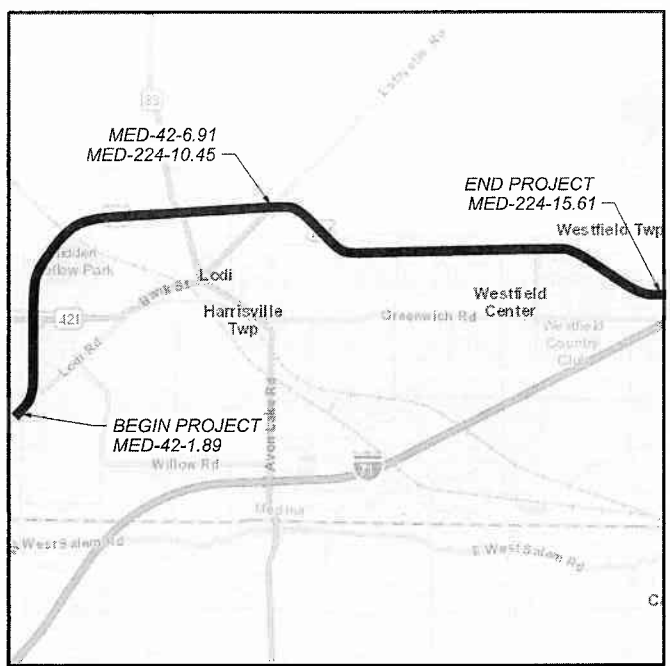


MED - US-US 42-01.89  
 210531 PID - 79761  
 Dist 3 11/18/2021

Contract Proposal available @ [www.contracts.dot.state.oh.us](http://www.contracts.dot.state.oh.us)  
 (5701)(529)-422-DEW/681-24-DEW



LOCATION MAP

LATITUDE: 41°2'48" LONGITUDE: 81°59'38"



STATE OF OHIO  
 DEPARTMENT OF TRANSPORTATION

MED-42-1.89  
 MED-224-(6.25)(10.45)

VILLAGE OF WESTFIELD CENTER  
 HARRISVILLE TOWNSHIP  
 WESTFIELD TOWNSHIP  
 MEDINA COUNTY

FEDERAL PROJECT NUMBER

E170083

RAILROAD INVOLVEMENT

CSX, WHEELING & LAKE ERIE

PROJECT DESCRIPTION

THIS PROJECT INCLUDES PAVEMENT REPAIRS, PLANING AND PAVING WITH ASPHALT CONCRETE, BRIDGE MAINTENANCE, GUARDRAIL REPAIR, AND REPLACING PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: N/A ACRES\*  
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A ACRES\*  
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A ACRES\*  
 \* = MAINTENANCE PROJECT

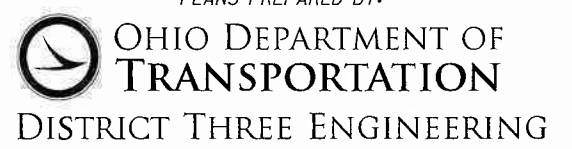
LIMITED ACCESS

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.

2019 SPECIFICATIONS

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

PLANS PREPARED BY:



PORTION TO BE IMPROVED

DESIGN DESIGNATIONS: SEE SHEET 2

DESIGN EXCEPTIONS

NONE REQUIRED

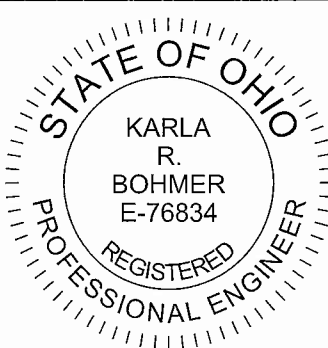
ADA DESIGN WAIVERS

NONE REQUIRED

INDEX OF SHEETS:

TITLE SHEET	1	STRUCTURE NOTES	54-55
SCHEMATIC PLAN	2-6	STRUCTURE SUMMARY	56
TYPICAL SECTIONS	7-9	STRUCTURE DETAILS	
GENERAL NOTES	10-12	GENERAL DETAILS	57-59
GUARDRAIL NOTES	13	MED-42-2.61	60-61, 61A
MAINTENANCE OF TRAFFIC NOTES	14-16	MED-42-3.10 (L/R)	62-63
MAINTENANCE OF TRAFFIC DETOUR PLAN	17, 17A, 17B, 17C, 18-22, 22A, 22B	MED-42-4.60 (L/R)	64-65
GENERAL SUMMARY	23-28	MED-42-5.39 (L/R)	66-67
PAVEMENT & SHOULDER DATA	29-31	MED-42-5.89 (L/R)	68
GUARDRAIL/CONCRETE REPAIR SUB-SUMMARY	32	MED-42-7.14	69-70
MED-224/LAKE RD CONCRETE REPAIRS	33	MED-83-4.36	71
GUARDRAIL DETAILS	34-49, 49A, 50	MED-224-12.76 (L/R)	72-73
PAVEMENT MARKING/RPM SUB-SUMMARY	51-53	PLAN INSERT SHEETS	
		GR-1.1	74-76
		GR-2.1	77-78
		GR-3.4	79

ENGINEER'S SEAL:



SIGNED: Karla R. Bohmer  
 DATE: 6/30/21

**UNDERGROUND UTILITIES**  
 Contact Two Working Days Before You Dig  
  
 OHIO811, 8-1-1, or 1-800-362-2764  
 (Non members must be called directly)

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	
AS-1-15	7/17/15	MGS-1.1	1/19/18	MT-95.30	7/19/19	MT-101.60	1/17/20	TC-41.20	10/18/13	800	7/16/21
DBR-2-73	7/19/02	MGS-2.1	1/19/18	MT-95.40	1/17/20	MT-101.70	1/17/20	TC-42.20	10/18/13	807	7/17/20
DBR-3-11	7/15/11	MGS-3.1	1/19/18	MT-95.45	1/17/20	MT-101.75	1/17/20	TC-52.10	10/18/13	808	1/18/19
EXJ-4-87	1/19/18	MGS-3.2	1/18/13	MT-95.50	7/21/17	MT-101.90	7/17/20	TC-52.20	1/15/21	821	4/20/12
BP-2.1	7/17/15	MGS-4.2	7/19/13	MT-96.11	4/16/21	MT-102.20	4/19/19	TC-61.30	7/19/19	830	7/19/19
BP-2.2	1/15/21	MGS-4.3	1/18/13	MT-96.20	7/15/16	MT-104.10	10/16/15	TC-64.10	1/17/20	832	10/19/18
BP-2.5	7/19/13	MGS-6.2	7/19/19	MT-97.12	1/20/17	MT-105.10	1/17/20	TC-65.10	1/17/14	848	1/15/21
BP-3.1	1/17/20			MT-98.10	1/17/20			TC-65.11	7/21/17	850	4/16/21
BP-3.2	1/18/19	RM-4.6	7/19/13	MT-98.11	1/17/20			TC-71.10	1/19/18	872	4/17/20
BP-6.1	7/19/13			MT-98.20	4/19/19			TC-72.20	7/20/18	873	4/16/21
BP-9.1	1/18/19			MT-98.22	1/17/20			TC-73.20	1/17/20	874	4/17/20
				MT-98.28	1/17/20					875	1/18/19
DM-4.1	7/17/20			MT-98.29	1/17/20					861	1/15/21
DM-4.3	1/15/16			MT-99.20	4/19/19						
DM-4.4	1/15/16			MT-99.50	1/17/20						

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 17-22.

APPROVED:   
 DATE: 09/25/21 DISTRICT DEPUTY DIRECTOR

APPROVED:   
 DATE: 8/17/21 DIRECTOR, DEPARTMENT OF TRANSPORTATION

TITLE SHEET

DESIGN AGENCY  
 DISTRICT 3  
  
 ENGINEERING TEAM TWO  
 DESIGNER  
 ACM  
 REVIEWER  
 KRB 6-30-21  
 PROJECT ID  
 79761  
 SHEET TOTAL  
 1 79

MED-42-1.89/MED-224-(6.25)(10.45)

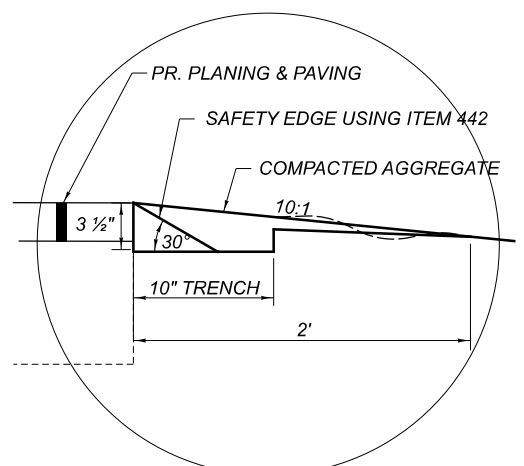
MODEL: Sheet1 PAPER SIZE: 17x11 (in.) DATE: 11/23/2021 TIME: 3:05:09 PM USER: ksalaby  
 p:\v\hobbs-pw\benley.com\shhdod-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_GY001.dgn

**EXISTING LEGEND**

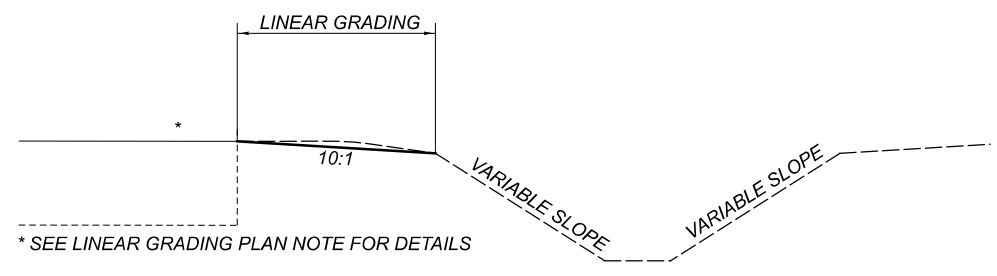
- (A) 5"± ASPHALT CONCRETE
- (B) 7"± ASPHALT CONCRETE
- (C) 9"± ASPHALT CONCRETE
- (D) 9"± REINFORCED CONCRETE PAVEMENT
- (E) AGGREGATE BASE

**PROPOSED LEGEND**

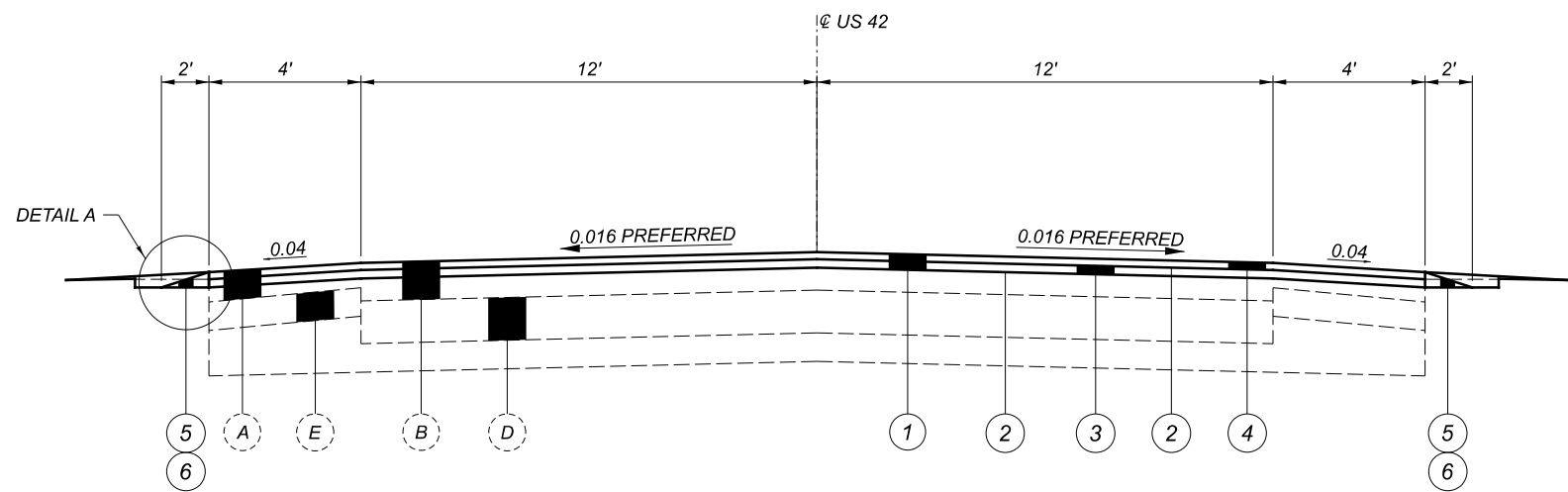
- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (3.25")
- (2) ITEM 407 - TACK COAT (0.08 GAL/SY 1ST LIFT, 0.05 GAL/SY 2ND LIFT)
- (3) ITEM 861 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) (1.75")
- (4) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (1.50")
- (5) ITEM 408 - PRIME COAT, AS PER PLAN (0.40 GAL/SY)
- (6) ITEM 617 - COMPACTED AGGREGATE (2.0")



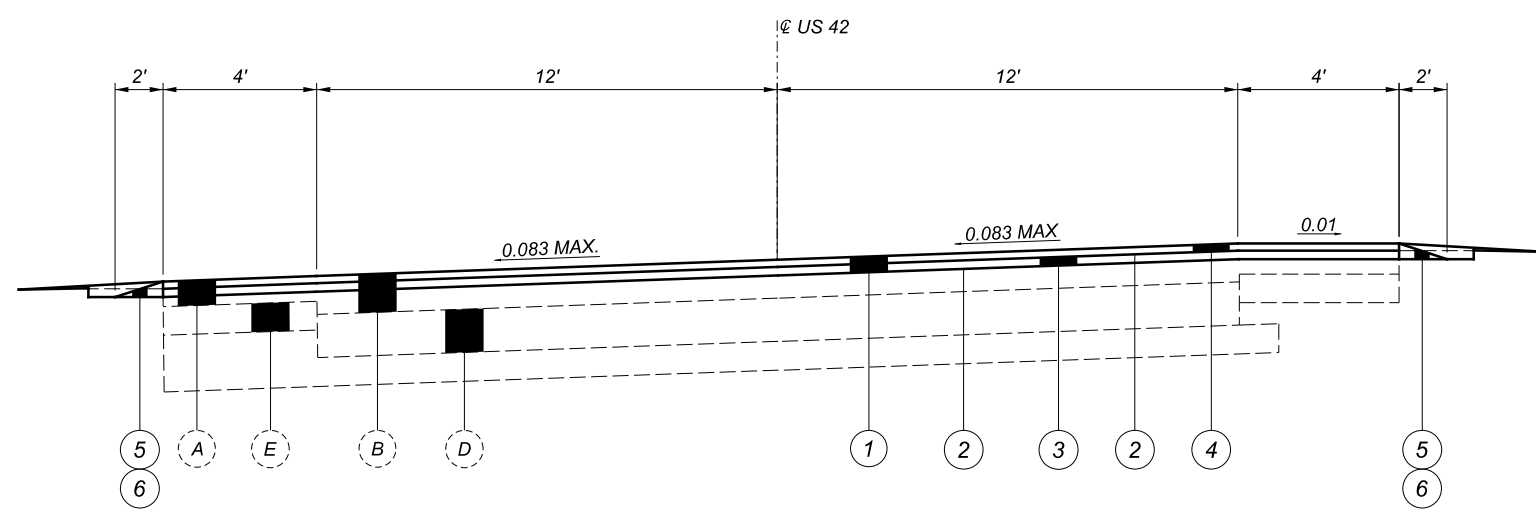
**DETAIL A  
SAFETY EDGE**



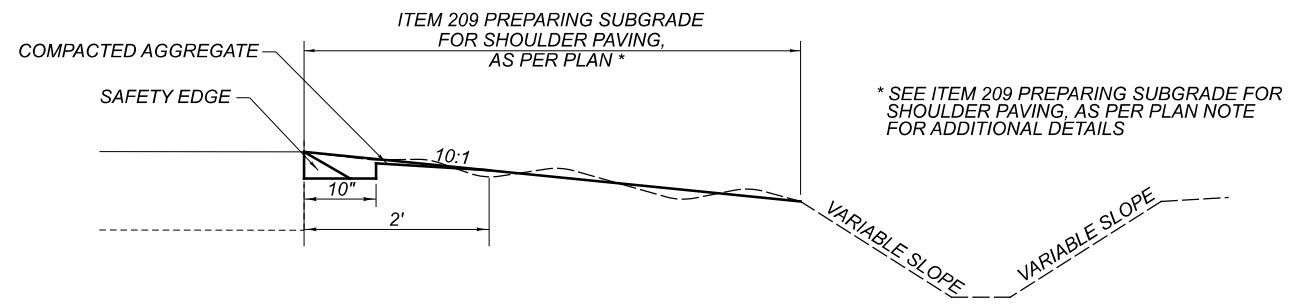
**LINEAR GRADING DETAIL**



**NORMAL SECTION - TWO-LANE**  
MED-42-1.89 TO 2.78



**SUPERELEVATED SECTION - TWO-LANE**  
MED-42-1.89 TO 2.78



**ITEM 209 PREPARING SUBGRADE  
FOR SHOULDER PAVING, AS PER PLAN**

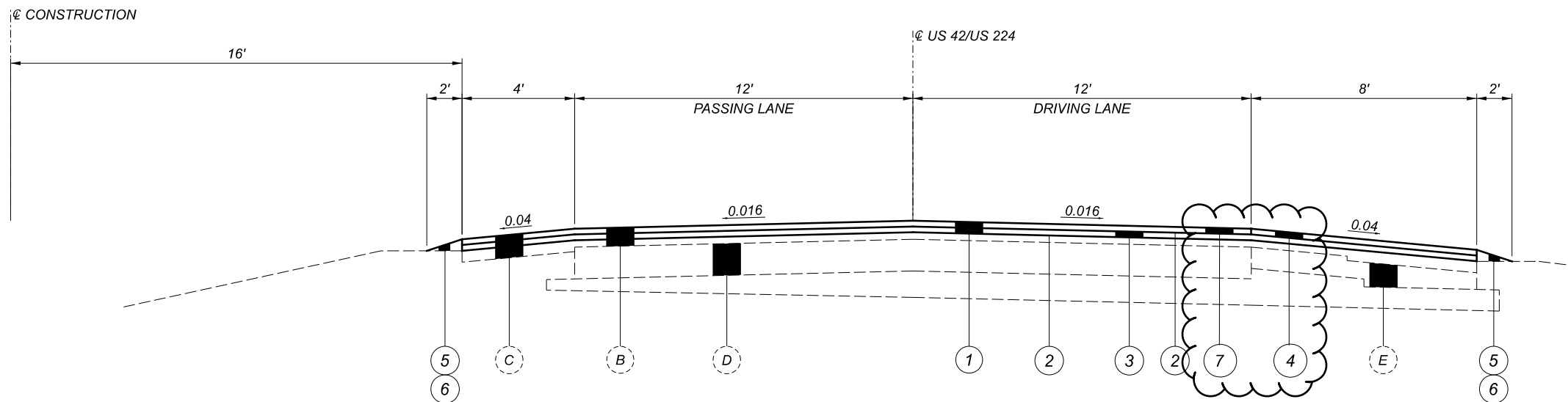
NOTE: ALL CROSS SLOPES SHALL MATCH THE EXISTING CROSS SLOPES.

