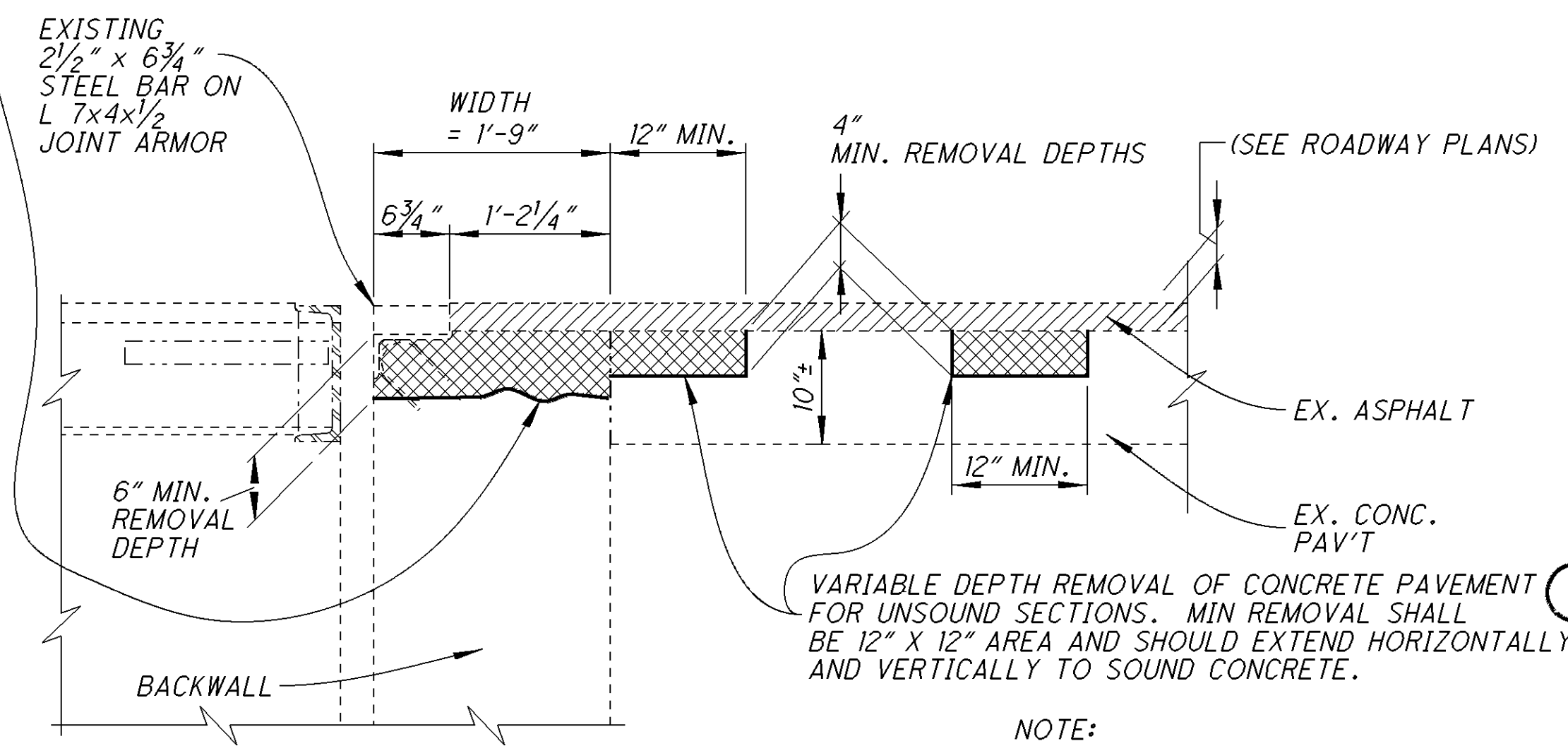
BRIDGE DETAILS



BR. NO. MUS-70-0198 L/R
 BR. NO. MUS-70-0299 L/R
 (EXISTING TYP. ABUTMENT SECTION IN LANES)

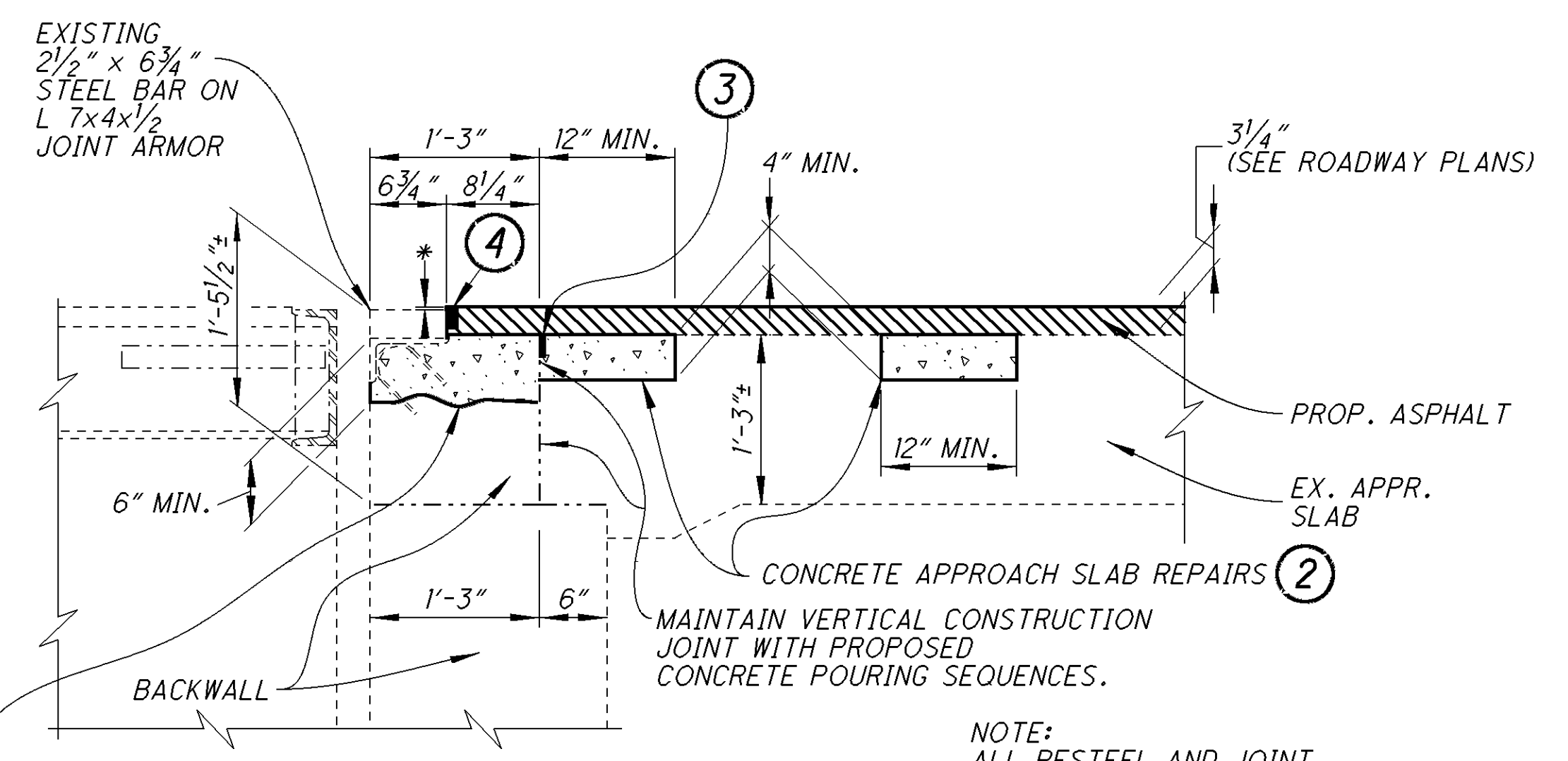
NOTE:
 ALL RESTEEL AND JOINT ARMORS SHALL BE PRESERVED IN PLACE.
 SUPPORT JOINT ARMOR AS NECESSARY.

