Maintenance of Traffic Control Zones

The Contractor shall be responsible to maintain the signs, drums and temporary pavement markings at the locations detailed in the plans or specified in the Standard Drawings. When the Contractor is notified of deficiencies he shall correct the deficiencies as soon as possible, preferably within 12 hours and no later than 24 hours.

Construction Equipment Median Crossing

Construction equipment is permitted to only cross the median at the existing interchanges, intersections, and U-turn crossovers.

Construction Traffic

All construction traffic shall use acceptable truck routes to access the construction area. Use of local residential streets is strictly prohibited unless allowed in writing by the local enforcement authority.

Contractor's Equipment – Operation and Storage

Vehicles and equipment shall always move with, and not across or against the flow of traffic. Vehicles and other equipment shall not park or stop except within designated work areas; and shall not enter and leave work areas in a manner which will be hazardous to, or interfere with the normal traffic flow. Personal vehicles will not be permitted to park within the right-of-way except in specific areas designated by the Engineer.

Equipment, vehicles and materials shall not be stored or parked within 30 feet of the traveled way unless 6 feet behind PCB or guardrail.

All work vehicles and equipment that enters the work zone more than once a day must be equipped with at least one flashing, rotating, or oscillating amber light that is visible in all directions of traffic for at least one quarter of a mile, day or night.

Floodlighting

Floodlighting of the work site for operations conducted during nighttime periods shall be accomplished so that the lights do not cause glare to the drivers on the roadway. To ensure the adequacy of the floodlight placement, the Contractor shall drive through the work site each night when the lighting is in place and operative prior to commencing any work. If glare is detected, the light placement and shielding shall be adjusted before work proceeds.

Payment for all labor, equipment and materials shall be included in the lump sum contract price for Item 614 – Maintaining Traffic.

Continuous Access

The Contractor shall maintain safe and adequate driveways and walkways in order to provide continuous access for pedestrians, passenger vehicles, trucks, and safety equipment to all adjoining properties

The cost for all materials, equipment, and labor necessary to provide continuous access shall be included in the lump sum price for Item 614 – Maintaining Traffic.

Item 614 – Maintaining Traffic Lane Closure/Reduction Required

Length and duration of lane closures and restrictions shall be at the approval of the engineer. It is the intent to minimize the impact to the traveling public. Lane closures or restrictions over segments of the project in which no work is anticipated within a reasonable time frame, as determined by the Engineer, shall not be permitted. The level of utilization of maintenance of traffic devices shall be commensurate with the work in progress.

Schedule of Through Lanes to be Maintained

All lane closures may only be implemented at the times permitted by the District 12 Permitted Lane Closure list, which is located on the ODOT website at:

http://www.dot.state.oh.us/districts/D12/HighwayManagement/Pages/PermittedLaneClosures.aspx

All Notes on the Permitted Lane Closure Times shall be part of the project.

The latest revision, at 14 days prior to the bid date, shall be in effect for this project.

No lane or shoulder closures shall be in place when no work is being performed. Shoulder closures shall only be allowed at the times specified for lane closures. All work performed on ramps shall be half width, no closures shall be permitted.

The following lane closure restrictions shall apply to the non-interstate routes on this project: Location 3 (CUY-237-0.26), one lane each direction can be closed long term.

Any roadway not listed shall not have any lane closures on weekdays from 6:30am to 9:00am and 3:00pm to 6:00pm.Contact Dennis O'Neil, District 12 Work Zone Traffic Manager, at (216) 584-2204 if there are any questions.

Lane Closure Disincentive

Description of Critical Lane/Ramp to be Maintained	Restricted Time Period	Time Unit	Disincentive $ per Time Unit per Lane
IR-71 NB at Denison Ave. Ramp A	As per the D12 Permitted Lane Closure Schedule	Each Minute	$75
US-6 EB at IR-90	As per the D12 Permitted Lane Closure Schedule	Each Minute	$70
US-6 WB at IR-90	As per the D12 Permitted Lane Closure Schedule	Each Minute	$70
SR-237 NB at Brookpark Rd	As per the D12 Permitted Lane Closure Schedule	Each Minute	$125
SR-237 SB at Brookpark Rd	As per the D12 Permitted Lane Closure Schedule	Each Minute	$125
IR-90 EB at SR-283	As per the D12 Permitted Lane Closure Schedule	Each Minute	$140

The Contractor shall be assessed a disincentive equal to the largest disincentive within all sections impacted by the physical lane restriction, including the Transition Area, Activity Area, and Termination Area as defined by the OMUTCD. Holiday disincentives shall be applied per section per lane per time unit.