TYPICAL SECTIONS

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER	JLL
REVIEWER	ACM
PROJECT ID	79761
SHEET	TOTAL
7	79

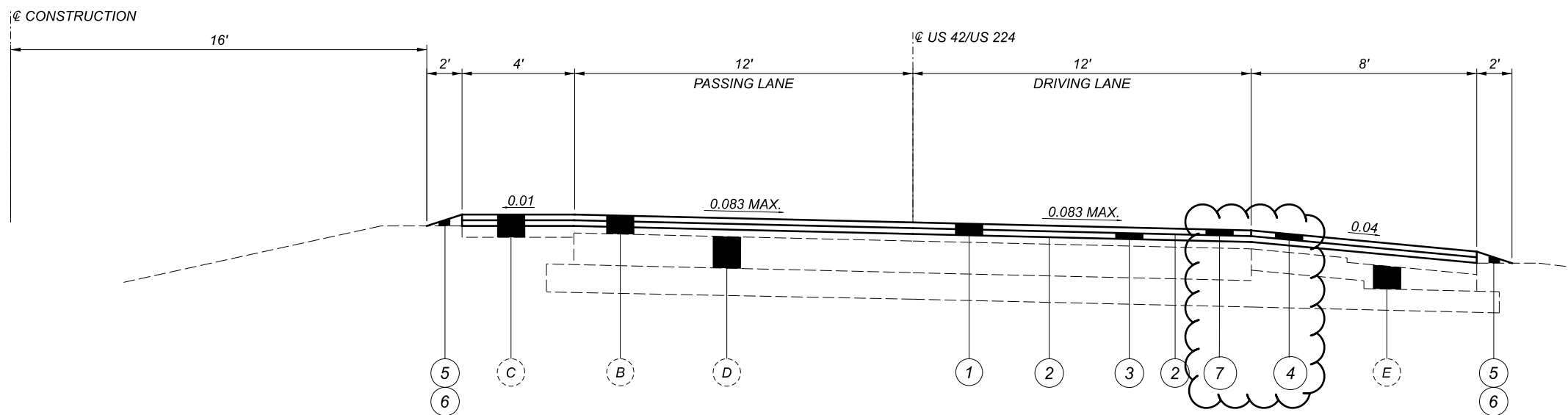
MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: Sheet2 PAPER SIZE: 17x11 (in.) DATE: 11/23/2021 TIME: 3:05:25 PM USER: ksalby  
 p:\v\hobbs-pw-bentley.com\shahid-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_GY001.dgn



**NORMAL SECTION - FOUR-LANE**

IN DIRECTION OF TRAVEL  
 MED-42-2.78 TO 6.91  
 MED-224-10.45 TO 15.30 (EASTBOUND)  
 10.45 TO 15.40 (WESTBOUND)



**SUPERELEVATED SECTION - FOUR-LANE**

IN DIRECTION OF TRAVEL  
 MED-42-2.78 TO 6.91  
 MED-224-10.45 TO 15.30 (EASTBOUND)  
 10.45 TO 15.40 (WESTBOUND)

**EXISTING LEGEND**

- (A) 5"± ASPHALT CONCRETE
- (B) 7"± ASPHALT CONCRETE
- (C) 9"± ASPHALT CONCRETE
- (D) 9"± REINFORCED CONCRETE PAVEMENT
- (E) AGGREGATE BASE

**PROPOSED LEGEND**

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (3.25")
- (2) ITEM 407 - TACK COAT (0.08 GAL/SY 1ST LIFT, 0.05 GAL/SY 2ND LIFT)
- (3) ITEM 861 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) (1.75")
- (4) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (1.50")
- (5) ITEM 408 - PRIME COAT, AS PER PLAN (0.40 GAL/SY)
- (6) ITEM 617 - COMPACTED AGGREGATE (2.0")
- (7) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (1.50")

NOTE: ALL CROSS SLOPES SHALL MATCH THE EXISTING CROSS SLOPES.

TYPICAL SECTIONS

DESIGN AGENCY

DISTRICT 3



ENGINEERING TEAM TWO

DESIGNER

JLL

REVIEWER

ACM 6-29-21

PROJECT ID

79761

SHEET

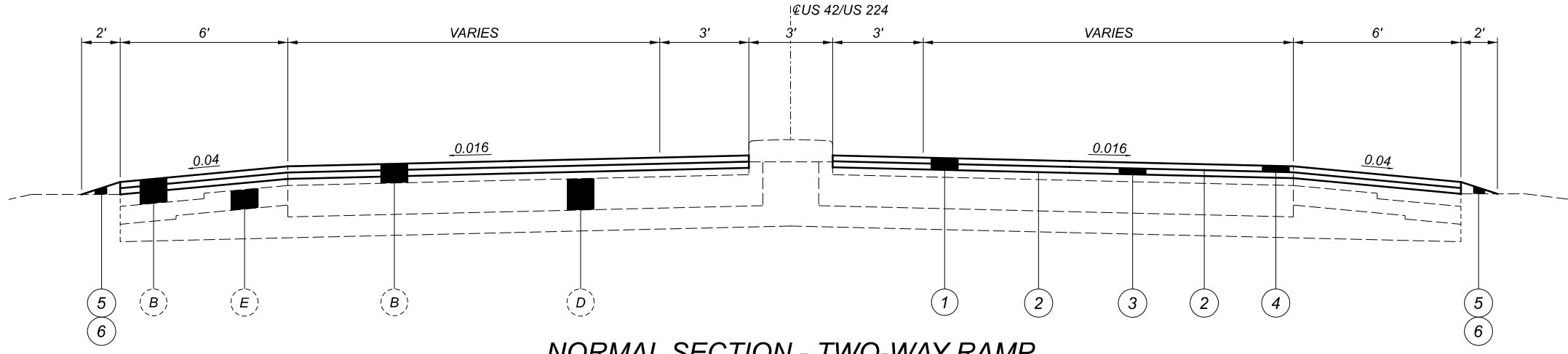
8

TOTAL

79

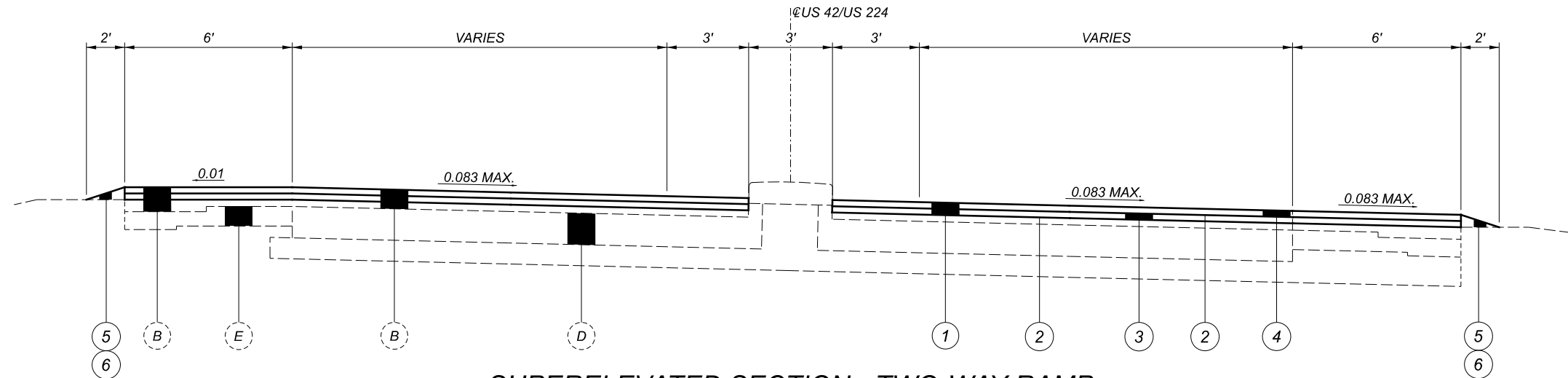
MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: Sheet3 PAPER: 17x11 (in.) DATE: 11/23/2021 TIME: 3:05:36 PM USER: ksalby  
 p:\v\hobbs-pw-bentley.com\shahid-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_GY001.dgn



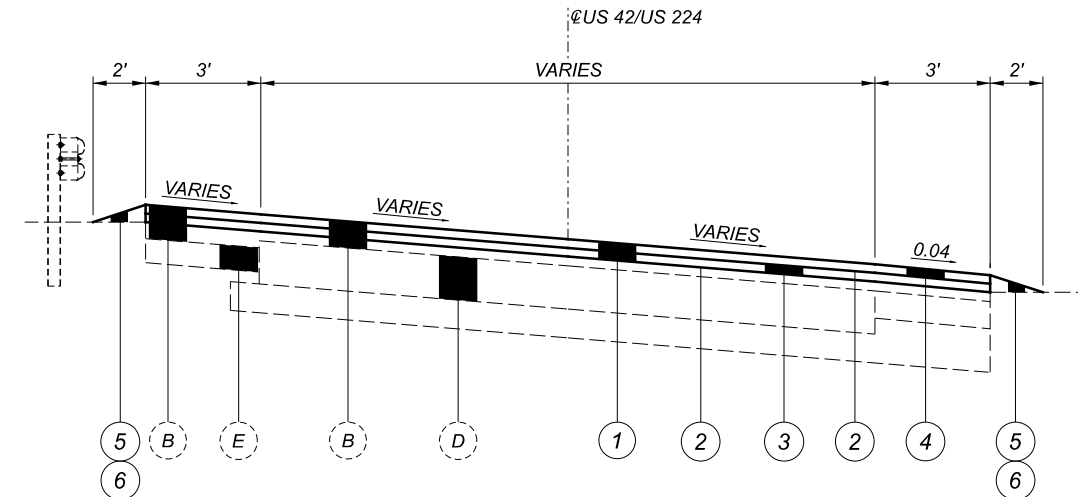
**NORMAL SECTION - TWO-WAY RAMP**

MED-42/224  
 RAMP D1 RAMP B1  
 RAMP C2 RAMP B2



**SUPERELEVATED SECTION - TWO-WAY RAMP**

MED-42/224  
 RAMP D1 RAMP B1  
 RAMP C2 RAMP B2



**SUPERELEVATED SECTION - ONE-WAY RAMP**

MED-42/224  
 RAMP D1 RAMP D2  
 RAMP B1 RAMP B2  
 RAMP C1 RAMP C2  
 RAMP A1 RAMP A2  
 RAMP E2

**EXISTING LEGEND**

- (A) 5"± ASPHALT CONCRETE
- (B) 7"± ASPHALT CONCRETE
- (C) 9"± ASPHALT CONCRETE
- (D) 9"± REINFORCED CONCRETE PAVEMENT
- (E) AGGREGATE BASE

**PROPOSED LEGEND**

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (3.25")
- (2) ITEM 407 - TACK COAT (0.08 GAL/SY 1ST LIFT, 0.05 GAL/SY 2ND LIFT)
- (3) ITEM 861 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) (1.75")
- (4) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (1.50")
- (5) ITEM 408 - PRIME COAT, AS PER PLAN (0.40 GAL/SY)
- (6) ITEM 617 - COMPACTED AGGREGATE (2.0")

NOTE: ALL CROSS SLOPES SHALL MATCH THE EXISTING CROSS SLOPES.

TYPICAL SECTIONS

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER	JLL
REVIEWER	ACM
PROJECT ID	79761
SHEET	TOTAL
9	79



**ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN, (13.0" CONCRETE)**

**ITEM 255 – FULL DEPTH PAVEMENT SAWING**

THE EXISTING PAVEMENT BUILDUP SHALL BE REMOVED AS PART OF THIS PAY ITEM. PLACE THE CONCRETE BASE IN ACCORDANCE WITH THE SPEC AND PLACED TO BE FLUSH WITH THE PLANED SURFACE. IN FULL DEPTH CONCRETE SECTIONS, THE CONCRETE REPAIRS SHALL BE PLACED FLUSH TO THE EXISTING SURFACE.

THE CONCRETE SHALL BE PLACED IN THE REPAIR AREA THE SAME DAY THAT THE EXISTING PAVEMENT IS REMOVED FROM THE REPAIR AREA.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 255 – FULL DEPTH REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

IN ADDITION TO THE QUANTITIES PROVIDED ON SHEET 32, THE FOLLOWING ADDITIONAL ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER OVER THE ENTIRE PROJECT LIMITS.

**01/NHS/PV:**

ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN	14,000 SY
ITEM 255 – FULL DEPTH PAVEMENT SAWING	56,000 FT

**02/STR/PV:**

ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN	1,700 SY
ITEM 255 – FULL DEPTH PAVEMENT SAWING	6,800 FT

**ITEM 203 – EXCAVATION, AS PER PLAN**

**ITEM 304 – AGGREGATE BASE, AS PER PLAN**

THIS WORK SHALL BE PERFORMED AT FULL DEPTH CONCRETE REPAIR AREAS TO REPLACE DISTURBED OR DETERIORATED BASE MATERIAL UNDERNEATH THE EXISTING CONCRETE PAVEMENT. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE ABOVE WORK. PAYMENT WILL BE MADE AT THE UNIT PRICE PER CUBIC YARD FOR ITEM 203 – EXCAVATION, AS PER PLAN, AND ITEM 304 – AGGREGATE BASE, AS PER PLAN.

**01/NHS/PV:**

ITEM 203 – EXCAVATION, AS PER PLAN	40 CY
ITEM 304 – AGGREGATE BASE, AS PER PLAN	40 CY

**02/STR/PV:**

ITEM 203 – EXCAVATION, AS PER PLAN	10 CY
ITEM 304 – AGGREGATE BASE, AS PER PLAN	10 CY

**ITEM 408 – PRIME COAT, AS PER PLAN**

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GAL/SY TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

**ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)**

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W-8-1-36) SHALL BE ERECTED AT ANY TRANSVERSE JOINT LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

**ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), (SAFETY EDGE)**

THE SAFETY EDGE SHALL BE INSTALLED AT THE SAME TIME AS THE SURFACE COURSE IS TO BE PLACED. THE SAFETY EDGE WILL NOT REQUIRE ANY DENSITY TESTING.

**ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN**

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W-8-1-36) SHALL BE ERECTED AT ANY TRANSVERSE JOINT LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

REQUIREMENTS OF 447 APPLY EXCEPT AS FOLLOWS: THE JOINT BETWEEN THE RIGHT LANE AND THE OUTSIDE SHOULDER WILL BE EXCLUDED FROM THE 447.06 JOINT DENSITY ACCEPTANCE.

**ADDITIONAL QUANTITIES FOR PAVING THE RIGHT LANE (FOUR LANE SECTION)**

THE FOLLOWING QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER WHEN PAVING THE RIGHT LANE TO CORRECT ANY DAMAGED AREAS ON THE PREVIOUSLY OVERLAID OUTSIDE SHOULDERS.

**01/NHS/PV:**

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (1.5 INCH)	5,080 SY
ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	212 CY

**02/STR/PV:**

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (1.5 INCH)	164 SY
ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	7 CY

**ITEM 605 – AGGREGATE DRAINS, AS PER PLAN**

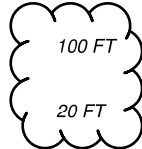
AGGREGATE DRAINS SHALL BE PLACED AT FULL DEPTH CONCRETE REPAIR AREAS TO IMPROVE EXISTING DRAINAGE. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER. THE AGGREGATE DRAINS SHOULD BE PLACED ADJACENT TO THE FULL DEPTH CONCRETE REPAIRS AND EXTEND UNDERNEATH THE PAVED SHOULDERS AND OUTLET BEYOND THE PAVED SHOULDERS.

IN ADDITION TO THE REQUIREMENTS OF 605.07, THIS ITEM SHALL INCLUDE THE PLACEMENT OF 6" OF ITEM 301 OVER THE EMBANKMENT MATERIAL AND 1.5" OF ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE ON THE PAVED SHOULDERS.

PAYMENT FOR THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

**01/NHS/PV:**

ITEM 605 – AGGREGATE DRAINS, AS PER PLAN



**02/STR/PV:**

ITEM 605 – AGGREGATE DRAINS, AS PER PLAN

**ITEM 618 – RUMBLE STRIPS, TRANSVERSE (ASPHALT CONCRETE), AS PER PLAN**

REPLACE EXISTING TRANSVERSE RUMBLE STRIPS IN THE SOUTHBOUND LANES ON MED-42. THE REPLACEMENT RUMBLE STRIPS SHALL MATCH THE LOCATIONS, GROOVE DIMENSIONS AND GROOVE SPACING OF THE EXISTING RUMBLE STRIPS TO BE REPLACED.

SEE STANDARD CONSTRUCTION DRAWING BP-9.2 FOR ADDITIONAL DETAILS.

**MED-42 (SB RT LANE):**

3.29
3.35
3.42

ITEM 618 – RUMBLE STRIPS, TRANSVERSE (ASPHALT CONCRETE), AS PER PLAN

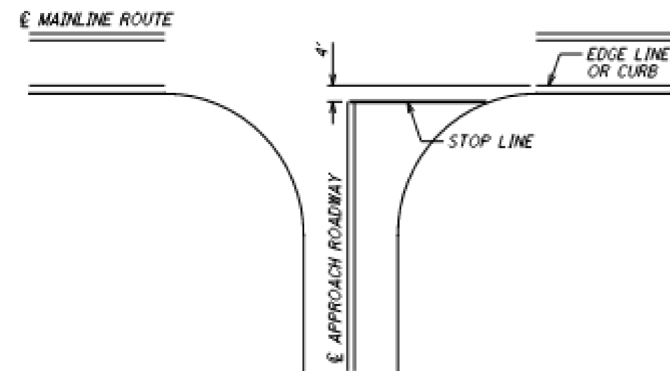
01/NHS/PV – 3 EACH

**PAVING AT WESTFIELD RD RCUT AND LEROY RD LEFT TURN LANES**

MAINLINE PAVING OF MED-224 SHALL OVERLAP 1 FT INTO THE EXISTING PAVEMENT AREAS AT THE WESTFIELD RD (SLM 13.47) RCUT AND LEROY RD (SLM 13.92) LEFT TURN LANES. THE REMAINING EXISTING PAVEMENT AREAS AT BOTH LOCATIONS SHALL BE UNDISTURBED.

**STOP BAR PLACEMENT**

AT NORMAL STOP CONTROLLED RURAL INTERSECTIONS WITHOUT CROSSWALK, THE STOP BAR SHOULD BE PLACED FOUR FEET FROM THE EDGE LINE OF THE INTERSECTING ROADWAY IN ORDER TO ACHIEVE MAXIMUM INTERSECTION SIGHT DISTANCE.



**DETECTION MAINTENANCE**

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED, REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION, IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE DISTRICT TRAFFIC ENGINEER SHALL ADVISE THE PROJECT ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL, MODIFYING THE MINIMUM GREEN TIMES, AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NON-INTRUSIVE DETECTION (I.E., VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL INSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDONED, THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED, CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO PERFORM THE ABOVE LISTED WORK IS CONSIDERED INCIDENTAL TO MAINTAINING TRAFFIC ON THE PROJECT AND WILL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.

**MAINTENANCE OF LEFT TURN MOVEMENTS**

ALL LEFT TURN LANES AND SIGNAL PHASES AT THE FRIENDSVILLE RD AND LAKE RD INTERSECTIONS SHALL BE MAINTAINED AT ALL TIMES EXCEPT AS NOTED BELOW.

LEFT TURN LANES AND SIGNAL PHASES SHALL BE MAINTAINED AT ALL TIMES, EXCEPT DURING SHORT INTERVALS WHEN THE LEFT TURN MOVEMENTS FROM US 224 SHALL BE FLAGGED WITH LEOS. THIS WORK SHALL NOT OCCUR BETWEEN 6 AM AND 9 PM. AT FRIENDSVILLE RD, HOWEVER, THIS WORK MAY OCCUR DURING WEEKDAYS WHEN CLOVERLEAF SCHOOLS ARE NOT IN SESSION AND ON WEEKENDS WHEN NO EVENTS ARE SCHEDULED TO TAKE PLACE AT THE CLOVERLEAF SCHOOLS COMPLEX. AT LAKE RD, WHERE DUAL LEFT TURN LANES EXIST, ONE OF THE TURN LANES MAY BE CLOSED AT A TIME COMMENSURATE WITH THE WORK IN PROGRESS. IF ANY LEFT TURN PHASES ARE REMOVED WHEN AN LEO IS NOT PRESENT, THE CORRESPONDING LEFT TURN SIGNAL HEADS SHALL BE FULLY COVERED SO THAT THE LEFT TURN SIGNAL INDICATION IS NOT VISIBLE TO TRAFFIC.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO PERFORM THE ABOVE LISTED WORK IS CONSIDERED INCIDENTAL TO MAINTAINING TRAFFIC ON THE PROJECT AND WILL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.



**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.

THIS ITEM IS TO BE CONSIDERED INCIDENTAL TO MAINTAINING TRAFFIC ON THE PROJECT AND WILL BE PAID FOR UNDER THE LUMP SUM CONTRACT BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC. IT 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.

**ITEM 614 – WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

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

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

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

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

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

**ITEM 614 – BARRIER REFLECTORS AND/OR OBJECT MARKERS**

BARRIER REFLECTORS AND/OR OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EXCEPT THAT THE SPACING SHALL BE 50 FEET.

**ITEM 614 – MAINTAINING TRAFFIC FOR STRUCTURES (MED-42-3.10L&R) (MED-42-4.60L&R) (MED-224-12.76L&R)**

ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. LANE CLOSURES FOR WORK ON STRUCTURES MED-42-3.10L&R, MED-42-4.60L&R, MED-224-12.76L&R SHALL FOLLOW STANDARD CONSTRUCTION DRAWING MT-95.40. THE REMOVAL OF CONFLICTING EDGE LINES AND LANE LINES WILL BE INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC. PLACING AND REMOVING WORK ZONE EDGE LINES WILL BE INCIDENTAL TO ITEM 614 – MAINTAINING TRAFFIC; WORK ZONE EDGE LINES ON STRUCTURES SHALL BE CLASS 1, 6", 873.