VARIABLE DEPTH REMOVAL OF BACKWALL FOR UNSOUND SECTIONS OF BACKWALL. MIN REMOVAL SHALL BE NOT LESS THAN 12" IN LENGTH X FULL BACKWALL WIDTH. (FACE/FACE PARAPETS). EXTEND DOWN TO SOUND CONCRETE.



BR. NO. MUS-70-0198 L/R
 BR. NO. MUS-70-0299 L/R
 (EXISTING TYP. ABUTMENT SECTION IN SHOULDERS)

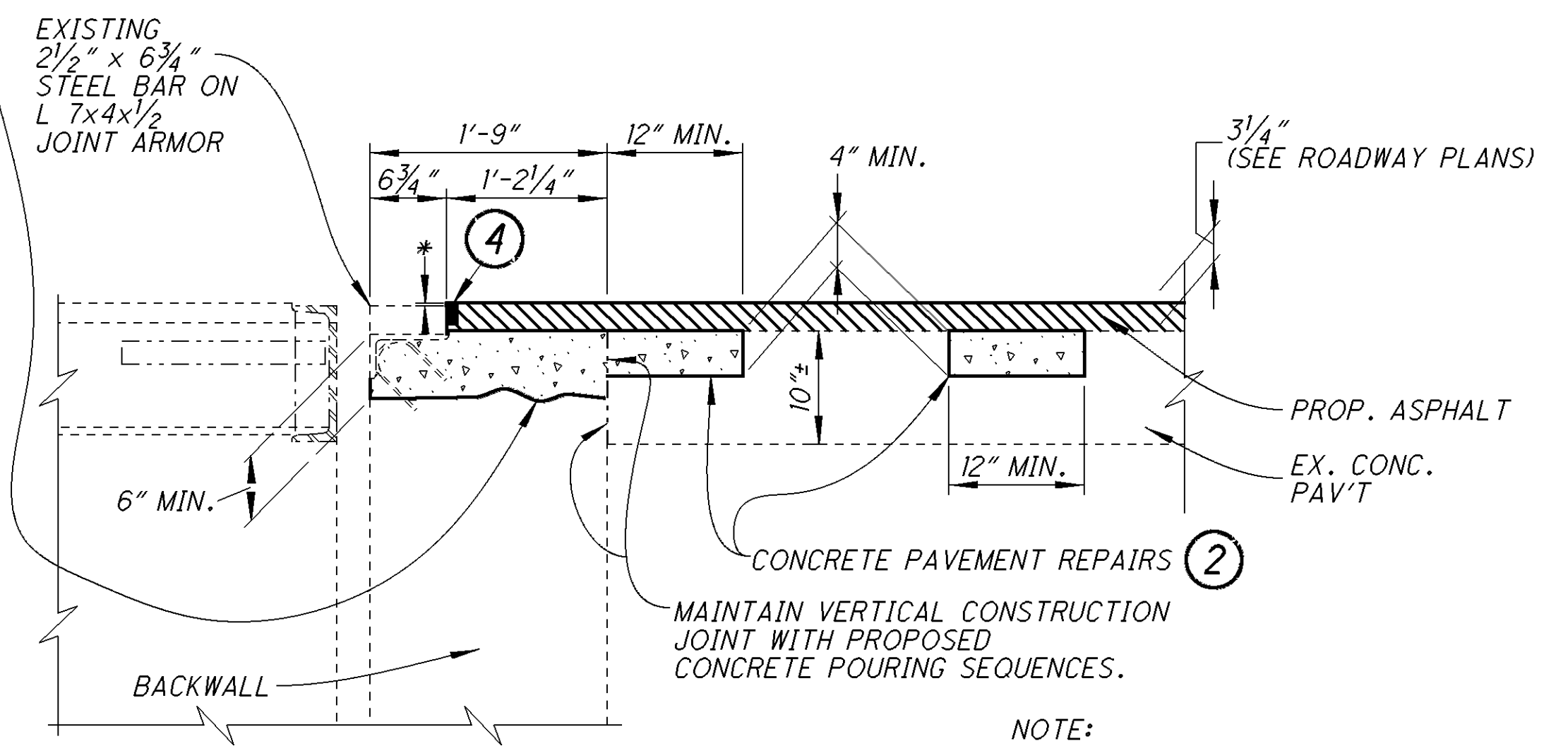
NOTE:
 ALL RESTEEL AND JOINT ARMORS SHALL BE PRESERVED IN PLACE.
 SUPPORT JOINT ARMOR AS NECESSARY.



BR. NO. MUS-70-0198 L/R
 BR. NO. MUS-70-0299 L/R
 (PROPOSED TYP. ABUTMENT SECTION IN LANES)

NOTE:
 ALL RESTEEL AND JOINT ARMORS SHALL BE PRESERVED IN PLACE.
 SUPPORT JOINT ARMOR AS NECESSARY.