Work Operations

In addition to the requirements of section 614 of the construction and material specifications the following shall apply:

The Contractor's equipment shall be operated in the direction of travel where practical.

The Contractor shall arrange construction operations so as to prevent any interference to the continuous flow of traffic. All vehicles, equipment, workers and their activities are restricted at all times to the closed lanes unless otherwise approved by the Engineer.

Covering of Ground-Mounted Signs – General

When required by other items or incidentally to Item 614 – Maintaining Traffic, cover existing ground-mounted signs with plywood or OSB blanks (1/2" minimum thickness) covering 80% of the sign area and all of the sign legend. The use of low quality materials such as duct tape and black plastic is not permitted.

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed by the Engineer

When additional signing is needed to maintain traffic, the Contractor shall furnish the sign or signs as directed by the Engineer. These signs shall be ground mounted and meet all the specifications of the plan, proposal and current year CMS.

Payment for this item shall include, but not be limited to, the cost to furnish and erect the sign, including driving posts or other approved methods of sign support, maintaining the sign and removal of the sign. The following estimated quantity has been carried to the General Summary for use as directed by the Engineer:

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed by the Engineer ..... **300 Sq Ft**

Allowable Road Closures

The following structure can be closed down within the restricted times listed.

Work at Location 4 (CUY-283-5.06) shall be completed between June 1, 2020 and August 1, 2020. The detour (as shown on sheet 17) shall be in place for a maximum of 14 days.

All other locations shall not be totally closed.

A PCMS shall be provided by the Contractor. The PCMS will be in place 7 days before the closure for pre-notification to the motorists.

The Contractor shall be responsible for providing, placing and removing all detour signs, per the OMUTCD. The cost for the detour signs shall be included in the Lump Sum bid for Item 614 – Detour Signing.

CALCULATED KHD
CHECKED DAB

MAINTENANCE OF TRAFFIC GENERAL NOTES - 2

CUY-BH-FY2020
WEARING SURFACE

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	3		7	8		19	20		22	26	29	31	01/NFP/BR						
																		EROSION CONTROL	
													1,000	832	30000	1,000	EACH	EROSION CONTROL	
																		TRAFFIC CONTROL	
							21						21	621	00100	21	EACH	RPM	
							0.34						0.34	642	00100	0.34	MILE	EDGE LINE, 4", TYPE 1, WHITE	
							0.38						0.38	642	00200	0.38	MILE	LANE LINE, 4", TYPE 1	
							0.26						0.26	642	00300	0.26	MILE	CENTER LINE, TYPE 1	
							646						646	642	00400	646	FT	CHANNELIZING LINE, 8", TYPE 1	
							76						76	642	00500	76	FT	STOP LINE, TYPE 1	
							442						442	642	00700	442	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1	
							17						17	642	01300	17	EACH	LANE ARROW, TYPE 1	
							139						139	642	01500	139	FT	DOTTED LINE, 4", TYPE 1	
							7						7	642	01602	7	EACH	BIKE LANE SYMBOL MARKING, TYPE 1	
							0.89						0.89	646	10010	0.89	MILE	EDGE LINE, 6", WHITE	
							0.53						0.53	646	10010	0.53	MILE	EDGE LINE, 6", YELLOW	
							0.56						0.56	646	10110	0.56	MILE	LANE LINE, 6"	
																		STRUCTURE REPAIR (CUY-71-1589L)	
									1,588				1,588	848	10001	1,588	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN	3
																		(2" THICKNESS)	
									1,588				1,588	848	20000	1,588	SY	SURFACE PREPARATION USING HYDRODEMOLITION (1/2" THICKNESS)	
									45				45	848	30001	45	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3
									79				79	848	50000	79	SY	HAND CHIPPING	
									LS				LS	848	50100	LS		TEST SLAB	
									4				4	848	50200	4	CY	FULL-DEPTH REPAIR	
									1,588				1,588	848	50320	1,588	SY	EXISTING CONCRETE OVERLAY REMOVED (1 1/2" THICKNESS, LMC)	
																		STRUCTURE REPAIR (CUY-6-1672)	
										11,332			11,332	SPECIAL	53000600	11,332	SF	STRUCTURES, MISC.: TIMBER SUBDECKING	4
										929			929	847	10001	929	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN (1 1/2" THICKNESS, MSC)	3
										40			40	847	20001	40	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3
										LS			LS	847	30000	LS		TEST SLAB	
										6			6	847	30200	6	CY	FULL DEPTH REPAIR	
										929			929	847	30401	929	SY	EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN (1 1/2" THICKNESS, MSC)	3
										139			139	847	50000	139	SY	HAND CHIPPING	
																		STRUCTURE REPAIR (CUY-237-0045)	
											614		614	847	10001	614	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN (2" THICKNESS)	3
											27		27	847	20001	27	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3
											LS		LS	847	30000	LS		TEST SLAB	
											614		614	847	30400	614	SY	EXISTING CONCRETE OVERLAY REMOVED (1 3/4" THICKNESS, SDC)	
											93		93	847	50000	93	SY	HAND CHIPPING	
																		STRUCTURE REPAIR (CUY-283-0487)	
												737	737	848	10001	737	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN	3
																		(1 1/2" THICKNESS)	
												737	737	848	20000	737	SY	SURFACE PREPARATION USING HYDRODEMOLITION (1 1/2" THICKNESS)	
												21	21	848	30001	21	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3
												38	38	848	50000	38	SY	HAND CHIPPING	
												LS	LS	848	50100	LS		TEST SLAB	
												2	2	848	50200	2	CY	FULL-DEPTH REPAIR	
												38	38	848	50300	38	SY	WEARING COURSE REMOVED, ASPHALT	