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 BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

STRUCTURE MED-42-3.10L (03/NHS/BR):  
ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL):  
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY):  
ITEM 614 - OBJECT MARKER, ONE WAY:  
ITEM 622 - PORTABLE BARRIER, 32" (UNANCHORED):

4 EACH  
16 EACH  
16 EACH  
770 FT

STRUCTURE MED-42-3.10R (03/NHS/BR):  
ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL):  
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY):  
ITEM 614 - OBJECT MARKER, ONE WAY:  
ITEM 622 - PORTABLE BARRIER, 32" (UNANCHORED):

4 EACH  
16 EACH  
16 EACH  
770 FT

STRUCTURE MED-42-4.60L (03/NHS/BR):  
ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL):  
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY):  
ITEM 614 - OBJECT MARKER, ONE WAY:  
ITEM 622 - PORTABLE BARRIER, 32" (UNANCHORED):

4 EACH  
16 EACH  
16 EACH  
750 FT

STRUCTURE MED-42-4.60R (03/NHS/BR):  
ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL):  
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY):  
ITEM 614 - OBJECT MARKER, ONE WAY:  
ITEM 622 - PORTABLE BARRIER, 32" (UNANCHORED):

4 EACH  
16 EACH  
16 EACH  
750 FT

STRUCTURE MED-224-12.76L (03/NHS/BR):  
ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL):  
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY):  
ITEM 614 - OBJECT MARKER, ONE WAY:  
ITEM 622 - PORTABLE BARRIER, 32" (UNANCHORED):

4 EACH  
16 EACH  
16 EACH  
760 FT

STRUCTURE MED-224-12.76R (03/NHS/BR):  
ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (UNIDIRECTIONAL):  
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY):  
ITEM 614 - OBJECT MARKER, ONE WAY:  
ITEM 622 - PORTABLE BARRIER, 32" (UNANCHORED):

4 EACH  
16 EACH  
16 EACH  
760 FT

**ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

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

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

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 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.

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 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.

ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN  
01/NHS/PV - 36 SIGN MONTH  
[ASSUMING 6 PCMS SIGNS FOR 6 MONTHS]

**WORK ZONE SPEED ZONES (WZSZs)**

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER(S)	COUNTY-ROUTE-SECTION(S)	DIRECTION(S)
WZ-20629	MED-42-2.79 TO 6.90	NB & SB
WZ-20630	MED-224-10.45 TO 15.61	EB & WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT 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 LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

WZSZS USING TEMPORARY FLATSHEET SPEED LIMIT SIGNS SHALL BE IN ACCORDANCE WITH THIS NOTE AND SCD MT-104.10. ADDITIONALLY, PAYMENT MAY BE REMOVED, OR A DISINCENTIVE APPLIED, FOR WZSZS USING TEMPORARY FLATSHEET SPEED LIMIT SIGNS THE SAME AS DESCRIBED IN THE MOST RECENT PUBLICATION OF SS 808 IN REGARD TO WZSZS USING DSL SIGN ASSEMBLIES (SEE SS 808.06 PARAGRAPHS 4 THROUGH 7, INCLUDING TABLE 1.) ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN ODOTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS:

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

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

ITEM 808 - DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY  
[ASSUMING 22 DSL SIGN ASSEMBLIES FOR 6 MONTHS]  
01/NHS/PV – 132 SIGN MONTHS

**ITEM 614 - MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)**

**DETOUR LIMITATION:**

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THREE (3) CONSECUTIVE CALENDAR DAYS. THROUGH TRAFFIC SHALL BE DETOURED AS SHOWN ON THIS SHEET.

THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING.

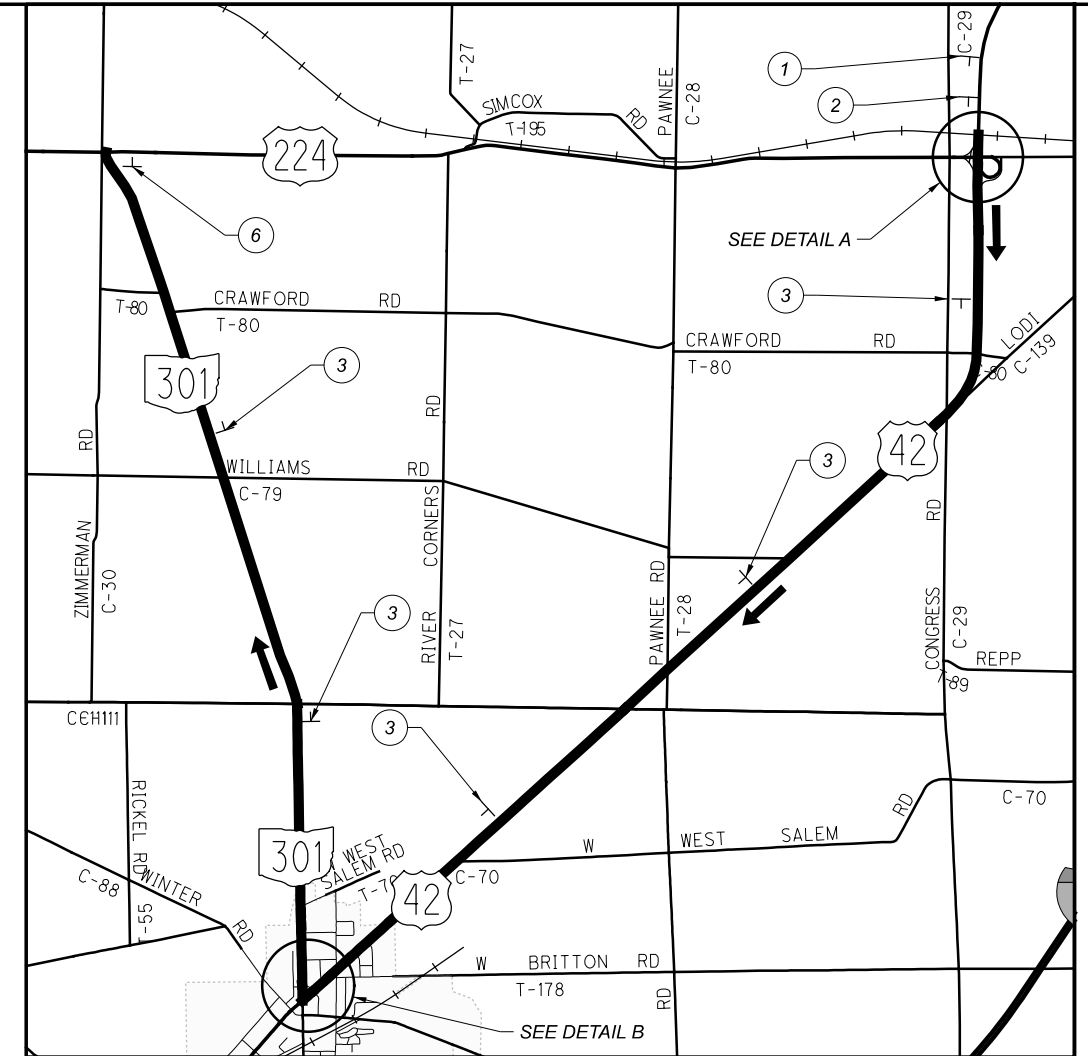
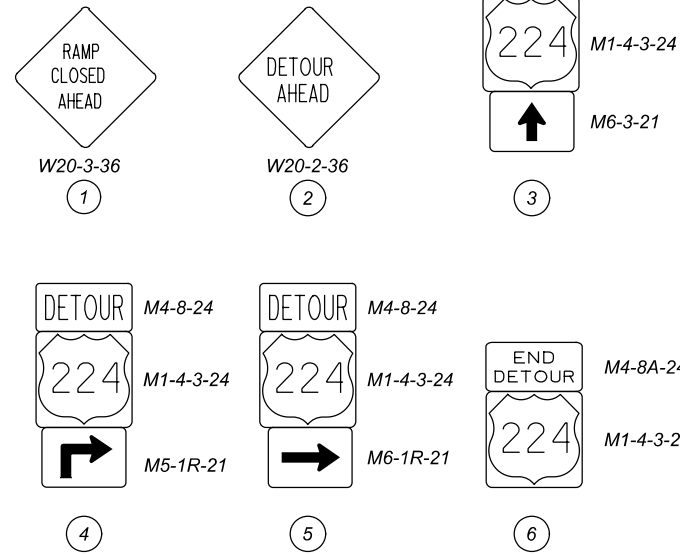
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT, AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

**INTERIM COMPLETION DATE:**

THE THREE (3) CONSECUTIVE CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE, AND FOR EACH CALENDAR DAY BEYOND THE THREE (3) CONSECUTIVE CALENDAR DAYS THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE OF \$8,400 PER DAY.

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, AS PER SECTION 614.02(A).

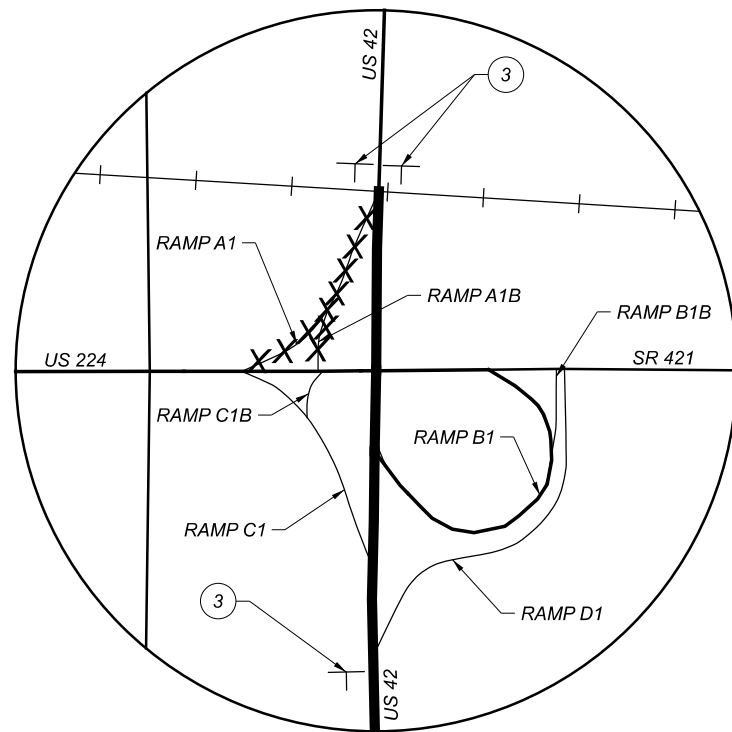
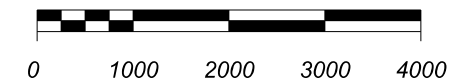
ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATION, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING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



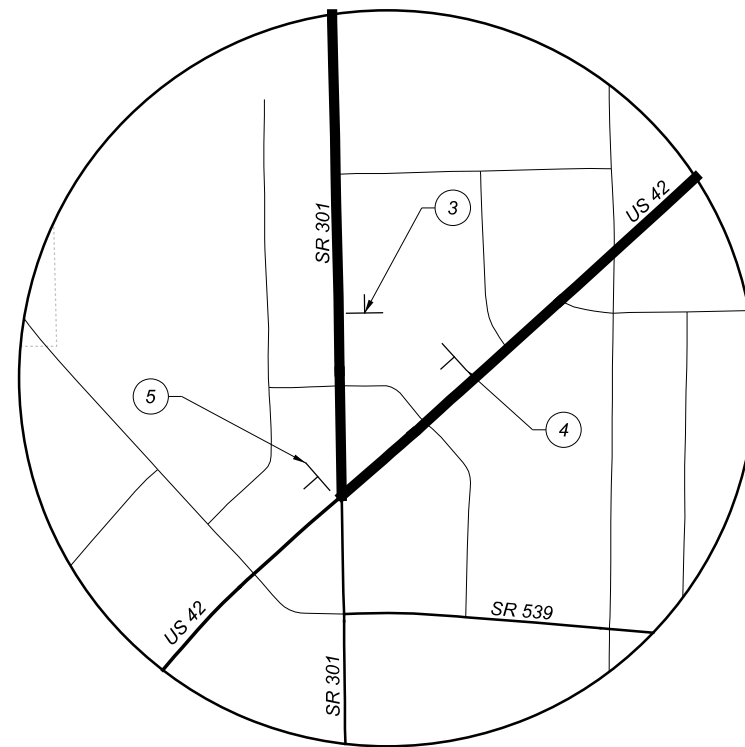
**MAP LEGEND**

- PROJECT LOCATION
- OFFICIAL STATE SIGNED DETOUR
- GATES AND BARRICADES, AS PER MT-101.60

SCALE IN FEET



**DETAIL A**



**DETAIL B**

DESIGN AGENCY

DISTRICT 3



ENGINEERING TEAM TWO

DESIGNER

JLL

REVIEWER

XXX MM-DD-YY

PROJECT ID

79761

SHEET TOTAL

17A | 79

**ITEM 614 - MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)**

**DETOUR LIMITATION:**

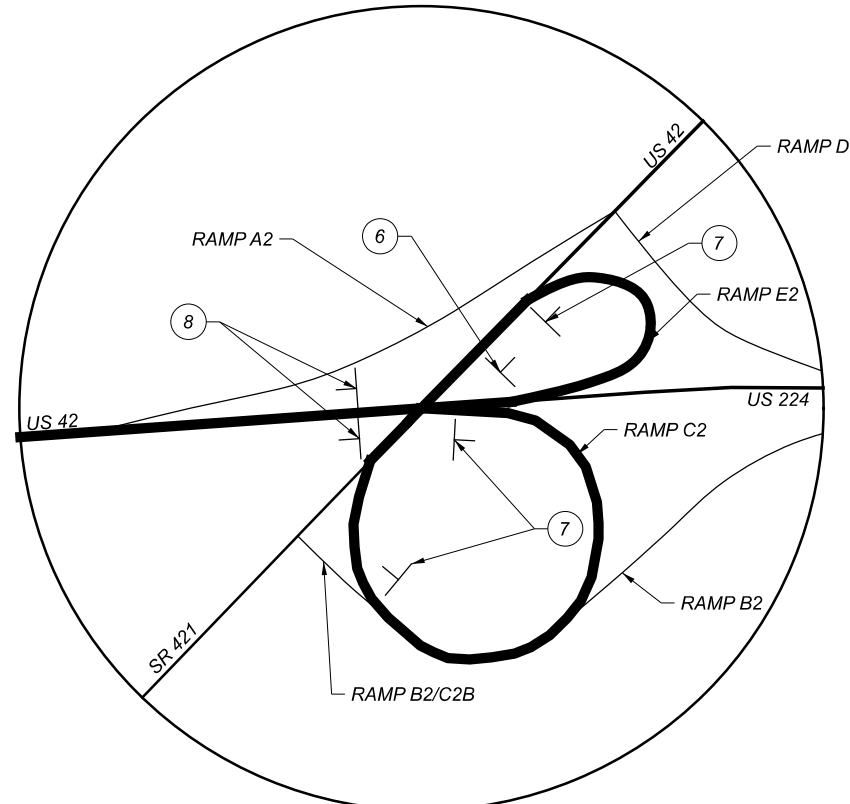
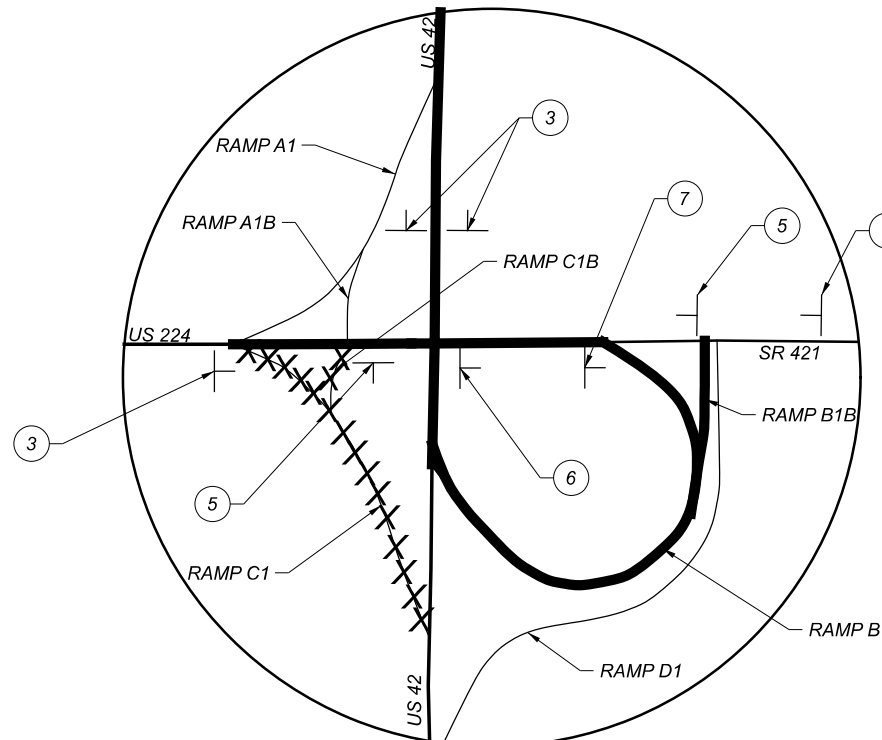
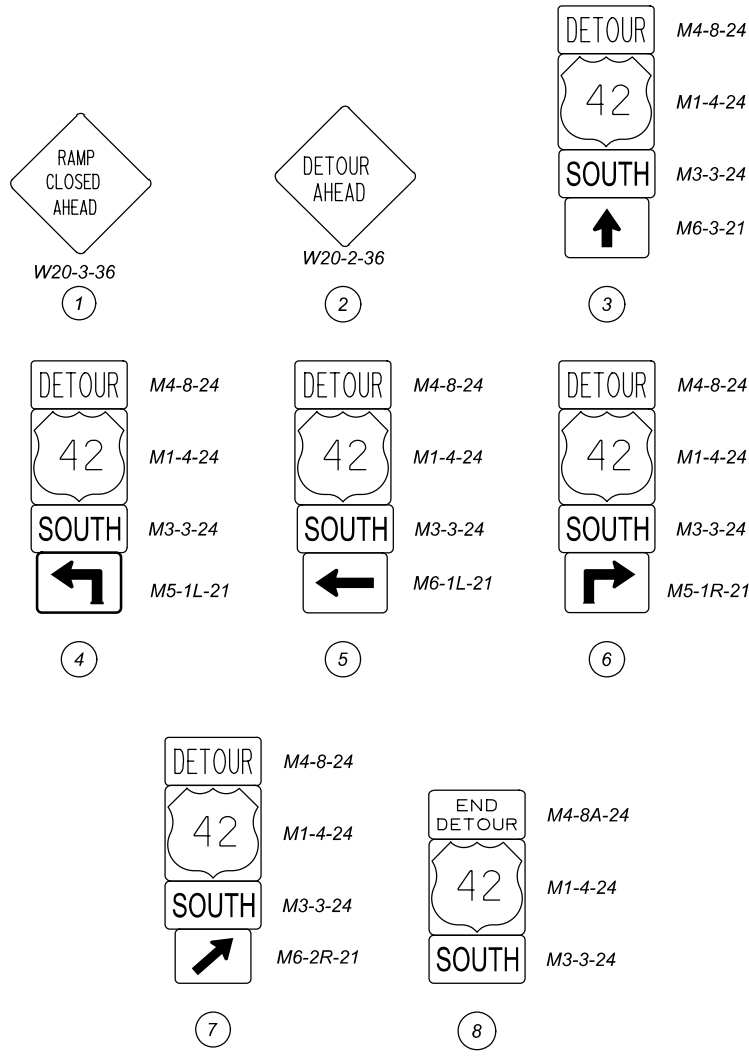
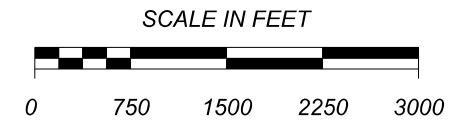
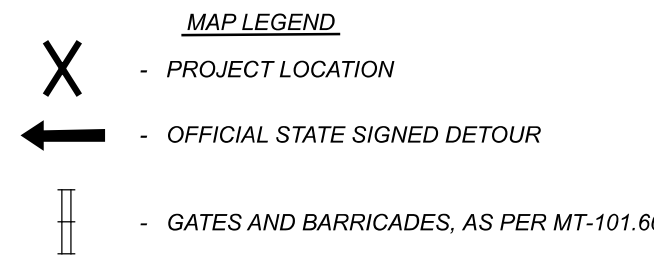
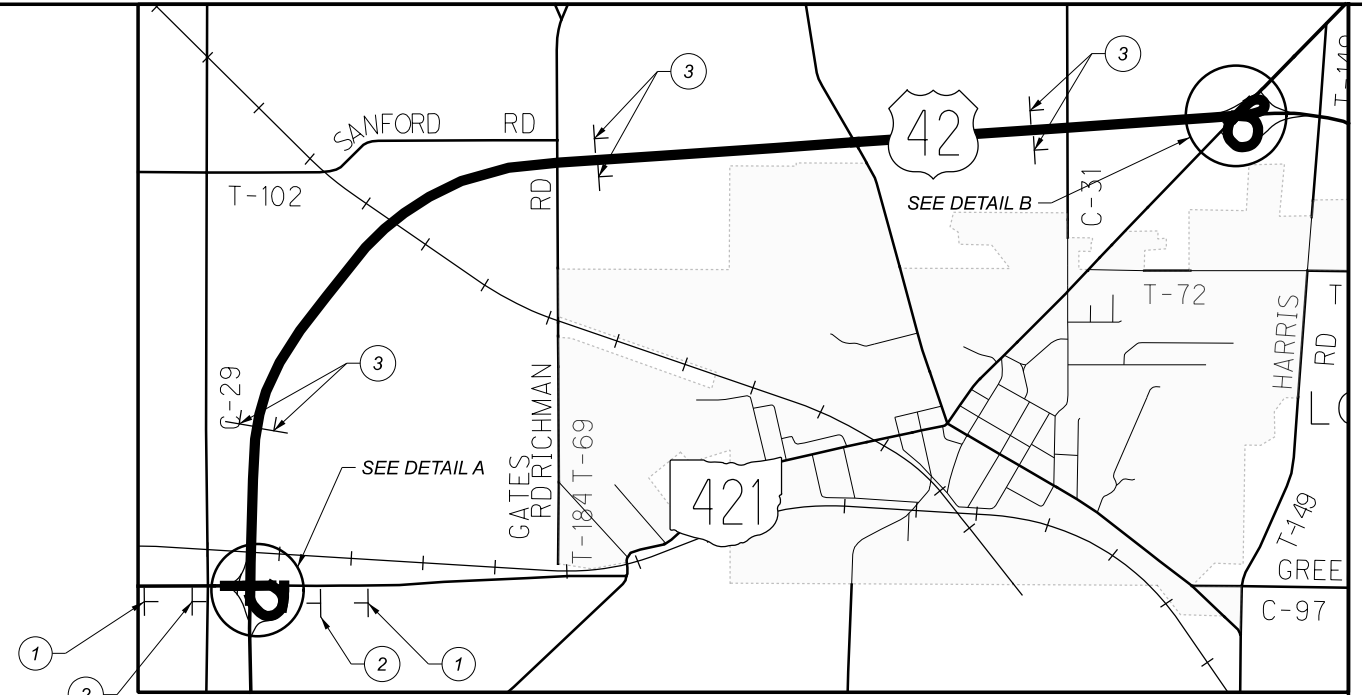
TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THREE (3) CONSECUTIVE CALENDAR DAYS. THROUGH TRAFFIC SHALL BE DETOURED AS SHOWN ON THIS SHEET.

THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT, AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, AS PER SECTION 614.02(A).

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATION, 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.



DETAIL A

DETAIL B

MAINTENANCE OF TRAFFIC DETOUR PLAN  
US 42/224 - RAMP C1

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER	JLL
REVIEWER	XXX MM-DD-YY
PROJECT ID	79761
SHEET	TOTAL
17B	79

MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: RAMP\_C1 PAPER SIZE: 11x17 (in.) DATE: 11/22/2021 TIME: 5:17:22 PM USER: ksclay  
 pw: \\ohiodot-pw.bentley.com\ohiodot-pw-02\Documents\01Active Projects\Distric 03\Medina\79761\400-Engineering\W01\Sheets\79761\_MD001.dgn

**ITEM 614 - MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)**

**DETOUR LIMITATION:**

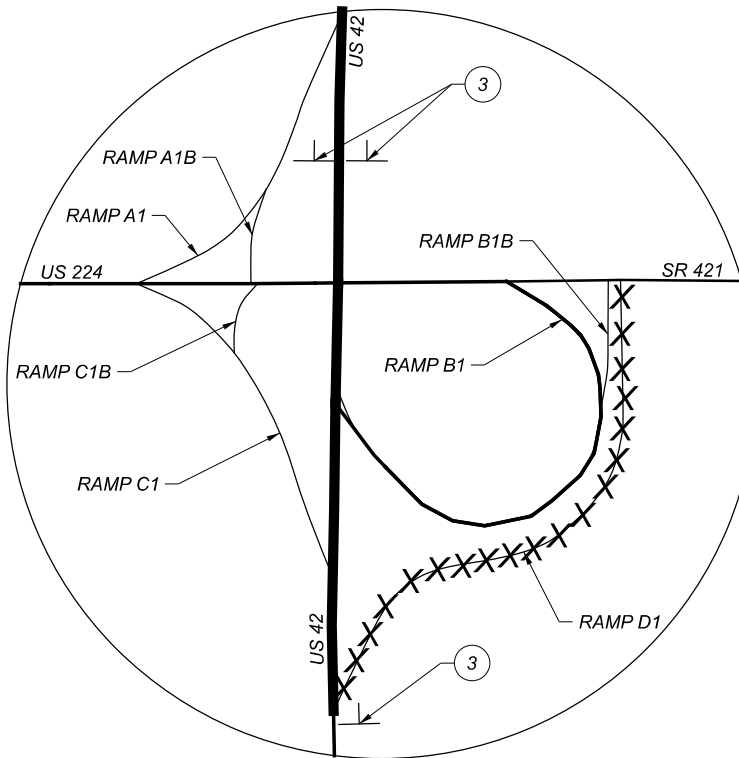
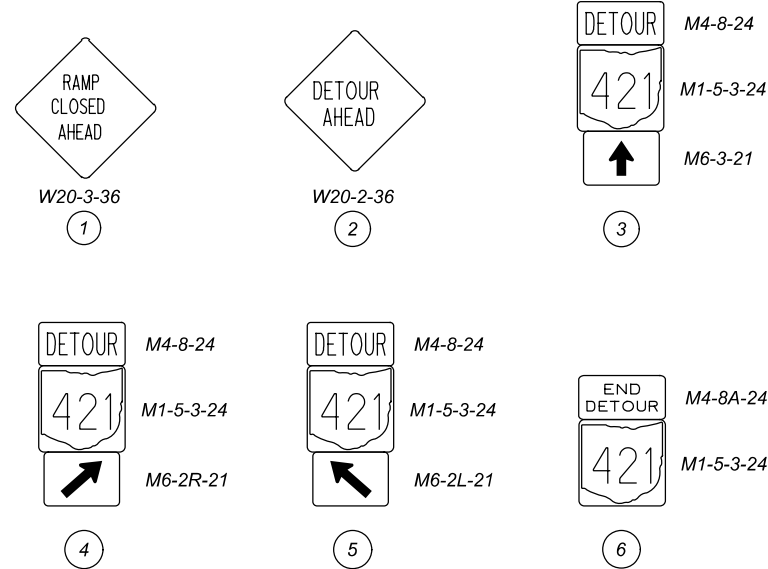
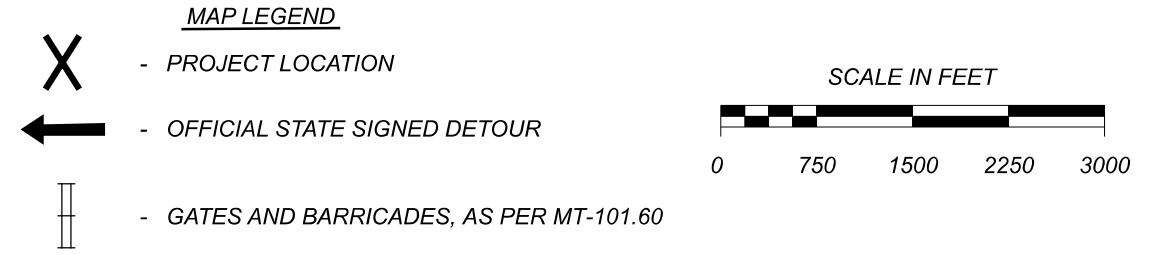
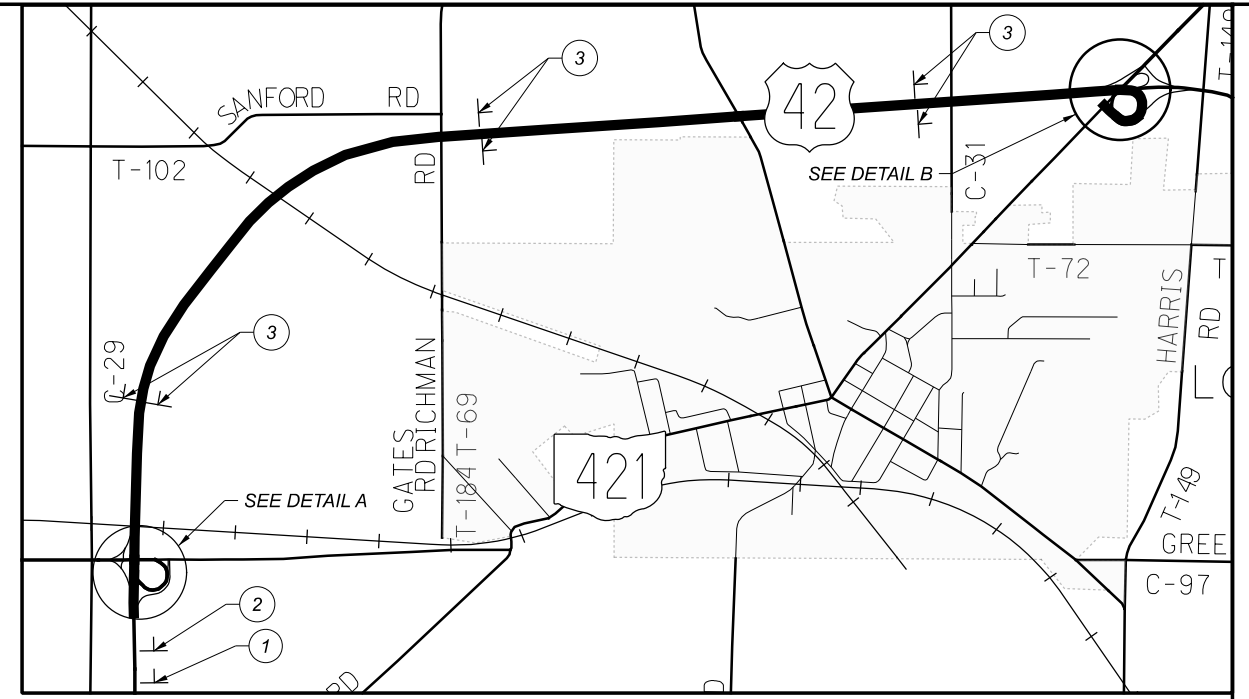
TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THREE (3) CONSECUTIVE CALENDAR DAYS. THROUGH TRAFFIC SHALL BE DETOURED AS SHOWN ON THIS SHEET.

THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING.

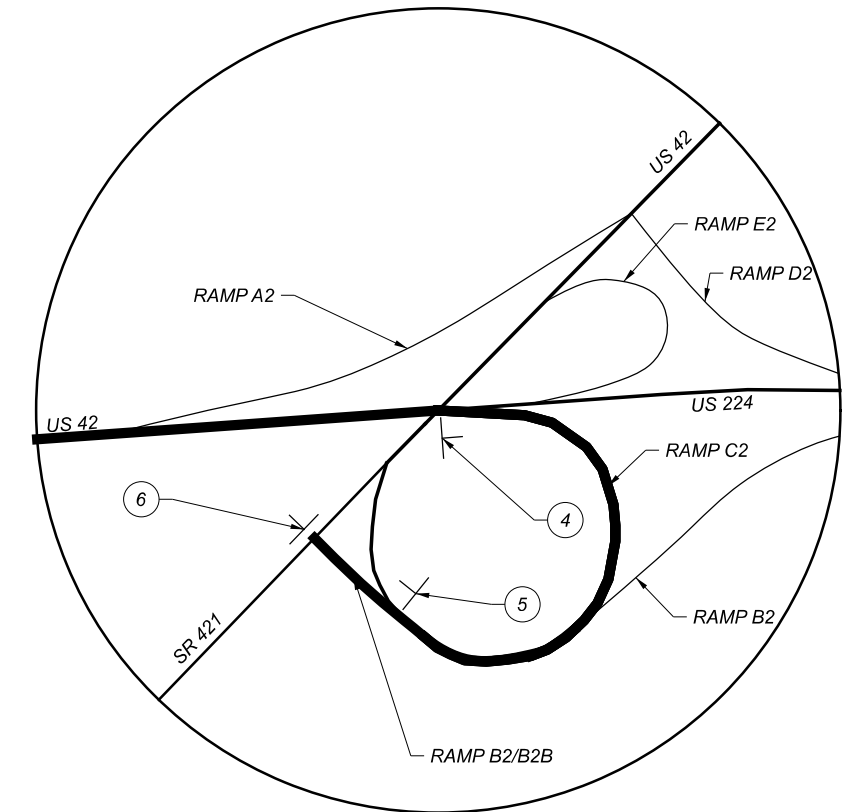
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT, AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, AS PER SECTION 614.02(A).

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATION, 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.



**DETAIL A**



**DETAIL B**

MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: RAMP.DI PAPER SIZE: 11x17 (in.) DATE: 11/22/2021 TIME: 5:17:57 PM USER: ksclay  
 pw:\ohiodot-pw\bentley.com\ohiodot-pw-02\Documents\01Active Projects\District 03\Medina\79761\400-Engineering\W01\Sheets\79761\_MD001.dgn

MAINTENANCE OF TRAFFIC DETOUR PLAN  
US 42/224 - RAMP D1

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER	JLL
REVIEWER	XXX MM-DD-YY
PROJECT ID	79761
SHEET	TOTAL
17C	79



**ITEM 614 – MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)**

**DETOUR LIMITATION:**

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THREE (3) CONSECUTIVE CALENDAR DAYS. THROUGH TRAFFIC SHALL BE DETOURED AS SHOWN ON THIS SHEET.

THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING.

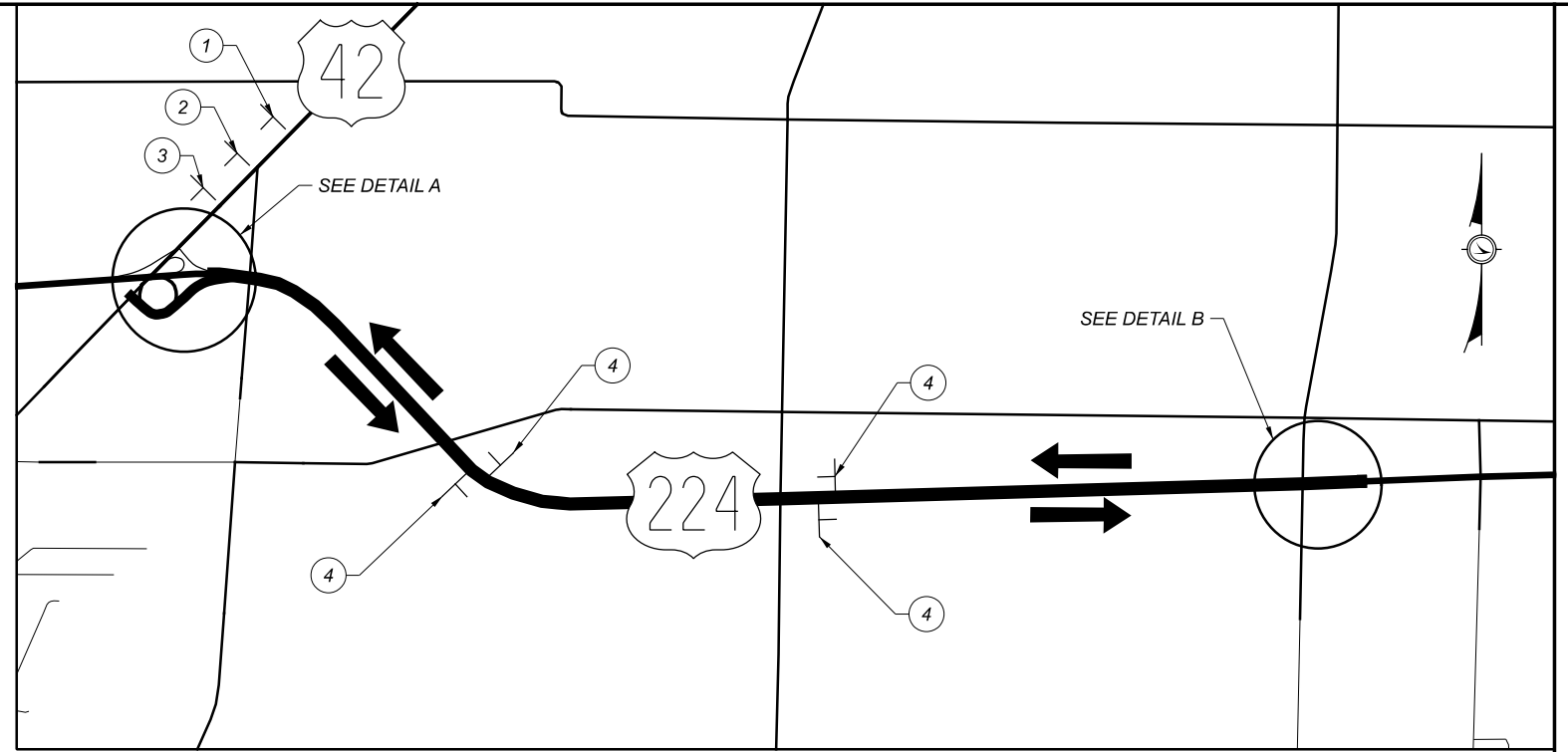
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT, AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

**INTERIM COMPLETION DATE:**




THE THREE (3) CONSECUTIVE CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE, AND FOR EACH CALENDAR DAY BEYOND THE THREE (3) CONSECUTIVE CALENDAR DAYS THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE OF \$2,400 PER DAY.

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, AS PER SECTION 614.02(A).