CONCRETE BACKWALL REPAIRS

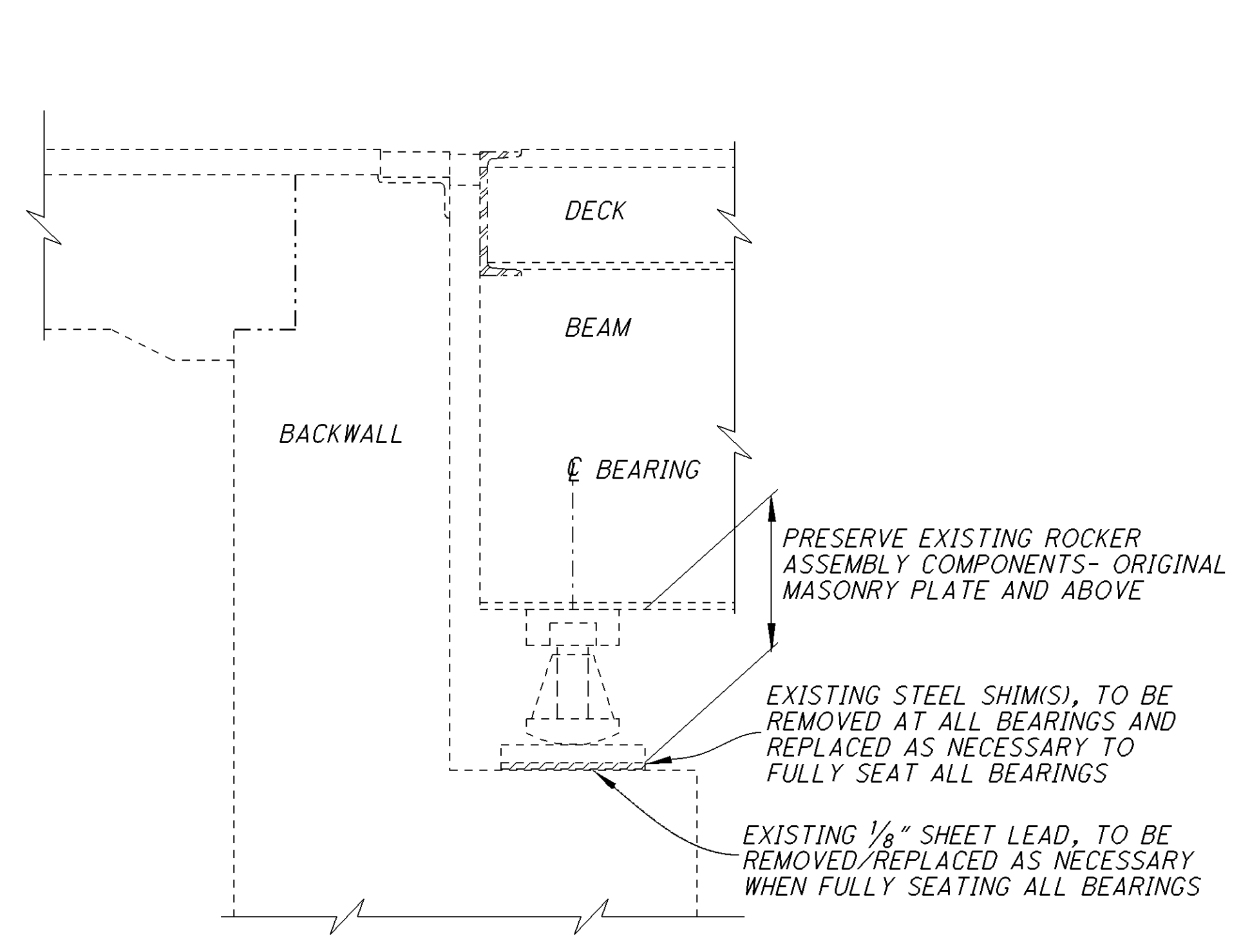


BR. NO. MUS-70-0198 L/R
 BR. NO. MUS-70-0299 L/R
 (PROPOSED TYP. ABUTMENT SECTION IN SHOULDERS)

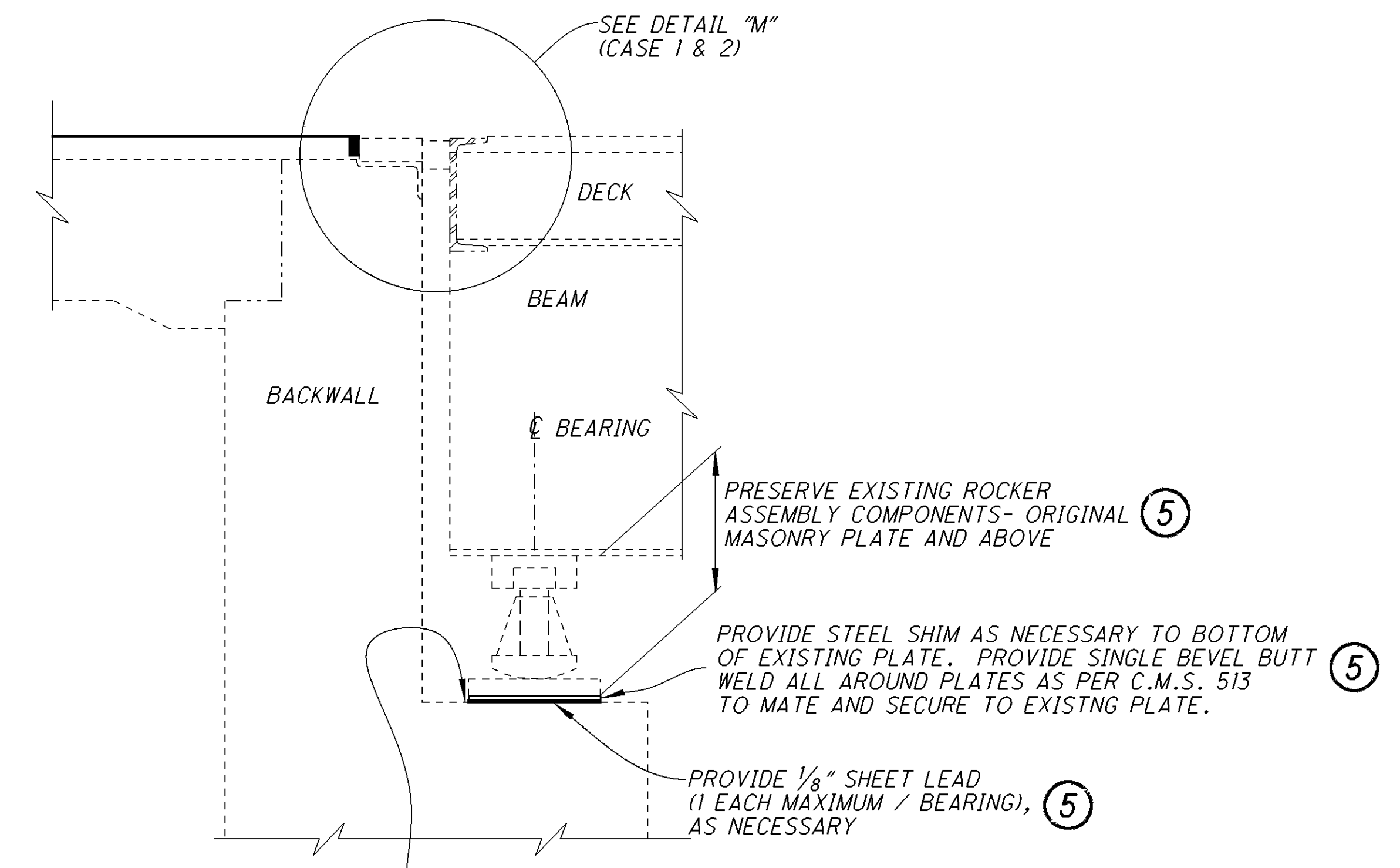
NOTE:
 ALL RESTEEL AND JOINT ARMORS SHALL BE PRESERVED IN PLACE.
 SUPPORT JOINT ARMOR AS NECESSARY.