CALCULATED KMR
CHECKED KHD

GENERAL SUMMARY - 1

CUY-BH-FY2020
WEARING SURFACE

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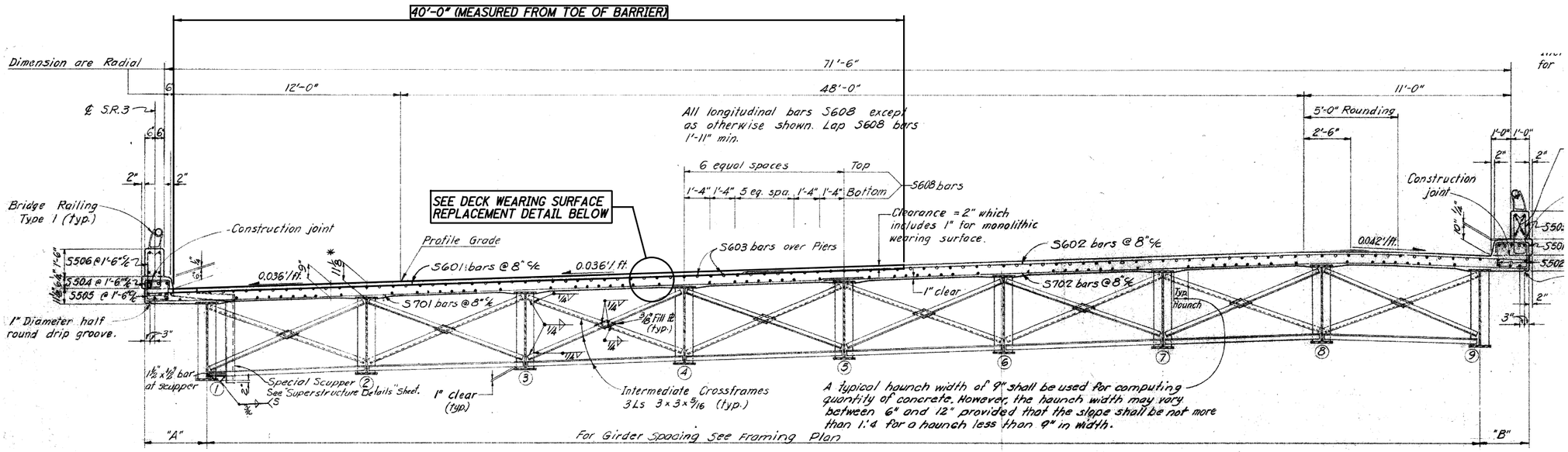
SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	3		7	8		19	20		22	26	29	31	01/NFP/BR						
																		MAINTENANCE OF TRAFFIC	
				400									400	614	11110	400	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			LS										LS	614	12420	LS		DETOUR SIGNING	
				20									20	614	18601	20	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
						0.12							0.12	614	20200	0.12	MILE	WORK ZONE LANE LINE, CLASS I, 4", 740.06, TYPE I	
						0.23							0.23	614	21200	0.23	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
						0.11							0.11	614	22200	0.11	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I, WHITE	
						0.04							0.04	614	22200	0.04	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I, YELLOW	
						1.58							1.58	614	22210	1.58	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I, WHITE	
						1.73							1.73	614	22210	1.73	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I, YELLOW	
						697							697	614	23400	697	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 740.06, TYPE I	
						1,066							1,066	614	24400	1,066	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 740.06, TYPE I	
						2,880							2,880	614	24402	2,880	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I	
						43							43	614	26400	43	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
						23							23	614	30400	23	EACH	WORK ZONE ARROW, CLASS I, 740.06, TYPE I	
						16							16	621	54000	16	EACH	RAISED PAVEMENT MARKER REMOVED	
			300										300	630	97800	300	SF	SIGNING, MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER	7
						15,537							15,537	642	30000	15,537	FT	REMOVAL OF PAVEMENT MARKING	
						21							21	642	30020	21	EACH	REMOVAL OF PAVEMENT MARKING	
																		INCIDENTALS	
													LS	614	11000	LS		MAINTAINING TRAFFIC	
	12												12	619	16011	12	MNTH	FIELD OFFICE, TYPE B, AS PER PLAN	3
	LS												LS	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	3
													LS	624	10000	LS		MOBILIZATION	