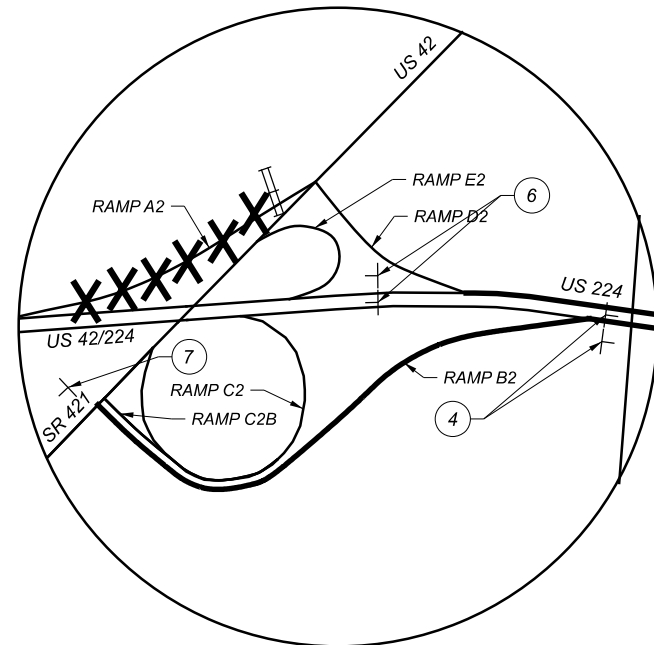
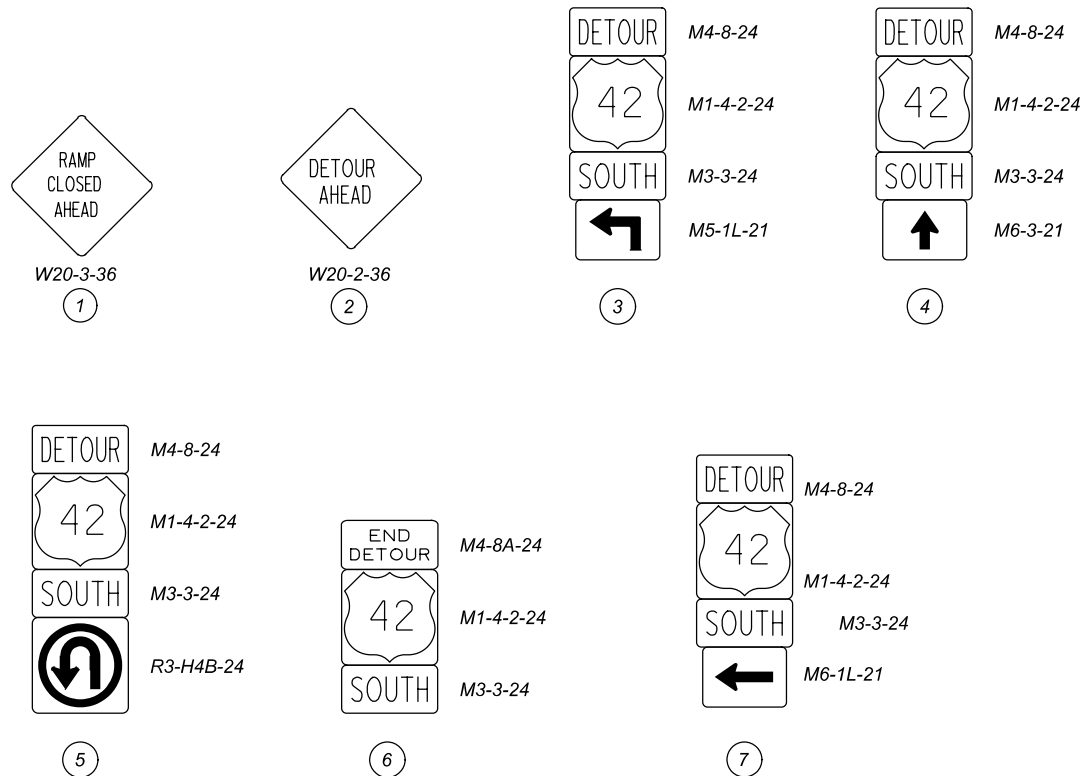
ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATION, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 – MAINTAINING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



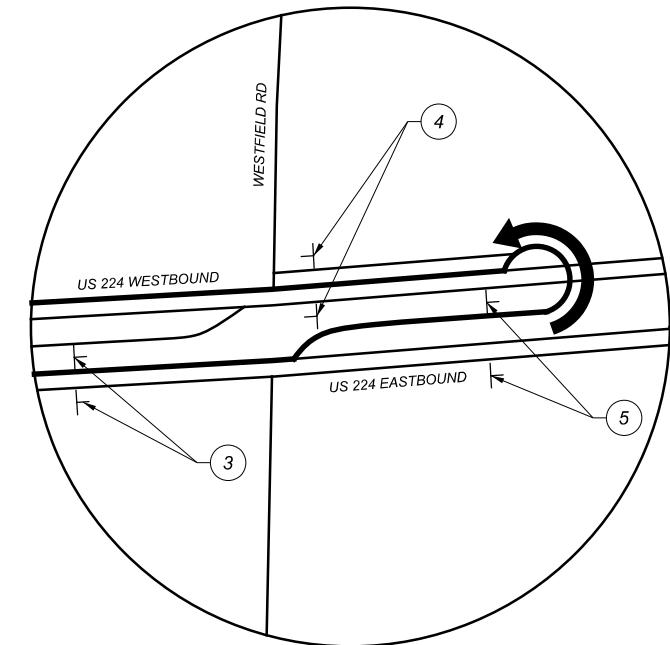
**MAP LEGEND**

-  - PROJECT LOCATION
-  - OFFICIAL STATE SIGNED DETOUR
-  - GATES AND BARRICADES, AS PER MT-101.60

**SCALE IN FEET**



**DETAIL A**



**DETAIL B**

**ITEM 614 – MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)**

**DETOUR LIMITATION:**

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THREE (3) CONSECUTIVE CALENDAR DAYS. THROUGH TRAFFIC SHALL BE DETOURED AS SHOWN ON THIS SHEET.

THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING.

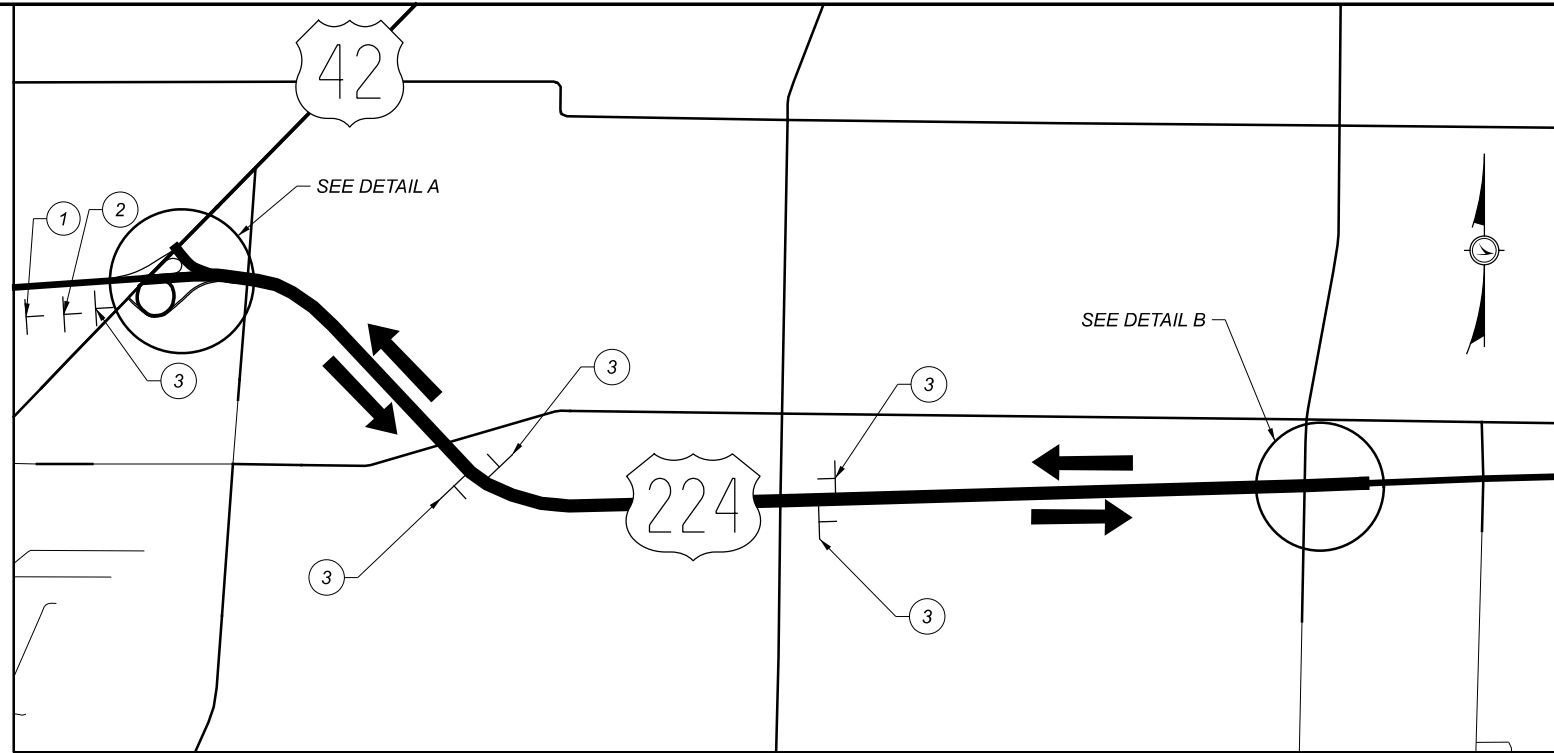
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT, AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

**INTERIM COMPLETION DATE:**




THE THREE (3) CONSECUTIVE CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE, AND FOR EACH CALENDAR DAY BEYOND THE THREE (3) CONSECUTIVE CALENDAR DAYS THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE OF \$2,400 PER DAY.

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, AS PER SECTION 614.02(A).

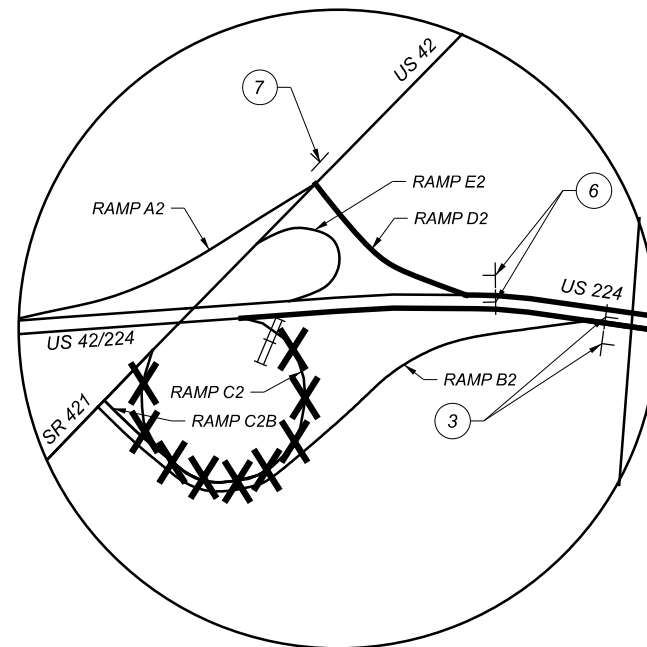
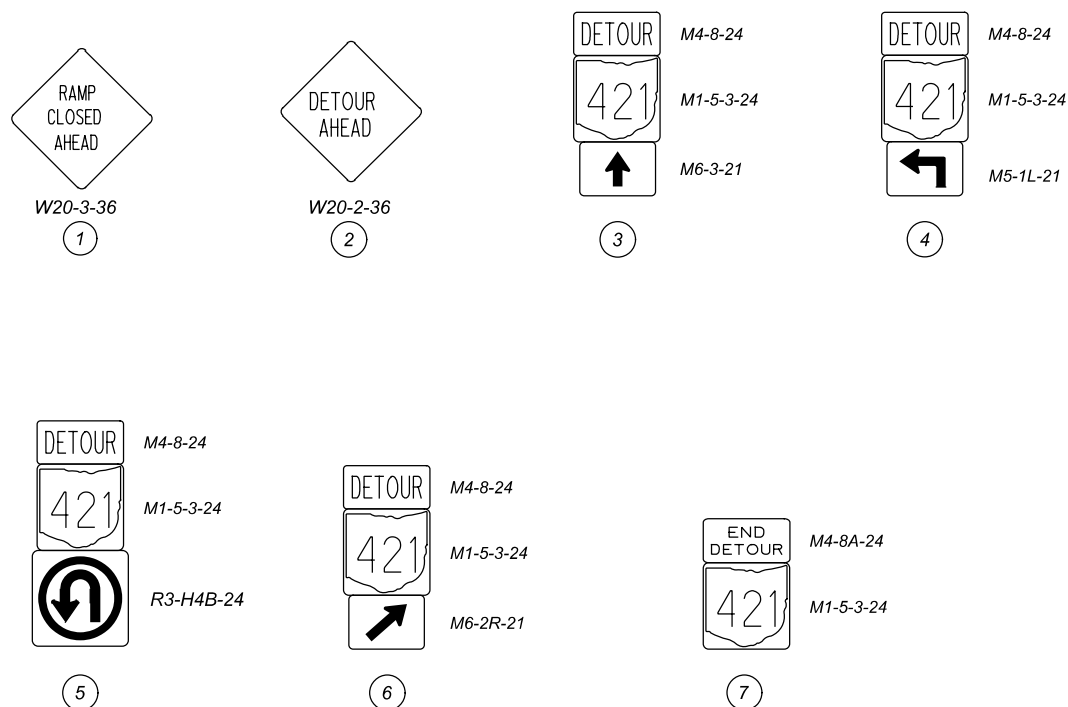
ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATION, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 – MAINTAINING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



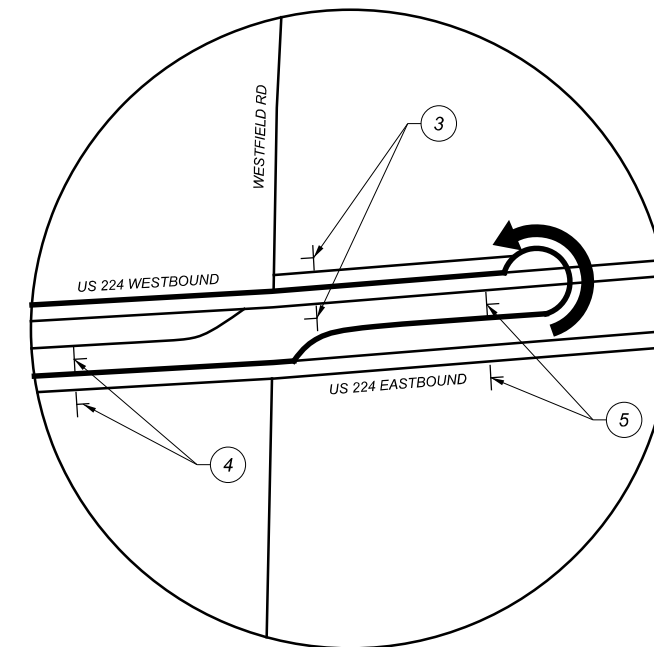
**MAP LEGEND**

-  - PROJECT LOCATION
-  - OFFICIAL STATE SIGNED DETOUR
-  - GATES AND BARRICADES, AS PER MT-101.60

**SCALE IN FEET**




**DETAIL A**



**DETAIL B**

**MAINTENANCE OF TRAFFIC DETOUR PLAN  
 US 42/224 - RAMP C2**

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER	KRB
REVIEWER	XXX
PROJECT ID	79761
SHEET	TOTAL
22B	79

MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: CENSUM1 PAPER SIZE: 17x11 (in.) DATE: 11/23/2021 TIME: 4:31:28 PM USER: ksalay  
 p:\vhodoc-pw-bentley.com\shahoc-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_GG001.dgn

SHEET NUM.						PART.						ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
11	12	29	30	31	32	01/NHS/PV	02/STR/PV	03/NHS/BR	04/STR/BR	05/SAF/OT	06/SAF/OT						
					22,325.5	21,338	987.5					202	38000	22,325.5	FT	ROADWAY	
					2,772.5	2,522.5	250					202	38300	2,772.5	FT	GUARDRAIL REMOVED, BARRIER DESIGN	
					3	3						202	42000	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
					45	40	5					202	42010	45	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
					50	47	3					202	42040	50	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
					58	54	4					202	47000	58	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
					20	18	2					202	47800	20	EACH	IMPACT ATTENUATOR REMOVED	
	50					40	10					203	10001	50	CY	EXCAVATION, AS PER PLAN	12
					310	295	15					203	20001	310	CY	EMBANKMENT, AS PER PLAN	13
					285.76	269.88	15.88					209	15000	285.76	STA	RESHAPING UNDER GUARDRAIL	
		8.37	8.62	20.7		35.87	1.82					209	60500	37.69	MILE	LINEAR GRADING	
		1.66					1.66					209	72051	1.66	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	11
					837.5	737.5	100					606	13000	837.5	FT	GUARDRAIL, TYPE 5	
					8,169.25	7,656.75	512.5					606	15050	8,169.25	FT	GUARDRAIL, TYPE MGS	
					12,781.3	12,406.3	375					606	15100	12,781.3	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
					500	500						606	15150	500	FT	GUARDRAIL, TYPE MGS HALF POST SPACING	
					2,745	2,495	250					606	15550	2,745	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS	
					46	41	5					606	26150	46	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	
					51	48	3					606	26550	51	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
					20	20						606	35002	20	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					2	2						606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
					36	32	4					606	35140	36	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	
					20	18	2					606	60012	20	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
					8	8						622	25001	8	EACH	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN	13
																EROSION CONTROL	
					1,535	130	205	55	70	5		832	30000	2,000	EACH	EROSION CONTROL	
																DRAINAGE	
	120				100	20						605	31101	120	FT	AGGREGATE DRAINS, AS PER PLAN	12
																PAVEMENT	
1,400					1,210	190						251	01042	1,400	CY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) (LONGITUDINAL)	
595					515	80						251	01042	595	CY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) (TRANSVERSE)	
	5,244				5,080	164						254	01000	5,244	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5 INCH)	
		109,283	94,726	224,268	390,828	37,649						254	01000	428,277	SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25 INCH)	
		178				178						254	01000	178	SY	PAVEMENT PLANING, ASPHALT CONCRETE (TAPER 3.25" TO 2.0")	
		356				356						254	01000	356	SY	PAVEMENT PLANING, ASPHALT CONCRETE (TAPER 3.25" TO 1.5")	
		547	474	1,122	1,955	188						254	01600	2,143	SY	PATCHING PLANED SURFACE	
	15,700				670	14,670	1,700					255	10161	16,370	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN	12
					235	235						255	10161	235	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (LONGITUDINAL CRACK)	11
	62,800				5,325	61,325	6,800					255	20000	68,125	FT	FULL DEPTH PAVEMENT SAWING	
					17,392	17,392						257	10000	17,392	SY	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT	
	50				40	10						304	20001	50	CY	AGGREGATE BASE, AS PER PLAN	12
		14,233	12,315	29,154	50,778	4,924						407	10000	55,702	GAL	TACK COAT	
		4,709	4,043	9,715	16,834	1,633						408	10001	18,467	GAL	PRIME COAT, AS PER PLAN	12
		6,797	5,833	13,967	24,125	2,472						442	00100	26,597	CY	ANTI-SEGREGATION EQUIPMENT	
		1,732	1,026	2,357	3,980	1,135						442	10000	5,115	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) PG70-22	
												442	10000	22	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) PG70-22 (SAFETY EDGE)	
	219	2,839	2,922	6,991	12,516	455						442	10301	12,971	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG70-22	12
		5,313	4,607	10,902	18,990	1,832						861	11100	20,822	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
		654	560	1,350	2,338	226						617	10100	2,564	CY	COMPACTED AGGREGATE	
		9,820	10,107	24,284	42,075	2,136						617	20000	44,211	SY	SHOULDER PREPARATION	
	3				3							618	39001	3	EACH	RUMBLE STRIPS, TRANSVERSE (ASPHALT CONCRETE), AS PER PLAN	12
		7.97	7.97	19.47	34.29	1.12						618	40600	35.41	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
		1.66				1.66						618	41000	1.66	MILE	RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE)	
		0.89										618	43000	0.89	MILE	RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE)	
										0.89							
										4,699		874	20000	4,699	FT	LONGITUDINAL JOINT PREPARATION	

GENERAL SUMMARY

DESIGN AGENCY  
DISTRICT 3



ENGINEERING  
TEAM TWO

DESIGNER  
JLL

REVIEWER  
KRB 7-7-21

PROJECT ID  
79761

SHEET TOTAL  
23 79





MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: GENSUM3 PAPER: 17x11 (in.) DATE: 11/24/2021 TIME: 12:36:27 PM USER: ksalay  
 p:\vohodoc-pw-bentley.com\shahidoc-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_GG001.dgn

SHEET NUM.						PART.						ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
31	32	51	52	53	56	01/NHS/PV	02/STR/PV	03/NHS/BR	04/STR/BR	05/SAF/OT	06/SAF/OT						
					33			33				519	11100	33	SF	PATCHING CONCRETE STRUCTURE	
					12			12				SPECIAL	51912510	12	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	55
					25			25				601	27000	25	CY	DUMPED ROCK FILL, TYPE C	
					474			474				848	10001	474	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (1.75 INCH THICK)	55
					474			474				848	20000	474	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
					9			9				848	30001	9	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	55
					27			27				848	50000	27	SY	HAND CHIPPING	
					LS			LS				848	50100	LS		TEST SLAB	
					2			2				848	50200	2	CY	FULL-DEPTH REPAIR	
					474			474				848	50320	474	SY	EXISTING CONCRETE OVERLAY REMOVED (1.25 INCH NOMINAL THICKNESS)	
					266			266				848	50340	266	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	
					240			240				SPECIAL	51900100	240	SF	COMPOSITE FIBER WRAP SYSTEM	55
																<b>STRUCTURE REPAIR (MED-42-3.10 R)</b>	
					52			52				202	32000	52	FT	CURB REMOVED	
					100			100				202	32600	100	FT	GUTTER REMOVED	
					256			256				202	98200	256	FT	REMOVAL MISC.: DECK OVERHANG	54
					90			90				202	98200	90	FT	REMOVAL MISC.: JOINT SEALER	54
					1,157			1,157				509	10001	1,157	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	55
					100			100				509	20001	100	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	54
					256			256				511	81100	256	FT	CONCRETE, MISC.: CLASS QC SCC CONCRETE, BRIDGE DECK, DECK OVERHANG	55
					138			138				512	10100	138	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
					28			28				512	10300	28	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
					90			90				516	31000	90	FT	JOINT SEALER	
					3			3				516	45305	3	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	55
					LS			LS				516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	55
					38			38				519	11100	38	SF	PATCHING CONCRETE STRUCTURE	
					18			18				601	21060	18	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
					25			25				601	27000	25	CY	DUMPED ROCK FILL, TYPE C	
					644			644				848	10001	644	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (1.75 INCH THICK)	55
					644			644				848	20000	644	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
					13			13				848	30001	13	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	55
					36			36				848	50000	36	SY	HAND CHIPPING	
					LS			LS				848	50100	LS		TEST SLAB	
					4			4				848	50200	4	CY	FULL-DEPTH REPAIR	
					644			644				848	50320	644	SY	EXISTING CONCRETE OVERLAY REMOVED (1.25 INCH NOMINAL THICKNESS)	
					361			361				848	50340	361	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	
					240			240				SPECIAL	51900100	240	SF	COMPOSITE FIBER WRAP SYSTEM	55
																<b>STRUCTURE REPAIR (MED-42-4.60 L)</b>	
					1			1				202	11301	1	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	54
					94			94				202	98200	94	FT	REMOVAL MISC.: JOINT SEALER	54
					1			1				511	46010	1	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
					26			26				512	10300	26	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
					94			94				516	31000	94	FT	JOINT SEALER	
					238			238				517	75600	238	FT	DEEP BEAM BRIDGE RETROFIT RAILING	
					238			238				517	76300	238	FT	RAILING, MISC.: DEEP BEAM RAILING PANELS	55
					6			6				519	11100	6	SF	PATCHING CONCRETE STRUCTURE	
					2			2				SPECIAL	51912510	2	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	55
					574			574				848	10001	574	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (1.75 INCH THICK)	55
					574			574				848	20000	574	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
					11			11				848	30001	11	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	55
					32			32				848	50000	32	SY	HAND CHIPPING	
					LS			LS				848	50100	LS		TEST SLAB	
					12			12				848	50200	12	CY	FULL-DEPTH REPAIR	
					574			574				848	50320	574	SY	EXISTING CONCRETE OVERLAY REMOVED (1.25 INCH NOMINAL THICKNESS)	
					322			322				848	50340	322	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	