- WEARING COURSE REMOVED (SEE ROADWAY ITEMS)
- ① - ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN SUBSTRUCTURE
- ② - ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
- ③ - ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN
- PROPOSED ASPHALT COURSES (SEE ROADWAY ITEMS)
- ④ - ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN (SEE ROADWAY ITEMS)

* - FINISH PROPOSED ASPHALT 1/4" ABOVE EXISTING JOINT ARMOR.

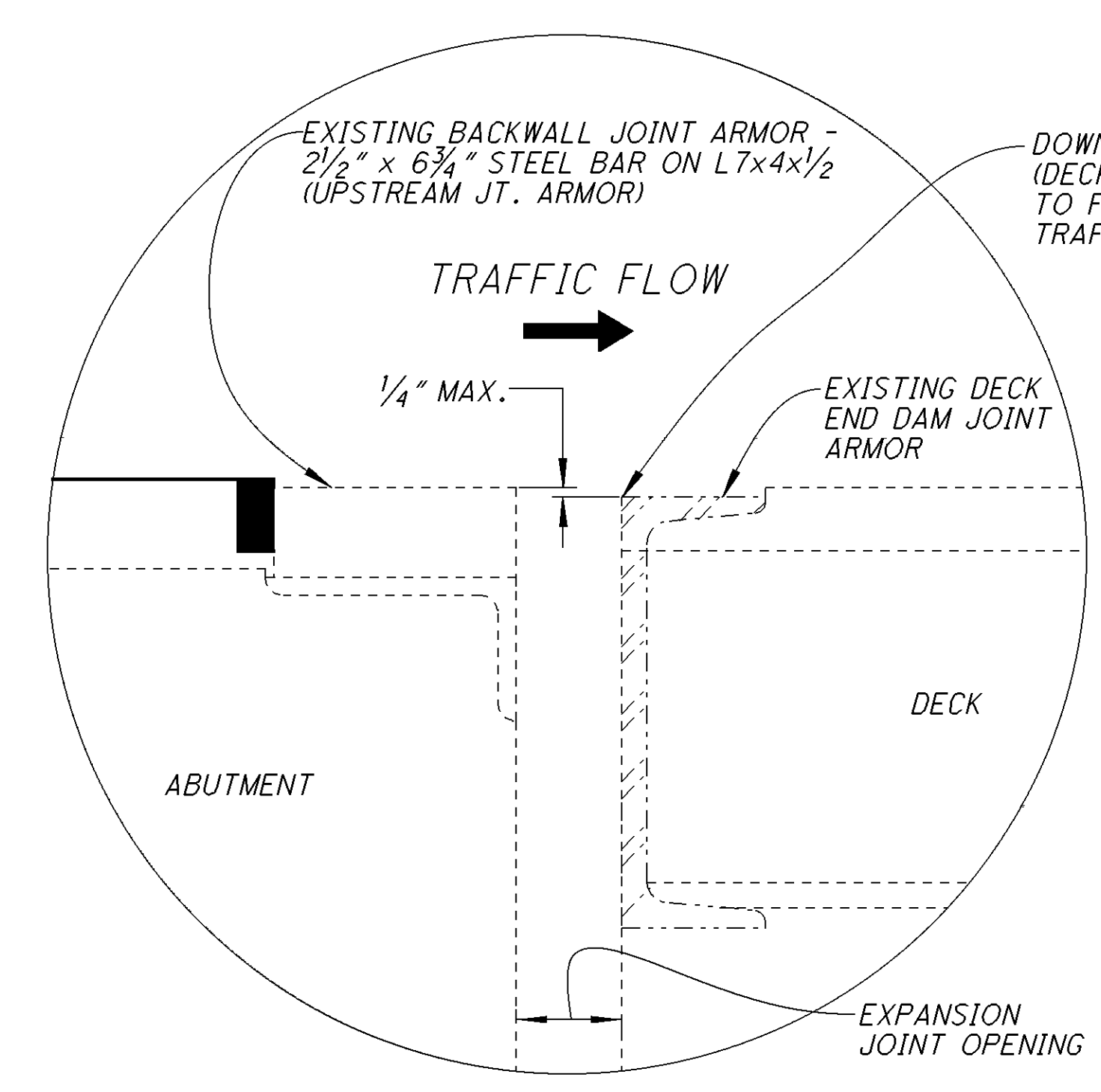