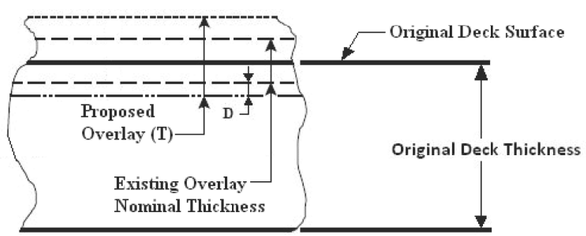
CALCULATED KMR
CHECKED KHD

GENERAL SUMMARY - 2

CUY-BH-FY2020
WEARING SURFACE



TRANSVERSE SECTION



ORIGINAL DECK THICKNESS = 9" (±)
EXISTING OVERLAY NOMINAL THICKNESS = 1½" (±) LMC
"D" = 1½"
PROPOSED OVERLAY ("T") = 2"

DECK WEARING SURFACE REPLACEMENT DETAIL

NOTES

1. REFER TO SS 848 FOR ADDITIONAL INFORMATION.
2. EXISTING BRIDGE SCUPPERS TO REMAIN. SCARIFICATION OR HAND CHIPPING MAY BE REQUIRED TO NOT DAMAGE EXISTING SCUPPER. CONCRETE OVERLAY AROUND EXISTING SCUPPERS SHALL BE SLOPED PER SCD GSD-1-19, SHEET 4/4.

ESTIMATED QUANTITIES - LOCATION 1

CALCULATED KMR DATED 12/26/19
CHECKED GHD DATED 12/30/19

ITEM	EXT.	TOTAL QUANTITY	UNIT	DESCRIPTION	REF. SHEET
848	10001	1588	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2" THICKNESS)	3
848	20000	1588	SY	SURFACE PREPARATION USING HYDRODEMOLITION (½" THICKNESS)	
848	30001	45	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3
848	50000	79	SY	HAND CHIPPING	
848	50100	1	LS	TEST SLAB	
848	50200	4	CY	FULL-DEPTH REPAIR	
848	50320	1588	SY	EXISTING CONCRETE OVERLAY REMOVED (1½" THICKNESS, LMC)	

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONY.
2. PERFORM ONLY THE WORK AS INDICATED IN FRAMED TEXT AND/OR IN THE GENERAL NOTES.

ODOT DISTRICT 12
5500 TRANSPORTATION BLVD
GARFIELD HTS, OHIO 44125

DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	XXX	XX-XX-XX
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GHD		1805193	

WEARING SURFACE REPLACEMENT DETAILS - LOCATION 1
BRIDGE NO. CUY-71-1589L
IR 71 NB TO DENISON AVE OVER IR 71 SB

CUY-BH-FY2020
WEARING SURFACE
PID No. 109249

2 / 2

24
31

i:\ProjectData\CUY\109249\Design\Roadway\Sheets\071_1589SD001.dgn Superstructure Details 1 - Location 1 3/11/2020 11:26:24 AM krohde