GENERAL SUMMARY

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER	JLL
REVIEWER	KRB 7-7-21
PROJECT ID	79761
SHEET	25
TOTAL	79


MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: GENSUM6 PAPER: 17x11 (in.) DATE: 11/24/2021 TIME: 12:56:54 PM USER: ksalay  
 p:\ohodot-pw-bentley.com\shahid-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_GG001.dgn

SHEET NUM.						PART.						ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
14	15	16	51	52	61	01/NHS/PV	02/STR/PV	03/NHS/BR	04/STR/BR	05/SAF/OT	06/SAF/OT						
<b>MAINTENANCE OF TRAFFIC</b>																	
		500			500								614	11110	500	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
LS	24				4			24	4				614	12380	28	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
13										13			614	12420	LS		DETOUR SIGNING
50										10			614	12460	13	EACH	WORK ZONE MARKING SIGN
													614	13000	50	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
	96				22			96	22				614	13310	118	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)
	96				22			96	22				614	13350	118	EACH	OBJECT MARKER, ONE WAY
	36					36							614	18601	36	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
		25.32		29.91		53.19		2.04					614	20560	55.23	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
					0.19				0.19				614	21200	0.19	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I
										2.67			614	21550	2.67	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
					0.42				0.42				614	22210	0.42	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I
		53.94		62.91		112.02		4.83					614	22360	116.85	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT
		5,754		11,544		15,711		1,587					614	23680	17,298	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT
					24				24				614	26400	24	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
	4,560		345	693	1,100	993		45					614	26610	1,038	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT
	132					132							622	41100	5,660	FT	PORTABLE BARRIER, UNANCHORED
													808	18700	132	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
<b>INCIDENTALS</b>																	
						LS	LS	LS	LS	LS	LS		614	11000	LS		MAINTAINING TRAFFIC
						8	1						619	16020	9	MNTH	FIELD OFFICE, TYPE C
						LS	LS	LS	LS	LS	LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING
						LS	LS	LS	LS	LS	LS		624	10000	LS		MOBILIZATION

GENERAL SUMMARY

DESIGN AGENCY  
**DISTRICT 3**



ENGINEERING  
**TEAM TWO**

DESIGNER  
 JLL

REVIEWER  
 KRB 7-7-21

PROJECT ID  
 79761

SHEET TOTAL  
 28 | 79




MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: MED-42 SB PAPER SIZE: 11x17 (in.) DATE: 11/23/2021 TIME: 4:00:35 PM USER: ksalay  
 p:\ohiodot-pw\benhiety\comphodot-pw-02\Documents\01Active Projects\District\03\_Medina\79761\400-Engineering\Roadway\Sheets\79761\_G000.dgn

PLAN SPLIT	COUNTY	ROUTE	LOG POINT TO LOG POINT		DIRECTION	LENGTH		AVERAGE WIDTH	AVERAGE PAVED SHOULDER WIDTH		PAVEMENT AREA	254		407		442		861	618	AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA	209	408	617	617		
			MILE	FEET		SL	SR		PAVEMENT PLANING, ASPHALT CONCRETE (3.25")	PATCHING PLANED SURFACE		TACK COAT (@ 0.08 GAL/SY)	TACK COAT (@ 0.05 GAL/SY)	ANTI-SEGREGATION EQUIPMENT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (1.50")	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (1.50")	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) (1.75")	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	SL	SR	LINEAR GRADING		PRIME COAT, AS PER PLAN (@ 0.40 GAL/SY)	COMPACTED AGGREGATE	SHOULDER PREPARATION			
			STRAIGHT LINE MILEAGE	FT		FT	FT		SY	SY		GAL	GAL	CY	CY	CY	CY	MILE	FT	FT	SY		MILE	GAL	CY	INCHES	SY	
02/STR/PV	MED	42	2.78	2.89	SB	0.11	581	24.0	4.0	8.0	2,324	2,324	12	186	116	140	75	22	113	0.22	2.0	2.0	258	0.22	103	14	258	
02/STR/PV	MED	42	2.89	3.03	SB	0.14	739	33.0	4.0	8.0	3,695	3,695	18	296	185	245	127	27	180	0.28	2.0	2.0	328	0.28	131	18	328	
02/STR/PV	MED	42	3.03	3.06	SB	0.03	158	24.0	4.0	8.0	632	632	3	51	32	38	20	6	31	0.06	2.0	2.0	70	0.06	28	4	70	
01/NHS/PV	MED	42	3.06	3.10	SB	0.04	211	24.0	4.0	8.0	844	844	4	68	42	51	27	8	41	0.08	2.0	2.0	94	0.08	38	5	94	
CONCRETE STRUCTURE MED-42-3.10L						0.034	178																					
01/NHS/PV	MED	42	3.13	3.19	SB	0.06	297	24.0	4.0	8.0	1,188	1,188	6	95	59	72	39	11	58	0.11	2.0	2.0	132	0.11	53	7	132	
01/NHS/PV	MED	42	3.19	3.29	SB	0.10	528	36.5	4.0	8.0	2,845	2,845	14	228	142	193	99	20	138	0.20	2.0	2.0	235	0.20	94	13	235	
01/NHS/PV	MED	42	3.29	4.59	SB	1.30	6,864	24.0	4.0	8.0	27,456	27,456	137	2,196	1,373	1,652	890	254	1,335	2.60	2.0	2.0	3,051	2.60	1,220	169	3,051	
CONCRETE STRUCTURE MED-42-4.60L						0.032	169																					
01/NHS/PV	MED	42	4.62	4.83	SB	0.21	1,098	24.0	4.0	8.0	4,392	4,392	22	351	220	264	142	41	214	0.42	2.0	2.0	488	0.42	195	27	488	
01/NHS/PV	MED	42	4.83	4.88	SB	0.05	264	29.7	4.0	8.0	1,223	1,223	6	98	61	79	41	10	59	0.10	2.0	2.0	117	0.10	47	7	117	
01/NHS/PV	MED	42	4.88	5.37	SB	0.49	2,587	24.0	4.0	8.0	10,348	10,348	52	828	517	623	335	96	503	0.98	2.0	2.0	1,150	0.98	460	64	1,150	
CONCRETE STRUCTURE MED-42-5.39L						0.047	250																					
01/NHS/PV	MED	42	5.42	5.87	SB	0.45	2,390	24.0	4.0	8.0	9,560	9,560	48	765	478	575	310	89	465	0.91	2.0	2.0	1,062	0.91	425	59	1,062	
CONCRETE STRUCTURE MED-42-5.89L						0.033	173																					
01/NHS/PV	MED	42	5.90	6.34	SB	0.44	2,309	24.0	4.0	8.0	9,236	9,236	46	739	462	556	299	86	449	0.87	2.0	2.0	1,026	0.87	410	57	1,026	
01/NHS/PV	MED	42	6.34	6.41	SB	0.07	370	29.7	4.0	8.0	1,714	1,714	9	137	86	110	58	14	83	0.14	2.0	2.0	164	0.14	66	9	164	
01/NHS/PV	MED	42	6.41	6.64	SB	0.23	1,214	24.0	4.0	8.0	4,856	4,856	24	388	243	292	157	45	236	0.46	2.0	2.0	540	0.46	216	30	540	
01/NHS/PV	MED	42	6.64	6.80	SB	0.16	845	35.7	4.0	8.0	4,479	4,479	22	358	224	303	155	31	218	0.32	2.0	2.0	376	0.32	150	21	376	
01/NHS/PV	MED	42	6.80	6.91	SB	0.11	581	33.0	4.0	8.0	2,905	2,905	15	232	145	192	100	22	141	0.22	2.0	2.0	258	0.22	103	14	258	
01/NHS/PV	RAMP A1 (US 42 SB TO US 224 WB)					0.08	403	23.1	3.0	6.0	1,438	1,438	7	115	72	93		60	70		2.0	2.0	179	0.15	72	10	179	
01/NHS/PV	RAMP A1B (US 42 SB TO SR 421)					0.01	65	15.8	3.0	6.0	178	178	1	14	9	10		7	9		2.0	2.0	29	0.02	12	2	29	
02/STR/PV	RAMP A2 (US 42 SB TO US 42 SB)					0.16	858	13.0	3.0	6.0	2,098	2,098	10	168	105	112		87	102		2.0	2.0	381	0.33	153	21	381	
02/STR/PV	RAMP E2 (US 42 NB TO US 42 SB)					0.07	380	13.9	3.0	6.0	966	966	5	77	48	53		40	47		2.0	2.0	169	0.14	67	9	169	
01/NHS/PV	EXTRA AREA FOR INTERSECTIONS										798	798	4	64	40	72	33		39									
01/NHS/PV	EXTRA AREA FOR MEDIAN CROSSOVERS										305	305	2	24	15		13		15									
02/STR/PV	EXTRA AREA FOR INTERSECTIONS										1,194	1,194	6	96	60	108	50		58									
02/STR/PV	EXTRA AREA FOR MEDIAN CROSSOVERS										52	52	1	4	3		2		3									
SOUTHBOUND SUBTOTAL (01/NHS/PV)												83,765	419	6,700	4,188	5,137	2,698	794	4,073	7.41			7.59	3,561	494	8,901		
SOUTHBOUND SUBTOTAL (02/STR/PV)												10,961	55	878	549	696	224	232	534	0.56			1.03	482	66	1,206		
TOTALS CARRIED TO THE GENERAL SUMMARY												94,726	474	7,578	4,737	5,833	2,922	1,026	4,607	7.97			8.62	4,043	560	10,107		

PAVEMENT & SHOULDER DATA  
MED-42 SOUTHBOUND

DESIGN AGENCY  
DISTRICT 3



ENGINEERING TEAM TWO

DESIGNER  
JLL

REVIEWER  
KRB 6-30-21

PROJECT ID  
79761

SHEET TOTAL  
30 79



### GUARDRAIL SUB-SUMMARY

LABEL	ITEM	EXTENSION	QUANTITY FROM GUARDRAIL AT SLM:													01/NHS/PV	02/STR/PV	TOTAL QUANTITY	UNIT	DESCRIPTION	
			2.61	3.05	3.15/6.35	3.50/4.32	4.60	5.39	5.75/5.89	6.42	6.86	11.92	12.76	14.43	14.70						15.44
R1	202	38000	850	755.5	1,326.25	1,775	2,968.75	2,643.75	2,662.5	1,437.5	1,162.5	975	1,893.75	2,200	787.5	887.5	21,338	987.5	22,325.5	FT	GUARDRAIL REMOVED
R4	202	38300		375	547.5	175	300	225	475		400		275				2,522.5	250	2,772.5	FT	GUARDRAIL REMOVED, BARRIER DESIGN
R8	202	42000									1					2	3		3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A
R9	202	42010	4	2	6	4	3	2	5	1	8	2	2	2	2	2	40	5	45	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E
R10	202	42040		4	3	4	5	4	7	3	5	2	4	2	2	5	47	3	50	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T
R24	202	47000	4	3	9	2	8	8	10		6		8			54	4	58	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
R27	202	47800		3	1	2	2	2	4		4		2			18	2	20	EACH	IMPACT ATTENUATOR REMOVED	
E2-A	203	20001	10	15	25	30	35	35	35	15	25	10	25	25	10	15	295	15	310	CY	EMBANKMENT, AS PER PLAN
E3	209	15000	10.500	13.300	21.978	22.625	35.455	30.818	36.010	15.250	21.635	11.000	23.818	23.250	9.125	11.000	269.883	15.880	285.763	STA	RESHAPING UNDER GUARDRAIL
G4	606	13000	100				187.5	187.5	175				187.5				737.5	100	837.5	FT	GUARDRAIL, TYPE 5
G13	606	15050	375	710.5	1,158.75	262.5	356.25	43.75	1,725	25	700	975	137.5		787.5	912.5	7,656.75	512.5	8,169.25	FT	GUARDRAIL, TYPE MGS
G14	606	15100	375			1,437.5	2,425	2,412.5	637.5	1,412.5	312.5		1,568.75	2,200			12,406.25	375	12,781.25	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS
G15	606	15150			150	75			125		150						500		500	FT	GUARDRAIL, TYPE MGS HALF POST SPACING
G22	606	15550		375	520	175	300	225	475		400		275				2,495	250	2,745	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS
A9	606	26150	4	2	6	4	3	2	5	1	8	2	2	2	2	3	41	5	46	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016
A13	606	26550		4	3	4	5	4	7	3	6	2	4	2	2	5	48	3	51	EACH	ANCHOR ASSEMBLY, MGS TYPE T
B18	606	35002		2	8	2			2		6						20		20	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1
B26	606	35102		1	1												2		2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2
B31	606	35140	4				8	8	8				8				32	4	36	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4
I2	606	60012		3	1	2	2	2	4		4		2				18	2	20	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)
L1	622	25001		4	4												8		8	EACH	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN
M4	626	00110	12	15	25	24	37	32	36	17	24	12	26	24	10	12	288	18	306	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL

### CONCRETE REPAIR SUB-SUMMARY

EASTBOUND PAVEMENT REPAIRS (01/NHS/PV)												
SLM	LANE	WIDTH	LENGTH	INDIVIDUAL REPAIR AREA	TYPE OF REPAIR	NUMBER OF REPAIRS	REPAIR TYPES					
							255	255	255	257		
BEGIN	END	FT	FT	SY			FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (13.0" CONCRETE)	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (LONGITUDINAL CRACK)	FULL DEPTH PAVEMENT SAWING	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT		
							SY	SY	FT	SY		
15.30	15.40	LT	12	6	8.00	TRANS	14	112		504		
		RT	12	6	8.00	TRANS	3	24		108		
		LANE LINE	2	20	4.44	LONG	1		4	44		
15.40	15.50	LT	12	6	8.00	TRANS	6	48		216		
		RT	12	6	8.00	TRANS	8	64		288		
		LANE LINE	2	20	4.44	LONG	2		9	88	9,838	
15.50	15.61	LT	12	6	8.00	TRANS	1	8		36		
		RT	12	6	8.00	TRANS	9	72		324		
		LANE LINE	2	20	4.44	LONG	6		27	264		
		EDGE LINE	2	20	4.44	LONG	6		27	264		
<b>EASTBOUND SUB-TOTAL</b>							<b>328</b>	<b>67</b>	<b>2,136</b>	<b>9,838</b>		


WESTBOUND PAVEMENT REPAIRS (01/NHS/PV)												
SLM	LANE	WIDTH	LENGTH	INDIVIDUAL REPAIR AREA	TYPE OF REPAIR	NUMBER OF REPAIRS	REPAIR TYPES					
							255	255	255	257		
BEGIN	END	FT	FT	SY			FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (13.0" CONCRETE)	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (LONGITUDINAL CRACK)	FULL DEPTH PAVEMENT SAWING	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT		
							SY	SY	FT	SY		
15.40	15.50	LT	12	6	8.00	TRANS	6	48		216		
		RT	12	6	8.00	TRANS	3	24		108		
		LANE LINE	2	20	4.44	LONG	9		40	396	7,554	
		EDGE LINE	2	20	4.44	LONG	6		27	264		
15.50	15.61	LT	12	6	8.00	TRANS	11	88		396		
		RT	12	6	8.00	TRANS	6	48		216		
		LANE LINE	2	20	4.44	LONG	8		36	352		
		EDGE LINE	2	20	4.44	LONG	4		18	176		
<b>WESTBOUND SUB-TOTAL</b>							<b>208</b>	<b>121</b>	<b>2,124</b>	<b>7,554</b>		
<b>CONTINGENCY</b>							<b>134</b>	<b>47</b>	<b>1,065</b>			
<b>TOTALS CARRIED TO THE GENERAL SUMMARY (01/NHS/PV)</b>							<b>670</b>	<b>235</b>	<b>5,325</b>	<b>17,392</b>		

MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 11/23/2021 TIME: 2:55:54 PM USER: ksalay p:\v\hobol-pw-bentley.com\shahid-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_05001.dgn

GUARDRAIL/CONCRETE REPAIR SUB-SUMMARY

DESIGN AGENCY  
DISTRICT 3



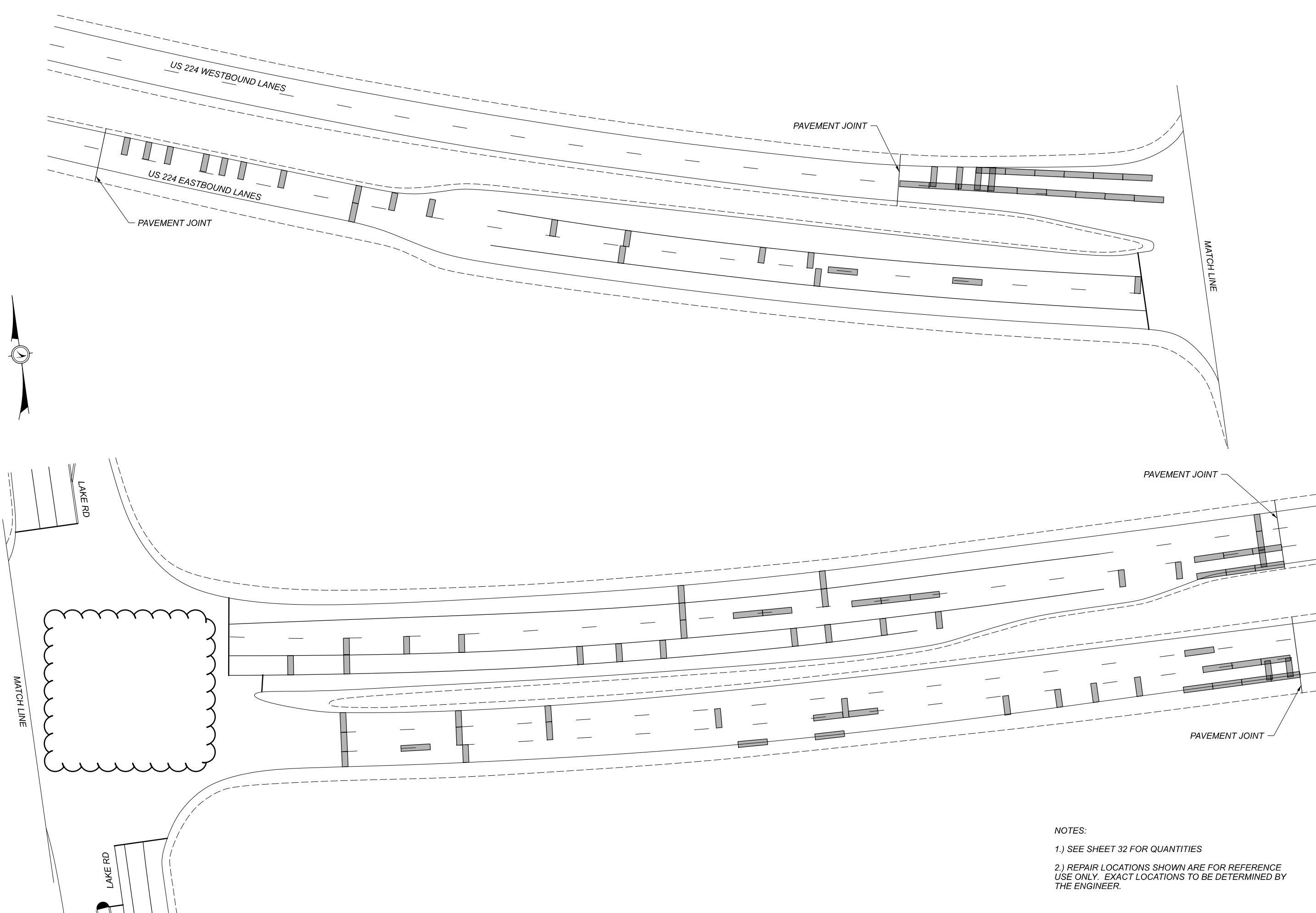
ENGINEERING TEAM TWO

DESIGNER  
JLL

REVIEWER  
ACM 6-24-21

PROJECT ID  
79761

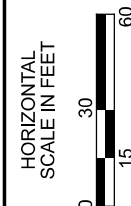
SHEET TOTAL  
32 | 79



NOTES:

1.) SEE SHEET 32 FOR QUANTITIES

2.) REPAIR LOCATIONS SHOWN ARE FOR REFERENCE.  
USE ONLY. EXACT LOCATIONS TO BE DETERMINED BY  
THE ENGINEER.