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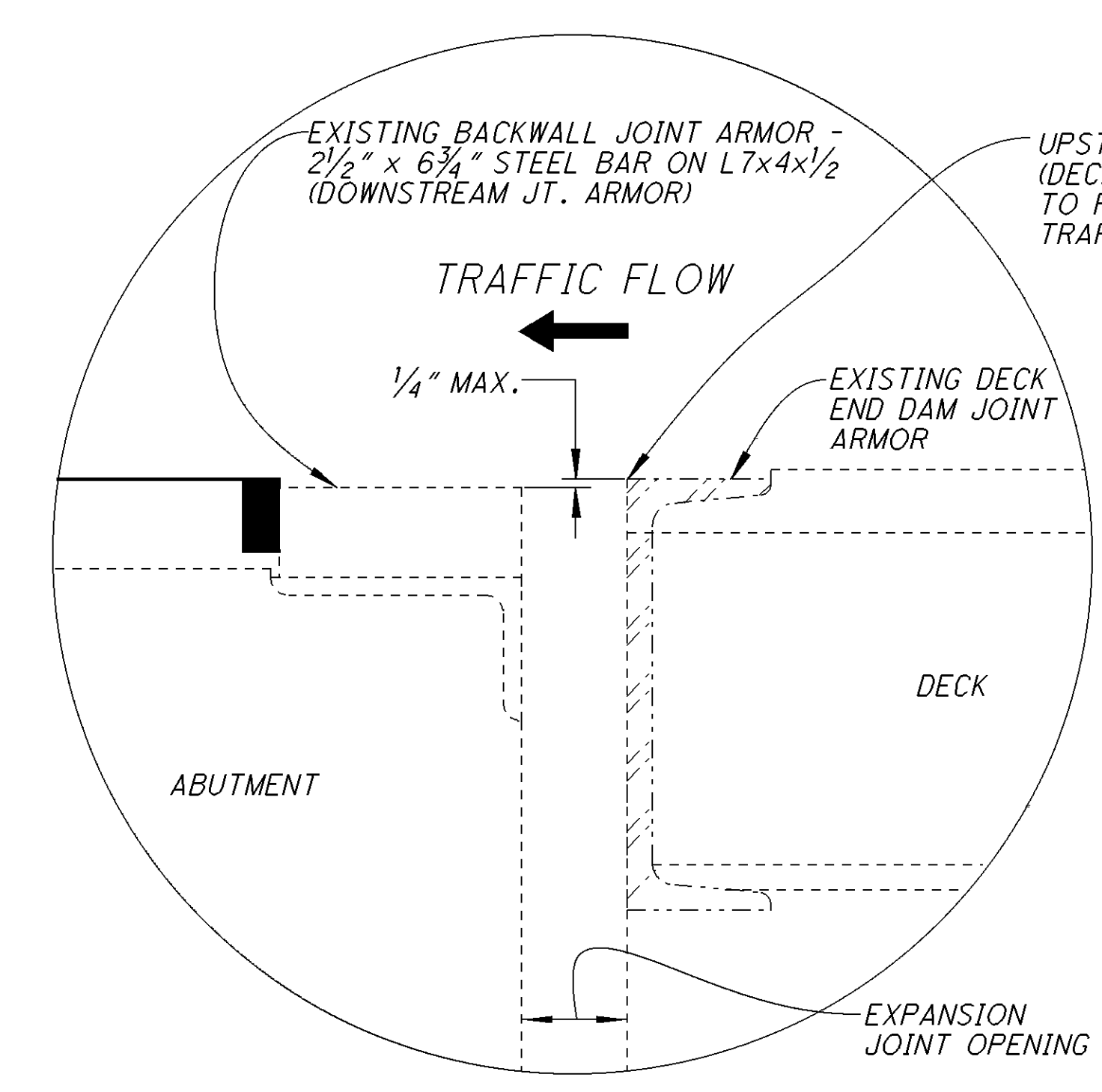


PROPOSED

IF NECESSARY, DUE TO EXISTING CONDITIONS, TO LOWER THE BEAM SEAT TO ACHIEVE MATCHING JOINT ARMOR ELEVATIONS AND FULL BEARING AT ALL BEAM SEATS, BUSHHAMMER OR GRIND BEARING SEAT AS PER C.M.S. 516.07.



DETAIL "M" (CASE 1)



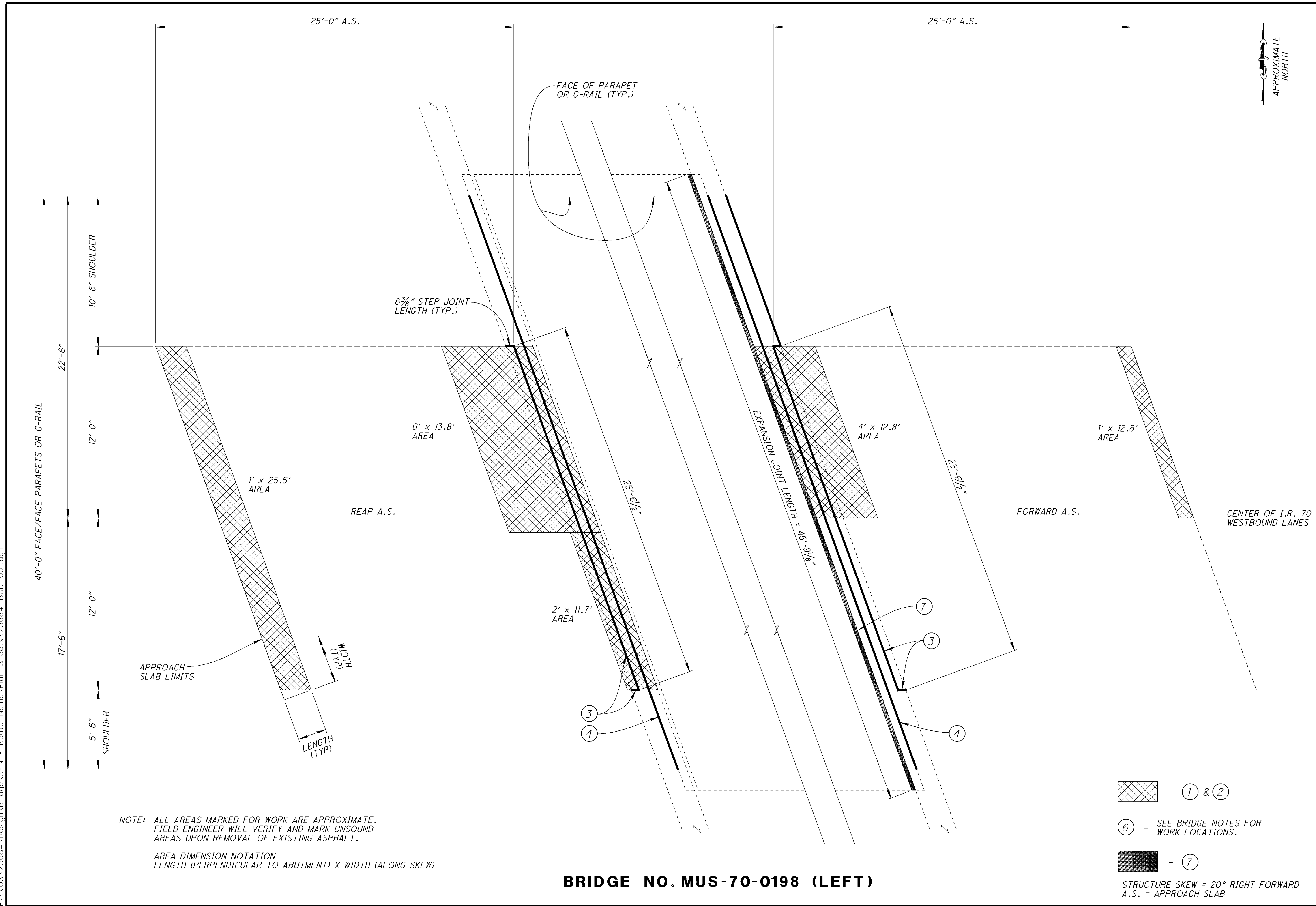
DETAIL "M" (CASE 2)

DOWNSTREAM TRAFFIC JOINT ARMOR (DECK END DAM) SHALL BE CORRECTED TO FLUSH WITH OR 1/4" MAX. BELOW UPSTREAM TRAFFIC JOINT ARMOR.