PLAN VIEW  
MED-224/LAKE RD CONCRETE REPAIRS

DESIGN AGENCY

DISTRICT 3



ENGINEERING  
TEAM TWO

DESIGNER

JLL

REVIEWER

ACM 6-24-21

PROJECT ID

79761

SHEET

33

TOTAL

79



MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: MED-42-PM PAPER: MED-224-1.89 DATE: 11/24/2021 TIME: 11:28:26 AM USER: ksalczy  
 pw:\\ohiodot-pw\benlody.com\ohiodot-pw-02\Documents\01Active Projects\District 03\Medina\79761\400-Engineering\Traffic\Sheets\79761\_T5000.dgn

**AUXILIARY & LONG LINE MARKINGS**

PLAN SPLIT	COUNTY	ROUTE	STATION / SLM			HIGHWAY MILES	DESCRIPTION	614			642	644		807			850			644						807				850									
			FROM	TO	MILE			WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	REMOVAL OF PAVEMENT MARKING (EXISTING EDGE LINE)	REMOVAL OF PAVEMENT MARKING (EXISTING STOP LINE)	REMOVAL OF PAVEMENT MARKING (EXISTING LANE ARROW)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (WHITE)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (YELLOW)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CENTER LINE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 8"	GROOVING FOR 4" RECESSED PAVEMENT MARKINGS, ASPHALT	GROOVING FOR 6" RECESSED PAVEMENT MARKINGS, ASPHALT	GROOVING FOR 8" RECESSED PAVEMENT MARKINGS, ASPHALT	STOP LINE	TRANSVERSE/DIAGONAL LINE (WHITE)	TRANSVERSE/DIAGONAL LINE (YELLOW)	LANE ARROW		WRONG WAY ARROW	SPEED MEASUREMENT MARKING	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (WHITE)	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (YELLOW)	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE EPOXY PAVEMENT MARKING, CENTER LINE	GROOVING FOR 4" RECESSED PAVEMENT MARKINGS, CONCRETE	GROOVING FOR 6" RECESSED PAVEMENT MARKINGS, CONCRETE			
																											LEFT	RIGHT									24"	24"	24"
02/STR/PV 05/SAF/OT	MED	42	1.89	2.78	0.89	TWO-LANE PAVEMENT MARKINGS		2.67		945											63	159	254		2														
02/STR/PV 01/NHS/PV 05/SAF/OT	MED	42	2.78	3.06	0.28	NORTHBOUND LONG LINE MARKINGS	0.84		1.68			0.56																											
02/STR/PV 01/NHS/PV 05/SAF/OT			3.06	6.91	3.85		11.55		23.10	312	7.70																												
02/STR/PV 01/NHS/PV 05/SAF/OT			2.78	6.91	4.13		11.55		23.10	306	7.70				4.13	4.13	4.13		104		12.39	104																	
02/STR/PV 01/NHS/PV 05/SAF/OT			2.78	3.06	0.28	11.55		23.10	306	7.70				4.13	4.13	4.13		102		12.39	102																		
02/STR/PV 01/NHS/PV 05/SAF/OT			2.78	6.91	4.13									4.13	4.13	4.13		102		12.39	102																		
02/STR/PV 01/NHS/PV 05/SAF/OT			3.06	6.91	3.85									108				8			2																		
01/NHS/PV 05/SAF/OT	MED	42	3.11	3.29	0.18	SB EXIT RAMP AT US 224 (RAMP A1)		0.54	2,367													104																	
01/NHS/PV 05/SAF/OT	MED	42	3.11	3.14	0.03	SB EXIT RAMP AT SR 421 (RAMP A1B)		0.12	90													30																	
01/NHS/PV 05/SAF/OT	MED	42	2.88	3.11	0.23	NB EXIT RAMP AT US 224/SR 421 (RAMP D1)	0.09	1.02	555	102												34	107																
02/STR/PV 05/SAF/OT	MED	42	6.80	6.88	0.08	SB ENTRANCE RAMP AT US 42 (RAMP A2)	0.18	0.93	300																														
01/NHS/PV 05/SAF/OT	MED	42	6.82	7.12	0.30	NB EXIT RAMP AT US 42 (RAMP C2)	0.09	1.23	627														61																
02/STR/PV 05/SAF/OT	MED	42	7.08	7.12	0.04	NB EXIT RAMP AT SR 421 (RAMP C2B)		0.12	45													15																	
02/STR/PV 05/SAF/OT	MED	42	6.88	7.24	0.36	SB ENTRANCE RAMP AT US 42 (RAMP E2)	0.18	0.42	342																														
05/SAF/OT	CONCRETE BRIDGE DECKS																																						
SUBTOTAL (01/NHS/PV)							23.28		49.11	4,167	300	15.40	308									172	272	8		6	2												
SUBTOTAL (02/STR/PV)							2.04	2.67	4.83	1,587	45	1.12											78	159	254		2												
SUBTOTAL (05/SAF/OT)																																							
<b>TOTALS TO GENERAL SUMMARY</b>							<b>25.32</b>	<b>2.67</b>	<b>53.94</b>	<b>5,754</b>	<b>345</b>	<b>16.52</b>	<b>308</b>	<b>8</b>	<b>10.39</b>	<b>8.70</b>	<b>8.11</b>	<b>0.85</b>	<b>1,918</b>	<b>1.70</b>	<b>27.20</b>	<b>1,918</b>	<b>250</b>	<b>431</b>	<b>254</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>0.38</b>	<b>0.29</b>	<b>0.33</b>	<b>0.04</b>	<b>0.08</b>	<b>1.00</b>				

PAVEMENT MARKING SUB-SUMMARY  
MED-42

DESIGN AGENCY: DISTRICT 3

ENGINEERING TEAM TWO

DESIGNER: JLL

REVIEWER: KRB

PROJECT ID: 6-30-21

SHEET: 79761

TOTAL: 79

MED-42-1.89/MED-224-(6.25)(10.45)


MODEL: MED-224.PW PAPERS/2E: 17x11(rn.) DATE: 11/24/2021 TIME: 11:28:56 AM USER: ksalay  
 pw:\ehlodot-pw\benley.com\hlotdot-pw-02\Documents\01 Active Projects\District 03\Medina\7976\400-Engineering\Traffic\Sheets\7976\_1500.dgn

### AUXILIARY & LONG LINE MARKINGS

PLAN SPLIT	COUNTY	ROUTE	STATION / SLIM		HIGHWAY MILES	DESCRIPTION	614		642		644		644		807					850			644					646			807				850							
			FROM	TO			MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	REMOVAL OF PAVEMENT MARKING (EXISTING EDGE LINE)	REMOVAL OF PAVEMENT MARKING (EXISTING STOP LINE)	REMOVAL OF PAVEMENT MARKING (EXISTING LANE ARROW)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (WHITE)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (YELLOW)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 8"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"	GROOVING FOR 6" RECESSED PAVEMENT MARKINGS, ASPHALT	GROOVING FOR 8" RECESSED PAVEMENT MARKINGS, ASPHALT	GROOVING FOR 6" RECESSED PAVEMENT MARKINGS, ASPHALT	STOP LINE	TRANSVERSE/DIAGONAL LINE (WHITE)	TRANSVERSE/DIAGONAL LINE (YELLOW)	LANE ARROW		WRONG WAY ARROW	STOP LINE	ISLAND MARKING	LANE ARROW		WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (WHITE)	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (YELLOW)	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 8"	GROOVING FOR 6" RECESSED PAVEMENT MARKINGS, CONCRETE	GROOVING FOR 8" RECESSED PAVEMENT MARKINGS, CONCRETE				
								MILE	MILE	FT	FT	MILE	FT	EACH	MILE	MILE	MILE	FT	FT	MILE	FT	FT	FT	FT	FT	FT	EACH	EACH	FT	SQ FT	EACH	EACH	MILE	MILE	MILE	FT	MILE	FT				
01/NHS/PV	MED	224	10.45	15.30	4.85	EASTBOUND LONG LINE MARKINGS	14.55	29.10	3,975	9.70																																
05/SAF/OT																																										
01/NHS/PV																																										
05/SAF/OT																																										
01/NHS/PV						FOUR-LANE AUXILIARY MARKINGS			324	320	32									320		20	23	9																		
01/NHS/PV	MED	224	15.30	15.61	0.31	EASTBOUND MARKINGS (CONCRETE SECTION)	0.20	0.30	400	25															51	24	5	5					0.31	0.31	0.40	885	1.02	885				
05/SAF/OT																																										
01/NHS/PV											WESTBOUND MARKINGS (CONCRETE SECTION)	0.10	0.30	800	30														62		10	5					0.31	0.31	0.19	1,667	0.81	1,667
05/SAF/OT																																										
01/NHS/PV	MED	224	6.37	6.60	0.23	EB RAMP TO US 42 NB (RAMP B1)	0.36	1.05	576																																	
05/SAF/OT																																										
01/NHS/PV	MED	224	6.42	6.45	0.03	WB RAMP TO US 42 NB (RAMP B1B)		0.21																																		
05/SAF/OT																																										
01/NHS/PV	MED	224	6.25	6.34	0.09	EB RAMP TO US 42 SB (RAMP C1)	0.06	0.54	894																																	
05/SAF/OT																																										
01/NHS/PV	MED	224	6.32	6.33	0.01	WB RAMP TO US 42 SB (RAMP C1B)		0.15																																		
05/SAF/OT																																										
01/NHS/PV	MED	224	10.45	10.74	0.29	EB ENTRANCE RAMP AT SR 421 (RAMP B2)	0.06	1.62	138																																	
05/SAF/OT																																										
01/NHS/PV	MED	224	10.45	10.66	0.21	WB EXIT RAMP AT US 42 (RAMP D2)	0.03	0.54	774	114																																
05/SAF/OT																																										
05/SAF/OT						CONCRETE BRIDGE DECKS																																				
	SUBTOTAL (01/NHS/PV)						29.91	62.91	11,544	693	19.40	320	32																													
	SUBTOTAL (05/SAF/OT)													10.30	10.33	9.80	3,448	1,455	30.43	3,448	1,455												0.69	0.69	0.66	2,552	2.04	2,552				
	<b>TOTALS TO GENERAL SUMMARY</b>						<b>29.91</b>	<b>62.91</b>	<b>11,544</b>	<b>693</b>	<b>19.40</b>	<b>320</b>	<b>32</b>	<b>10.30</b>	<b>10.33</b>	<b>9.80</b>	<b>3,448</b>	<b>1,455</b>	<b>30.43</b>	<b>3,448</b>	<b>1,455</b>	<b>358</b>	<b>196</b>	<b>20</b>	<b>23</b>	<b>9</b>	<b>2</b>	<b>113</b>	<b>24</b>	<b>15</b>	<b>10</b>	<b>0.69</b>	<b>0.69</b>	<b>0.66</b>	<b>2,552</b>	<b>2.04</b>	<b>2,552</b>					

PAVEMENT MARKING SUB-SUMMARY  
MED-224

DESIGN AGENCY  
**DISTRICT 3**



ENGINEERING  
TEAM TWO

DESIGNER  
JLL

REVIEWER  
KRB 6-30-21

PROJECT ID  
79761


SHEET TOTAL  
52 79

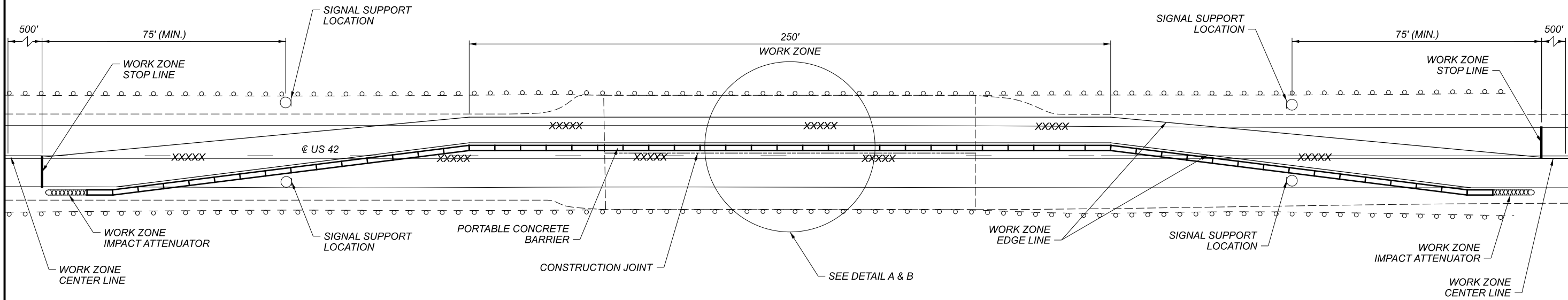
MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: Sheet PAPER: 17x11 (in.) DATE: 11/17/2021 TIME: 12:15:06 PM USER: ksabay  
 p:\vohobol-pw-bentley.com\shahid-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Roadway\Sheets\79761\_SC001.dgn

ITEM	EXTENSION	QUANTITY										TOTAL	UNIT	DESCRIPTION	REFERENCE SHEET			
		MED-42-2.61	MED-42-3.10		MED-42-4.60		MED-42-5.39		MED-42-5.89		MED-42-7.14					MED-83-4.36	MED-224-12.76	
			LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT			LEFT	RIGHT				
202	11301				1	1					12			8	22	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	54
202	32000		52	52											104	FT	CURB REMOVED	
202	32600		100	100								76			276	FT	GUTTER REMOVED	
202	98200		256	256											512	FT	REMOVAL, MISC.: DECK OVERHANG	54
202	98200		66	90	94	94	80	80	94	141			80	88	907	FT	REMOVAL, MISC.: JOINT SEALER	54
509	10001		1,157	1,157											2,314	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	55
509	20001		100	100											200	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCEMENT STEEL, AS PER PLAN	54
511	21521										7		2	9	9	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RECONSTRUCTION)	55
511	45711										5		3	8	8	CY	CLASS QC1 CONCRETE, ABUTMENT, AS PER PLAN (RECONSTRUCTION)	55
511	46010				1	1							3	5	5	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
511	81100		256	256											512	FT	CONCRETE, MISC.: CLASS QC SCC CONCRETE, BRIDGE DECK, DECK OVERHANG	55
512	10100		138	138							8				284	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	10300	32	28	28	26	26	800	800	605	605			28	40	3,018	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
513	21000										10				10	EACH	TRIMMING OF BEAM END	
516	10000										47				47	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL	
516	11211										104		44	148	148	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN	55
516	31000		66	90	94	94	80	80	94	94	72		80	88	932	FT	JOINT SEALER	
516	45305	5	4	3					2	2	4		1	5	26	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	55
516	47001	LS	LS	LS					LS	LS	LS		LS	LS	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	55
517	75600	300			238	238	425	425	250	250			262.5	262.5	2,651	FT	DEEP BEAM BRIDGE RETROFIT RAILING	
517	76300	300			238	238	425	425	250	250			262.5	262.5	2,651	FT	RAILING, MISC.: DEEP BEAM RAILING PANELS	55
SPECIAL	519E00100		240	240											480	SF	COMPOSITE FIBER WRAP SYSTEM	55
519	11100		33	38	6	24	28	10			3	141	12	21	316	SF	PATCHING CONCRETE STRUCTURE	
601	21060			18											18	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
601	27000		25	25									21		71	CY	DUMPED ROCK FILL, TYPE C	
848	10001	709	474	644	574	574							558	858	4,391	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (VARIABLE THICKNESS)	55
848	20000	709	474	644	574	574							558	858	4,391	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
848	30001	22	9	13	11	11							17	27	110	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	55
848	50000	40	27	36	32	32							31	48	246	SY	HAND CHIPPING	
848	50100	LS	LS	LS	LS	LS							LS	LS	LS		TEST SLAB	
848	50200		2	4	12	8							2	5	33	CY	FULL DEPTH REPAIR	
848	50320	709	474	644	574	574							558	858	4,391	SY	EXISTING CONCRETE OVERLAY REMOVED (VARIABLE THICKNESS)	
848	50340	398	266	361	322	322							313	481	2,463	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	
SPECIAL	519E12510		12		2	4	18	9					3	7	55	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	55

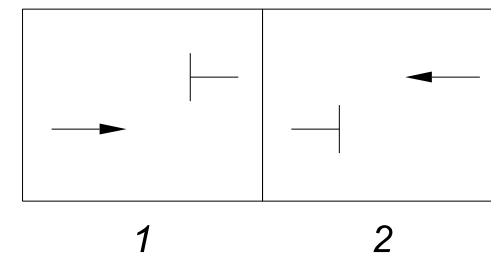
STRUCTURE SUMMARY  
 STRUCTURE SUMMARY FOR ALL  
 STRUCTURES ON THIS PROJECT

SFN  
 VARIOUS  
 DESIGN AGENCY  
 DISTRICT 3  
  
 ENGINEERING  
 TEAM TWO  
 DESIGNER/CHECKER  
 JLL KRB  
 REVIEWER  
 KAK 7-6-21  
 PROJECT ID  
 79761  
 SUBSET TOTAL  
 1 1  
 SHEET TOTAL  
 56 79



**MOT DETAIL**  
**PHASE A - SHOWN**  
**PHASE B - SIMILAR**

**SIGNAL PHASING DIAGRAM**



**FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL**

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON THIS SHEET AND TRAFFIC SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

	PHASE MED-42-2.61	
	1 MAINLINE (NORTHBOUND)	2 MAINLINE (SOUTHBOUND)
MIN. GREEN	27	27
EXTENSION	4	4
MAX. GREEN	30	30
YELLOW	5	5
ALL RED	13	13
RECALL	OFF	OFF

PROVIDE TIMING APPROPRIATE FOR THE SIGNAL LOCATION UNDER CONSIDERATION. TYPICAL FLOW RATES ARE DISPLAYED IN TABLE 697-2 IN THE ODOT TRAFFIC ENGINEERING MANUAL (TEM).

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

ESTIMATED QUANTITIES (04/STR/BR)			
ITEM	QUANTITY	UNIT	DESCRIPTION
614	4	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
614	22	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)
614	22	EACH	OBJECT MARKER, ONE WAY
614	0.19	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I
614	0.42	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I
614	24	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
622	1,100	FT	PORTABLE BARRIER, UNANCHORED

ALL QUANTITIES CARRIED TO THE GENERAL SUMMARY

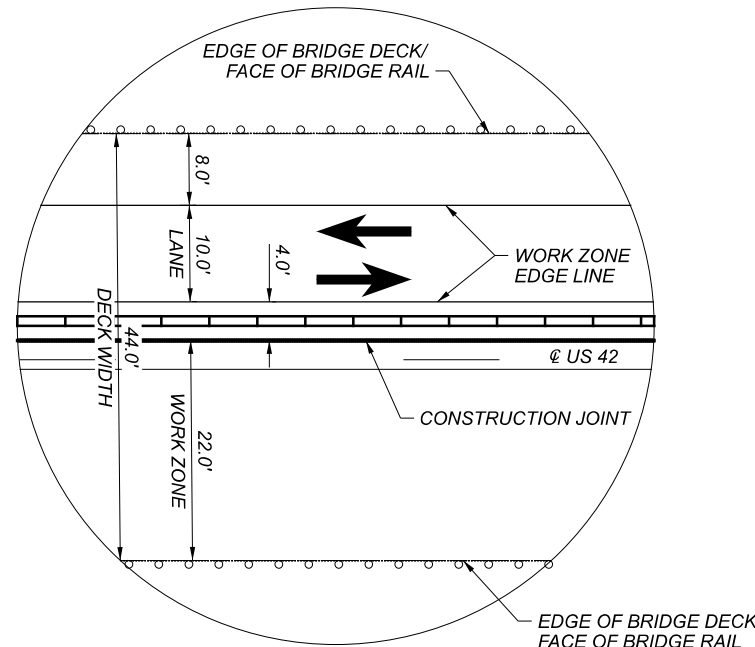
NOTES:  
 1.) FOR ADDITIONAL DETAILS, SEE SCDS MT-96.11, MT-96.20, MT-96.26 AND ALSO SUPPLEMENTAL SPECIFICATION 961.