UPSTREAM TRAFFIC JOINT ARMOR (DECK END DAM) SHALL BE CORRECTED TO FLUSH WITH OR 1/4" MAX. ABOVE DOWNSTREAM TRAFFIC JOINT ARMOR.

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NOTE: ALL AREAS MARKED FOR WORK ARE APPROXIMATE. FIELD ENGINEER WILL VERIFY AND MARK UNSOUND AREAS UPON REMOVAL OF EXISTING ASPHALT.

AREA DIMENSION NOTATION = LENGTH (PERPENDICULAR TO ABUTMENT) X WIDTH (ALONG SKEW)

- ① & ②

⑥ - SEE BRIDGE NOTES FOR WORK LOCATIONS.

- ⑦

STRUCTURE SKEW = 20° RIGHT FORWARD
A.S. = APPROACH SLAB

CALCULATED
JDR
CHECKED
TAG

BRIDGE PLAN MUS-70-0198 LEFT (SFN 6002315)

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

19
27

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CALCULATED
JDR
CHECKED
TAG



BRIDGE PLAN MUS-70-0198 RIGHT (SFN 6002374)

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

NOTE: ALL AREAS MARKED FOR WORK ARE APPROXIMATE. FIELD ENGINEER WILL VERIFY AND MARK UNSOUND AREAS UPON REMOVAL OF EXISTING ASPHALT.

AREA DIMENSION NOTATION = LENGTH (PERPENDICULAR TO ABUTMENT) X WIDTH (ALONG SKEW)

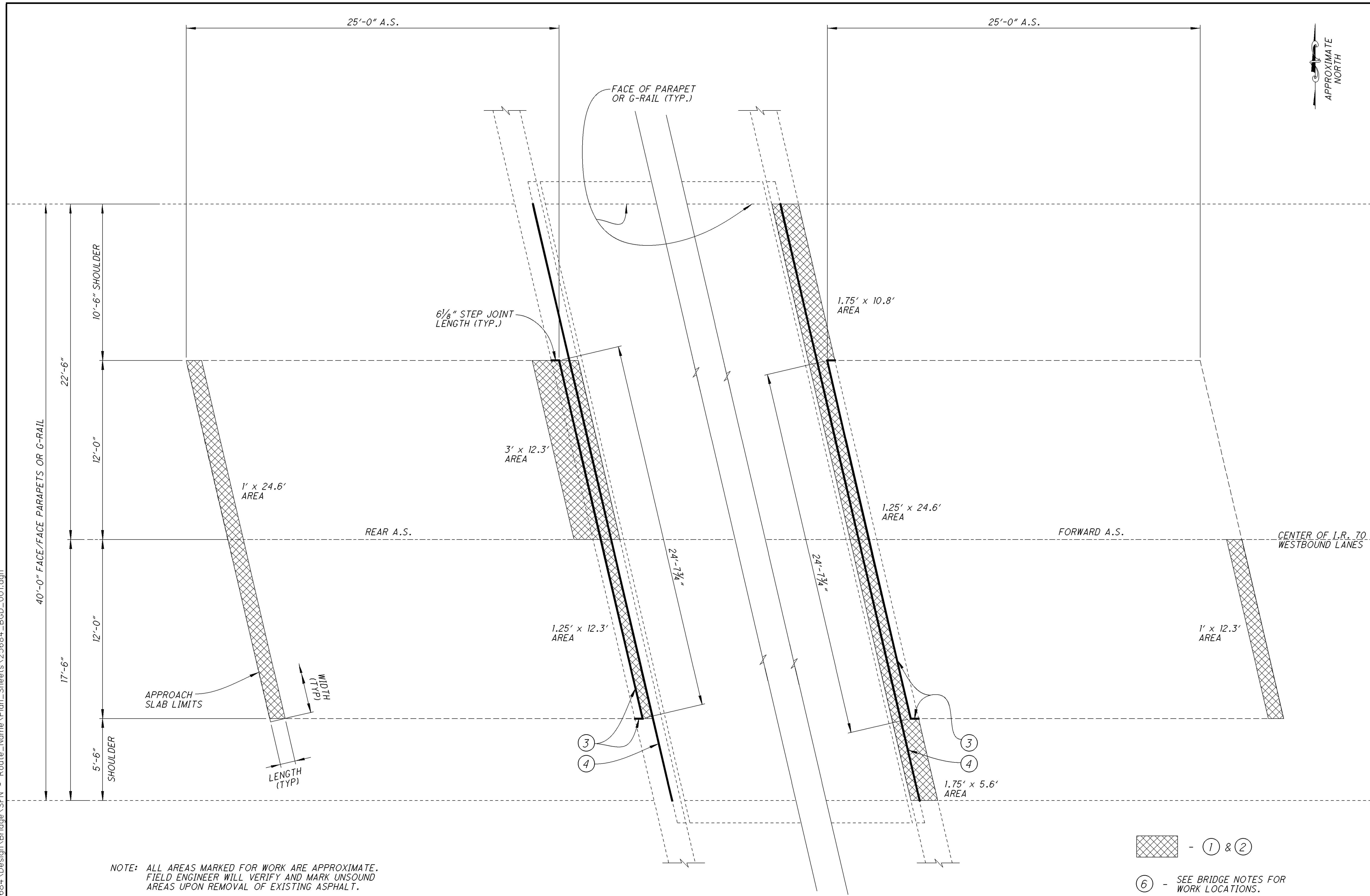
BRIDGE NO. MUS-70-0198 (RIGHT)

- ① & ②

⑥ - SEE BRIDGE NOTES FOR WORK LOCATIONS.

STRUCTURE SKEW = 20° RIGHT FORWARD
A.S. = APPROACH SLAB

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NOTE: ALL AREAS MARKED FOR WORK ARE APPROXIMATE. FIELD ENGINEER WILL VERIFY AND MARK UNSOUND AREAS UPON REMOVAL OF EXISTING ASPHALT.

AREA DIMENSION NOTATION = LENGTH (PERPENDICULAR TO ABUTMENT) X WIDTH (ALONG SKEW)

- (1) & (2)

(6) - SEE BRIDGE NOTES FOR WORK LOCATIONS.

BRIDGE NO. MUS-70-0299 (LEFT)

STRUCTURE SKEW = 13°08'00" RIGHT FORWARD
A.S. = APPROACH SLAB

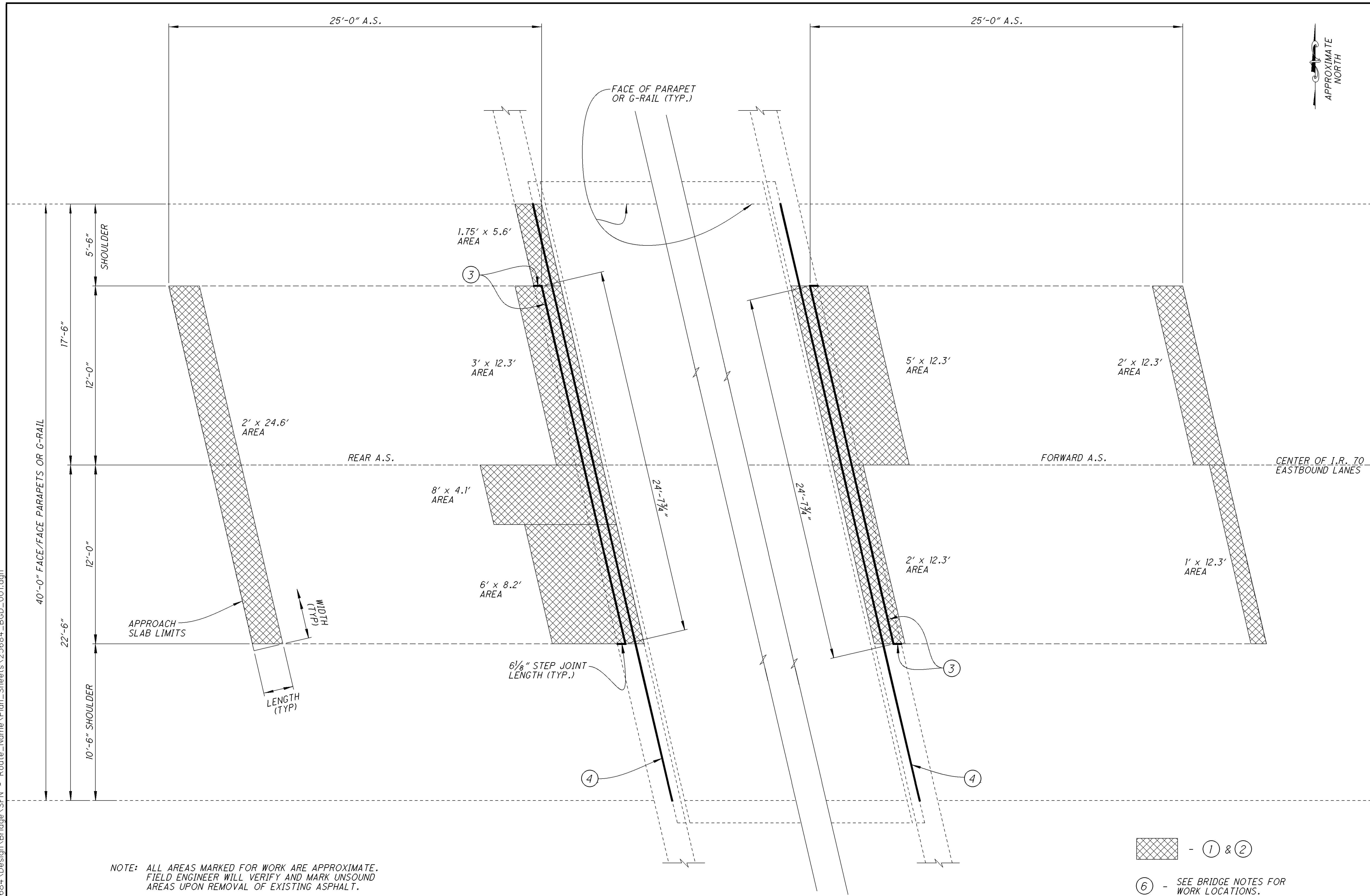
CALCULATED
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BRIDGE PLAN MUS-70-0299 LEFT (SFN 6002404)

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

21
27

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NOTE: ALL AREAS MARKED FOR WORK ARE APPROXIMATE. FIELD ENGINEER WILL VERIFY AND MARK UNSOUND AREAS UPON REMOVAL OF EXISTING ASPHALT.

AREA DIMENSION NOTATION = LENGTH (PERPENDICULAR TO ABUTMENT) X WIDTH (ALONG SKEW)

- (1) & (2)

(6) - SEE BRIDGE NOTES FOR WORK LOCATIONS.

BRIDGE NO. MUS-70-0299 (RIGHT)

STRUCTURE SKEW = 13°08'00" RIGHT FORWARD
A.S. = APPROACH SLAB

CALCULATED
JDR
CHECKED
TAG

BRIDGE PLAN MUS-70-0299 RIGHT (SFN 6002439)

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

22
27

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LOCATION 1 - SHEET TOTALS											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	
2	3	4	5	7	8	9	10	11	13	16						
											ROADWAY					
1,334											690	12050	1,334	SQ YD	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	
4											690	98000	4	EACH	SPECIAL - MISC.: REMOVAL AND STORAGE OF ROADWAY SENSOR	
4											690	98000	4	EACH	SPECIAL - MISC.: INSTALLATION OF ROADWAY WEATHER INFORMATION SYSTEM SENSOR (VX21-2)	
1											690	98000	1	EACH	SPECIAL - MISC.: VXTXRX RECEIVER RADIO	
											STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0198L					
											3	202	11301	3	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
											3	511	53012	3	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
											39	512	10600	39	FT	CONCRETE REPAIR BY EPOXY INJECTION
											46	516	14600	46	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE FOAM
											53	516	31011	53	FT	2" DEEP JOINT SEALER, AS PER PLAN
											10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN
											LUMP	516	47001	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	
											STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0198R					
											4	202	11301	4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
											4	511	53012	4	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
											65	512	10600	65	FT	CONCRETE REPAIR BY EPOXY INJECTION
											53	516	31011	53	FT	2" DEEP JOINT SEALER, AS PER PLAN
											10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN
											LUMP	516	47001	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	
											STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0299L					
											2	202	11301	2	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
											2	511	53012	2	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
											33	512	10600	33	FT	CONCRETE REPAIR BY EPOXY INJECTION
											51	516	31011	51	FT	2" DEEP JOINT SEALER, AS PER PLAN
											10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN
											LUMP	516	47001	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	
											STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0299R					
											4	202	11301	4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
											4	511	53012	4	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
											33	512	10600	33	FT	CONCRETE REPAIR BY EPOXY INJECTION
											51	516	31011	51	FT	2" DEEP JOINT SEALER, AS PER PLAN
											10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN
											LUMP	516	47001	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	