2.) ACCESS TO ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES.

3.) SEE SHEET 51 FOR REPLACEMENT PAVEMENT MARKING ITEMS AND QUANTITIES.

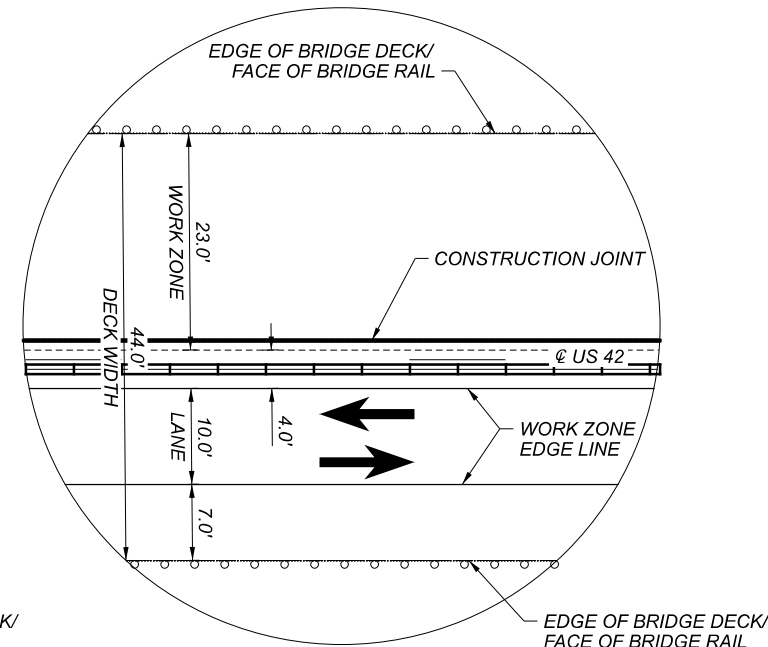
**DETAIL A**

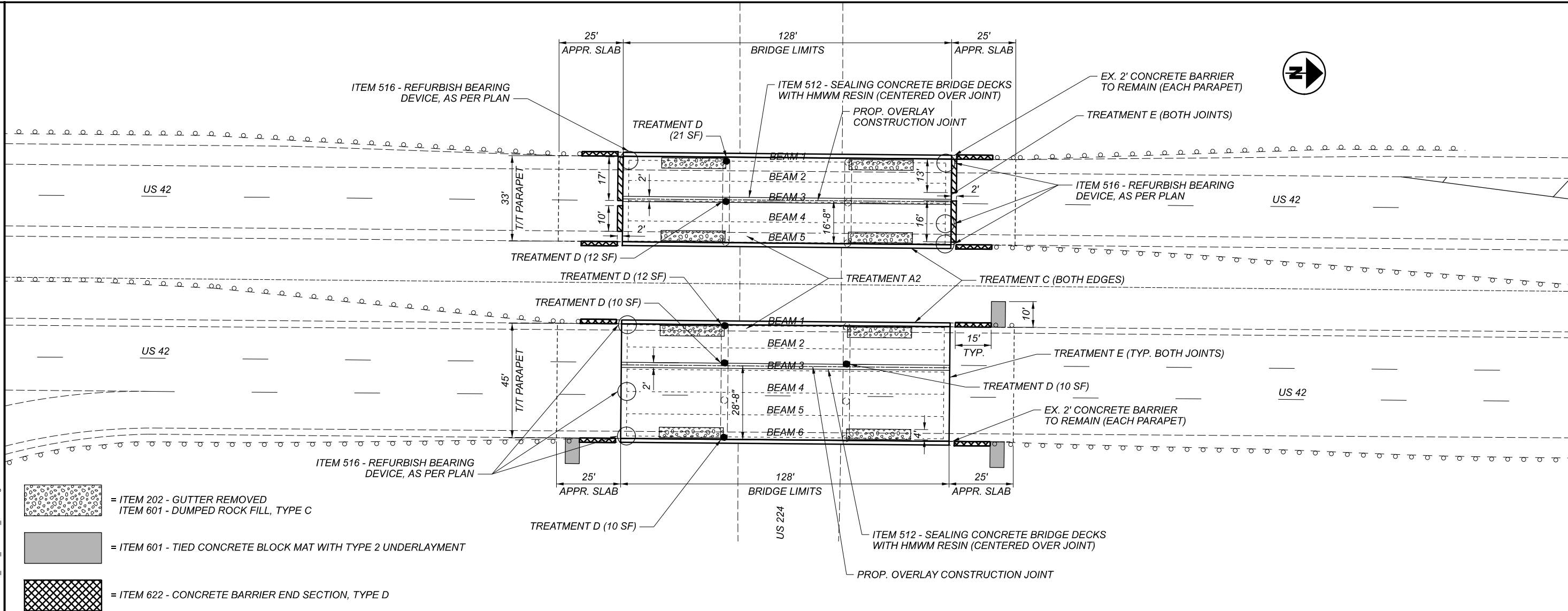
PHASE A



**DETAIL B**

PHASE B





= ITEM 202 - GUTTER REMOVED  
 = ITEM 601 - DUMPED ROCK FILL, TYPE C

= ITEM 601 - TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT

= ITEM 622 - CONCRETE BARRIER END SECTION, TYPE D

= ITEM SPECIAL - PATCHING CONCRETE BRIDGE DECK, TYPE B

ITEM	MED-42-3.10		TOTAL QUANTITY	UNIT	DESCRIPTION
	L	R			
202	52	52	104	FT	CURB REMOVED
202	100	100	200	FT	GUTTER REMOVED
202	256	256	512	FT	REMOVAL, MISC.: DECK OVERHANG
202	66	90	156	FT	REMOVAL, MISC.: JOINT SEALER
509	1,157	1,157	2,314	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN
509	160	160	200	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCEMENT STEEL, AS PER PLAN
511	256	256	512	FT	CONCRETE, MISC.: CLASS QC SCC CONCRETE, BRIDGE DECK, DECK OVERHANG
512	138	138	276	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	28	28	57	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN
516	66	90	156	FT	JOINT SEALER
516	4	3	7	EACH	REFURBISH BEARING DEVICE, AS PER PLAN
516	LS	LS	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
SPECIAL	240	240	480	SF	COMPOSITE FIBER WRAP SYSTEM
519	33	38	71	SF	PATCHING CONCRETE STRUCTURE
601		18	18	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT
601	25	25	50	CY	DUMPED ROCK FILL, TYPE C
848	474	644	1,118	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (1.75" THICK)
848	474	644	1,118	SY	SURFACE PREPARATION USING HYDRODEMOLITION
848	9	13	22	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
848	27	36	63	SY	HAND CHIPPING
848	LS	LS	LS		TEST SLAB
848	2	4	6	CY	FULL DEPTH REPAIR
848	474	644	1,118	SY	EXISTING CONCRETE OVERLAY REMOVED (1.25" NOMINAL THICKNESS)
848	266	361	627	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY
SPECIAL	12		12	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B

ALL QUANTITIES CARRIED TO THE STRUCTURE SUMMARY

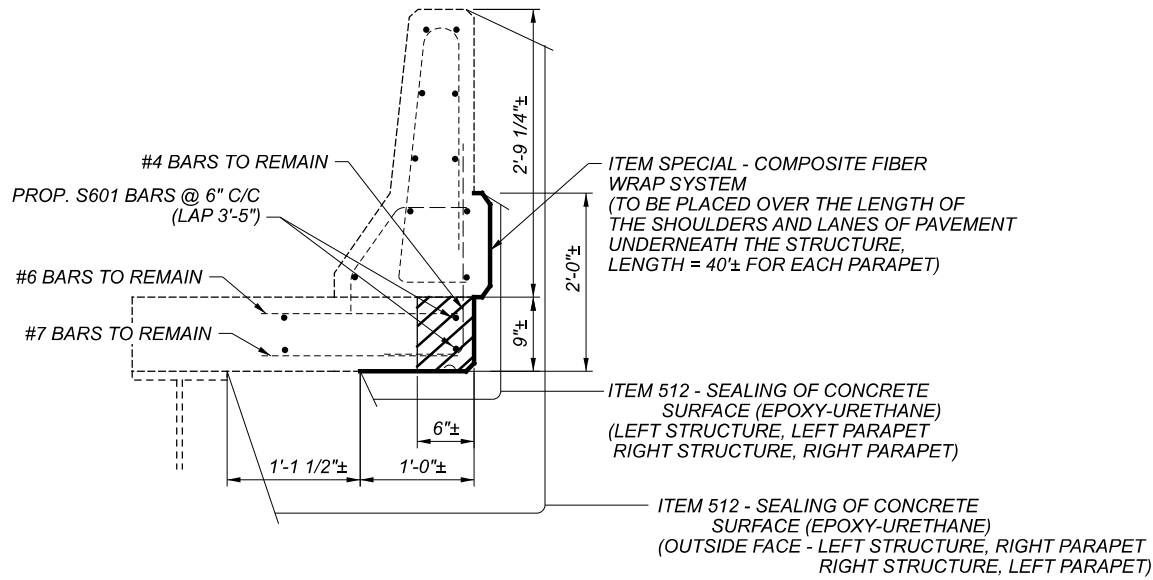
NOTES:

- MED-42-3.10L  
REFURBISH BEARING #1 ON THE REAR ABUTMENT, AND BEARINGS #1, #4 AND #5 ON THE FORWARD ABUTMENT. JACK AND SHIM AS NECESSARY TO ALLOW ELEVATION OF EXPANSION JOINT ARMOR ON DECK SIDE TO MATCH ELEVATION OF JOINT ARMOR ON BACKWALL SIDE.
- MED-42-3.10R  
REFURBISH BEARING #1 ON THE REAR ABUTMENT. SHIM AS NECESSARY TO ALLOW ELEVATION OF EXPANSION JOINT ARMOR ON DECK SIDE TO MATCH ELEVATION OF JOINT ARMOR ON BACKWALL SIDE.
- SEE SUPPLEMENTAL SPECIFICATION 848 FOR DETAILS ON THE OVERLAY PROCESS NOT SHOWN ON THIS SHEET.
- PERFORM ALL JOINT SEALING AFTER ALL REPAIR WORK HAS BEEN COMPLETED.
- USE EXTREME CARE WHEN PERFORMING ALL ITEMS THAT REQUIRE ANY REMOVAL OF THE EXISTING STRUCTURE AS TO NOT DAMAGE ANY EXISTING REINFORCING STEEL; THE REINFORCING STEEL IS TO REMAIN IN PLACE AND NOT BE REMOVED IN THE REMOVAL PROCESS. CLEAN EXPOSED REINFORCING STEEL AS PER ITEM 848 WHERE APPLICABLE AND DEEMED NECESSARY BY THE ENGINEER. SHOULD ANY REINFORCING STEEL BE DAMAGED AS A RESULT OF ANY WORK PERFORMED, REPAIR OR REPLACE THE DAMAGED AREA AS DIRECTED.
- ACCORDING TO CURRENT CORING DATA, THE TOP MAT OF THE EXISTING REINFORCING STEEL IS 3.25 INCHES BELOW THE CURRENT SURFACE.
- SEE ROADWAY SUB-SUMMARY FOR CONCRETE BARRIER END SECTION, TYPE D PAYMENT INFORMATION.
- PERFORM PIER COLUMN REPAIRS USING ITEM 519 - PATCHING CONCRETE STRUCTURE.
- ADDITIONAL QUANTITY OF 15 SQUARE YARDS (EACH STRUCTURE) OF ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) HAS BEEN ADDED TO TOUCH UP DAMAGED AREAS OF THE EXISTING PARAPETS THAT HAVE PREVIOUSLY BEEN SEALED.
- PREPARE A SECTION 2 FEET WIDE OVER THE LENGTH OF THE BRIDGE DECK, CENTERED OVER THE PROPOSED CONSTRUCTION JOINT, AND SEAL USING ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN.

STRUCTURE DETAILS  
 MED-42-3.10 (L/R)  
 OVER US 224

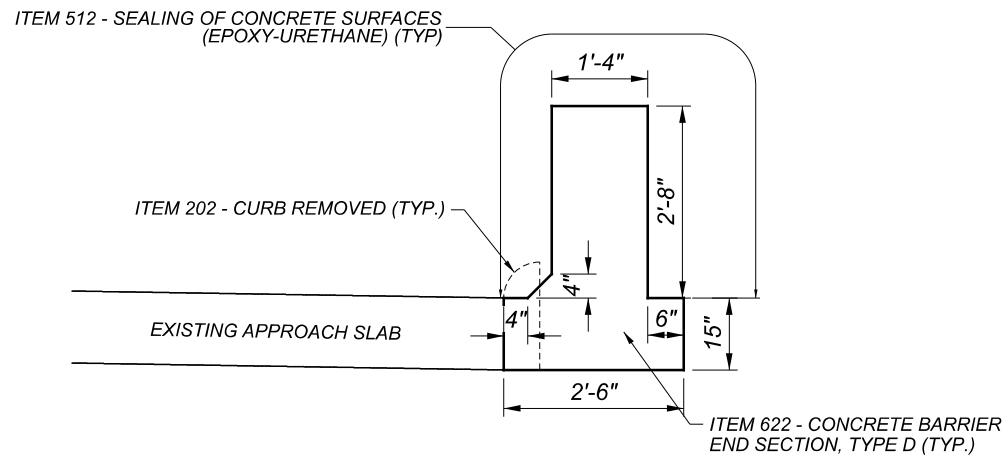
SFN	5200962
SFN	5200997
DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER/CHECKER	JLL KRB
REVIEWER	KAK 7-6-21
PROJECT ID	79761
SUBSET	TOTAL
1	2
SHEET	TOTAL
62	79

REINFORCING STEEL						
STRUCTURE	BAR MARK	# OF BARS	LENGTH	TYPE	# OF SIDES	WEIGHT
MED-42-3.10L	S601	22	17'-6"	STR.	2	1,157
MED-42-3.10R	S601	22	17'-6"	STR.	2	1,157



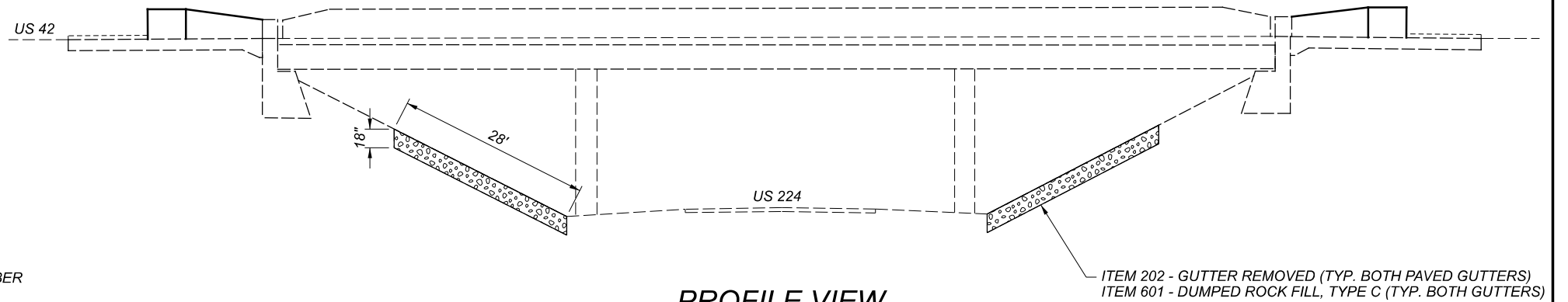
**TREATMENT C - CROSS SECTION**

- ITEM 202 - REMOVAL MISC.: DECK OVERHANG
- ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN
- ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING STEEL, AS PER PLAN
- ITEM 511 - CONCRETE, MISC.: CLASS QC SCC CONCRETE, BRIDGE DECK, DECK OVERHANG

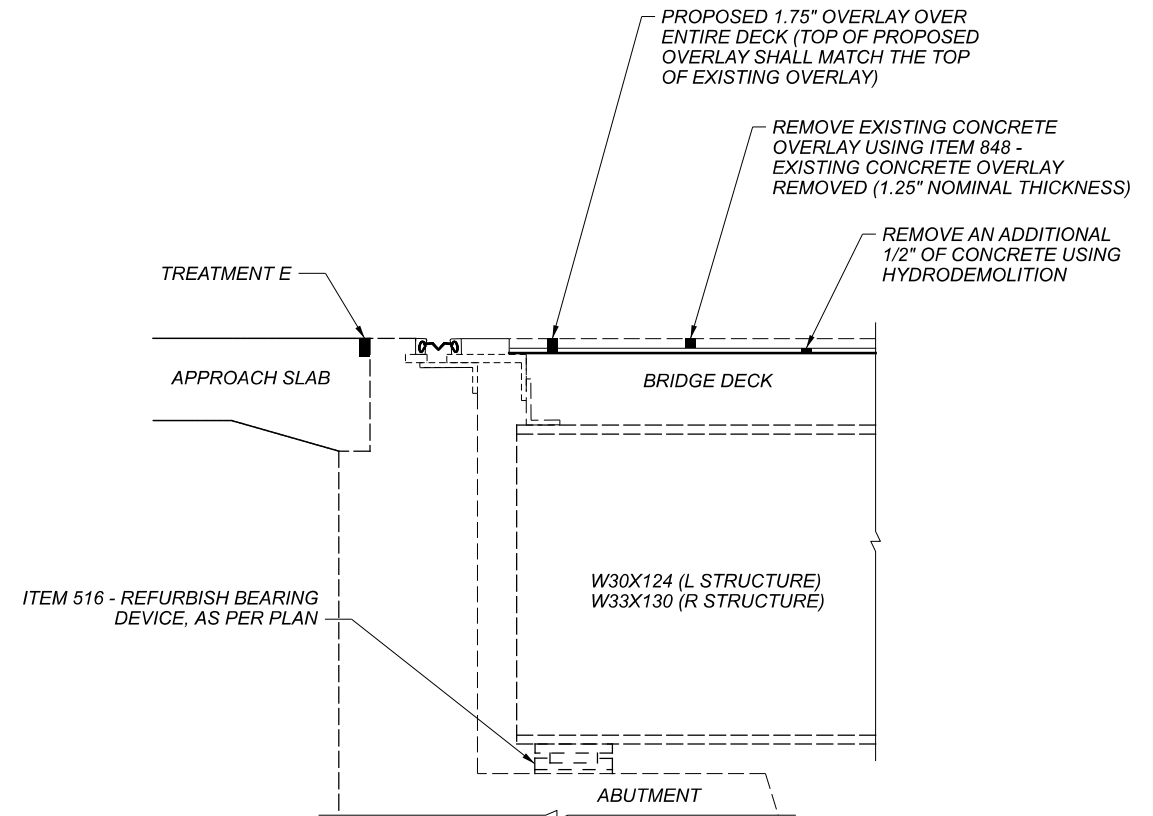


**CONCRETE BARRIER END SECTION DETAIL**

REINFORCING STEEL NOT SHOWN FOR CLARITY



**PROFILE VIEW**  
BOTH STRUCTURES SIMILAR  
EXISTING/PROPOSED GUARDRAIL NOT SHOWN



**BEAM/JOINT DETAIL**

STRUCTURE DETAILS  
MED-42-3.10 (L/R)  
OVER US 224

MED-42-1.89/MED-224-(6.25)(10.45)

MODEL: Details 2 PAPER:SIZE: 17x11 (in.) DATE: 11/17/2021 TIME: 1:06:24 PM USER: ksalay pwc:\hobol-pw-bentley.com\shahid-pw-02\Documents\01 Active Projects\District 03\Medina\79761\400-Engineering\Structures\SFN\_5200962\Sheets\79761\_SFN\_5200962\_SG001.dgn

SFN	5200962
SFN	5200997
DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM TWO	
DESIGNER/CHECKER	JLL KRB
REVIEWER	KAK 7-6-21
PROJECT ID	79761
SUBSET	TOTAL
2	2
SHEET	TOTAL
63	79