CALCULATED
LME
CHECKED
DNM

LOCATION 1 SUB-SUMMARY

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

CALCULATED
LME
CHECKED
DNM

LOCATION 2 - SHEET TOTALS								ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	4	5	7	8	11	13						
ROADWAY												
1.96								209	60500	1.96	MILE	LINEAR GRADING
50								253	02000	50	CU YD	PAVEMENT REPAIR
			13,799	8,049				254	01000	21,848	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
			1,035	604				407	10000	1,639	GALLON	TACK COAT
			690	403				407	14000	1,093	GALLON	TACK COAT FOR INTERMEDIATE COURSE
			575	336				442	10000	911	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
			671	392				442	10100	1,063	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)
		24						448	46020	24	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
	10							614	11110	10	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
				128				617	10101	128	CU YD	COMPACTED AGGREGATE, AS PER PLAN
				2,300				617	20000	2,300	SQ YD	SHOULDER PREPARATION
				1.96				618	40600	1.96	MILE	RUMBLE STRIPS, (ASPHALT CONCRETE)
						44		621	00100	44	EACH	RPM
						44		621	54000	44	EACH	RAISED PAVEMENT MARKER REMOVED
					1.96			648	00104	1.96	MILE	EDGE LINE, 6"
					0.98			648	00204	0.98	MILE	LANE LINE, 6"
134								690	12050	134	SQ YD	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

LOCATION 2 SUB-SUMMARY

MUS-70-0.76
LIC-70-28.93
MUS-C.R. 30-2.15

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LOCATION TOTALS			FUNDING PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1	LOCATION 2	LOCATION 3	01/IMS/PV	02/IMS/OT						
ROADWAY										
1,634			1,634		202	23500	1,634	SQ YD	WEARING COURSE REMOVED	
19.20	1.96		21.16		209	60500	21.16	MILE	LINEAR GRADING	
800	50		850		253	02000	850	CU YD	PAVEMENT REPAIR	
220,800	21,848		242,648		254	01000	242,648	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
		280	280		255	10111	280	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN	2A
		90	90		255	10111	90	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN (LONGITUDINAL JOINT REPAIR)	2A
		2,120	2,120		255	20000	2,120	FT	FULL DEPTH PAVEMENT SAWING	
		1,392	1,392		257	10000	1,392	SQ YD	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT	
16,688	1,639		18,327		407	10000	18,327	GALLON	TACK COAT	
11,152	1,093		12,245		407	14000	12,245	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
9,271	911		10,182		442	10000	10,182	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
10,842	1,063		11,905		442	10100	11,905	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)	
235	24		259		448	46020	259	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	
320			320		516	31011	320	FT	2" DEEP JOINT SEALER, AS PER PLAN	2, 15
500	10		510		614	11110	510	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
10			10		614	12460	10	EACH	WORK ZONE MARKING SIGN	
50			50		614	12600	50	EACH	REPLACEMENT DRUM	
16			16		614	13000	16	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
12			12		614	18601	12	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
1,277	128	50	1,455		617	10101	1,455	CU YD	COMPACTED AGGREGATE, AS PER PLAN	2
22,971	2,300	600	25,871		617	20000	25,871	SQ YD	SHOULDER PREPARATION	
19.08	1.96		21.04		618	40600	21.04	MILE	RUMBLE STRIPS, (ASPHALT CONCRETE)	
486	44			530	621	00100	530	EACH	RPM	
486	44			530	621	54000	530	EACH	RAISED PAVEMENT MARKER REMOVED	
55				55	644	00500	55	FT	STOP LINE	
		0.14		0.14	646	10200	0.14	MILE	CENTER LINE	
19.82	1.96			21.78	648	00104	21.78	MILE	EDGE LINE, 6"	
9.60	0.98			10.58	648	00204	10.58	MILE	LANE LINE, 6"	
1,578				1,578	648	00404	1,578	FT	CHANNELIZING LINE, 12"	
1,549				1,549	648	01510	1,549	FT	DOTTED LINE, 6"	
1,334	134		1,468		690	12050	1,468	SQ YD	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	2
4			4		690	98000	4	EACH	SPECIAL - MISC.: REMOVAL AND STORAGE OF ROADWAY SENSOR	2
4			4		690	98000	4	EACH	SPECIAL - MISC.: INSTALLATION OF ROADWAY WEATHER INFORMATION SYSTEM SENSOR (VX21-2)	2
1			1		690	98000	1	EACH	SPECIAL - MISC.: VXTXRX RECEIVER RADIO	2

CALCULATED LIME CHECKED DNM
GENERAL SUMMARY
 MUS-70-0.76
 LIC-70-28.93
 MUS-C.R. 30-2.15
 26
 27

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LOCATION TOTALS		FUNDING PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1	LOCATION 2	01/IMS/PV	02/IMS/OT	03/IMS/BR						
STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0198L										
3				3	202	11301	3	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	15
3				3	511	53012	3	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	15
39				39	512	10600	39	FT	CONCRETE REPAIR BY EPOXY INJECTION	
46				46	516	14600	46	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE FOAM	15
53				53	516	31011	53	FT	2" DEEP JOINT SEALER, AS PER PLAN	2,15
10				10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	15
LUMP				LUMP	516	47001		LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	15
STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0198R										
4				4	202	11301	4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	15
4				4	511	53012	4	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	15
65				65	512	10600	65	FT	CONCRETE REPAIR BY EPOXY INJECTION	
53				53	516	31011	53	FT	2" DEEP JOINT SEALER, AS PER PLAN	2,15
10				10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	15
LUMP				LUMP	516	47001		LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	15
STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0299L										
2				2	202	11301	2	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	15
2				2	511	53012	2	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	15
33				33	512	10600	33	FT	CONCRETE REPAIR BY EPOXY INJECTION	
51				51	516	31011	51	FT	2" DEEP JOINT SEALER, AS PER PLAN	2,15
10				10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	15
LUMP				LUMP	516	47001		LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	15
STRUCTURE 20 FOOT AND OVER BRIDGE NO. MUS-70-0299R										
4				4	202	11301	4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	15
4				4	511	53012	4	CU YD	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	15
33				33	512	10600	33	FT	CONCRETE REPAIR BY EPOXY INJECTION	
51				51	516	31011	51	FT	2" DEEP JOINT SEALER, AS PER PLAN	2,15
10				10	516	46801	10	EACH	REFURBISH AND RESET BEARING, AS PER PLAN	15
LUMP				LUMP	516	47001		LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	15
INCIDENTALS										
		100%			103	05000		LUMP	PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
		100%			614	11000		LUMP	MAINTAINING TRAFFIC	
		100%			619	16000	3	MONTH	FIELD OFFICE, TYPE A	
		100%			623	10000		LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
		100%			624	10000		LUMP	MOBILIZATION	

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GENERAL SUMMARY
 MUS-70-0.76
 LIC-70-28.93
 MUS-C.R. 30-2.15
 27/27