

**ITEM 614, MAINTAINING TRAFFIC**

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM,

THE OHIO DEPARTMENT OF TRANSPORTATION  
BUREAU OF TRAFFIC,  
1980 WEST BROAD STREET  
COLUMBUS, OHIO 43223

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

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.

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

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 90 CONSECUTIVE CALENDAR DAYS FOR THE 10.32 SITE, 45 CONSECUTIVE CALENDAR DAYS FOR THE 11.98 SITE, AND 60 CONSECUTIVE DAYS FOR THE 12.75 SITE, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS P.10-P.11. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT SHOWN IN THE WINDOW CONTRACT TABLE ON THIS SHEET.

CONTRACTOR SHALL CLOSE BOTH THE 10.32 AND 12.75 WORK AREAS SIMULTANEOUSLY. THE SIMULTANEOUS CLOSURE OF THE 10.32 AND 12.75 SITES SHALL STILL RESULT IN A MAXIMUM CLOSURE OF 60 CONSECUTIVE CALENDAR DAYS FOR THE 12.75 SITE ONLY.

THE 11.38 SITE SHALL UTILIZE FLAGGERS AS PER SCD MT-97.10 TO PERFORM ALL CONSTRUCTION OPERATIONS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES WHEN CONSTRUCTION ACTIVITIES ARE NOT BEING PERFORMED.

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)	GENERAL/REGULAR ELECTION DAY (NOV)
MEMORIAL DAY	THANKSGIVING
FOURTH OF JULY (OBSERVED)	CHRISTMAS (OBSERVED)
LABOR DAY	

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

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN/REG ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

**ITEM 614, MAINTAINING TRAFFIC (CONTINUED)**

SPECIAL EVENTS

DELAWARE COUNTY FAIR – LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE DELAWARE COUNTY FAIR 6AM-10PM DAILY ON THE FOLLOWING ROUTES:  
SR 521 BETWEEN US 36 AND SR 61

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$100 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

BEFORE THE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY-FOUR (24) HOURS PER DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
ROAD CLOSURES	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	≤ 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE.

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

SR 521 WILL BE CLOSED "MMM-DD" FOR 90 DAYS  
INFO: 1-740-833-8222

W20-H13-60 (10.32 SITE)

SR 521 WILL BE CLOSED "MMM-DD" FOR 45 DAYS  
INFO: 1-740-833-8222

W20-H13-60 (11.98 SITE)

SR 521 WILL BE CLOSED "MMM-DD" FOR 60 DAYS  
INFO: 1-740-833-8222

W20-H13-60 (12.75 SITE)

WINDOW CONTRACT TABLE					
DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO COMPLETE	DISINCENTIVE \$ PER DAY	WORK WINDOW		
			START	END	
ALL PROPOSED WORK AT THE 10.32 SITE	90	\$6,500	4/1/2025	10/1/2025	
ALL PROPOSED WORK AT THE 11.98 SITE	45	\$6,500	4/1/2025	10/1/2025	
ALL PROPOSED WORK AT THE 12.75 SITE	60	\$6,500	4/1/2025	10/1/2025	
ALL WORK ON PROJECT (INCLUDING WORK LISTED ABOVE)	180	\$600 (PER SITE)	4/1/2025	10/1/2025	

**ITEM 614, MAINTAINING TRAFFIC (CONTINUED)**

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

- AT THE LIMITS OF THE WORK AREA FOR THE 10.32 SITE ON S.R 521
- AT THE LIMITS OF THE WORK AREA FOR THE 11.38 SITE ON S.R 521
- AT THE LIMITS OF THE WORK AREA FOR THE 12.75 SITE ON S.R 521

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN ON THE DETOUR PLANS.

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

**NOTIFICATION OF TRAFFIC RESTRICTIONS**

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

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

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

**WORK SITE LIGHTING:**

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, AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**DROPOFFS IN WORK ZONES:**

THE DROPOFF ADJACENT TO THE TRAVELED LANE SHALL MEET THE CRITERIA OUTLINED IN STANDARD DRAWING MT-101.90. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

**ITEM 614 - DETOUR SIGNING**

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F-01.

DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
- EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

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

ITEM 614 - DETOUR SIGNING	LUMP SUM
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**DESIGNATED LOCAL DETOUR ROUTE**

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, LOCAL ROUTES HAVE BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THESE ROUTES ARE SHOWN ON SHEETS P.10-P.11. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

DURING THE TIME THAT TRAFFIC IS DETOURED, THOSE ROUTES THAT ARE PART OF THE OFFICIAL STATE DETOUR ROUTE THROUGH MUNICIPAL CORPORATIONS, THE CONTRACTOR SHALL MAINTAIN THESE ROUTES IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST, AND STANDING WATER.


THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED STATE AND LOCAL DETOUR ROUTES.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	25 CU. YD.
ITEM 407, NON TRACKING TACK COAT	50 GAL.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	50 CU. YD.
ITEM 617, COMPACTED AGGREGATE	25 CU. YD.
ITEM 642, CENTER LINE, TYPE 1	0.10 MI.



SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.57		P.74		P.80						01/STR/10	02/STR/04						
<b>STRUCTURE OVER 20 FOOT SPAN (DEL-00521-10.320)</b>																	
LS										LS		202	11002	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN	P.54
111										111		202	22900	111	SY	APPROACH SLAB REMOVED	
LS										LS		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
LS										LS		503	21300	LS		UNCLASSIFIED EXCAVATION	
LS										LS		505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
560										560		507	00100	560	FT	STEEL PILES HP10X42, FURNISHED	
480										480		507	00150	480	FT	STEEL PILES HP10X42, DRIVEN	
31,405										31,405		509	26000	31,405	LB	GALVANIZED STEEL REINFORCEMENT	
105										105		511	34444	105	CY	CLASS QC2 CONCRETE, BRIDGE DECK	
78										78		511	43510	78	CY	CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING	
89										89		512	10050	89	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
11										11		512	33000	11	SY	TYPE 2 WATERPROOFING	
48,000										48,000		513	10261	48,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN	P.54
1,026										1,026		513	20000	1,026	EACH	WELDED STUD SHEAR CONNECTORS	
86										86		516	13200	86	SF	1/2" PREFORMED EXPANSION JOINT FILLER	
86										86		516	13600	86	SF	1" PREFORMED EXPANSION JOINT FILLER	
38										38		516	13900	38	SF	2" PREFORMED EXPANSION JOINT FILLER	
107										107		516	14020	107	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
12										12		516	44000	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" X 12" X 1.914")	
132										132		517	70100	132	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)	
4										4		518	21200	4	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
127										127		SPECIAL	51822300	127	FT	STEEL DRIP STRIP	P.66
121										121		518	40000	121	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
52										52		518	40010	52	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
178										178		526	15001	178	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN	P.70
80										80		526	90031	80	FT	TYPE C INSTALLATION, AS PER PLAN	P.70
1										1		625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM	
<b>STRUCTURE 20 FOOT SPAN AND UNDER (DEL-00521-11.980)</b>																	
		LS								LS		202	11000	LS		STRUCTURE REMOVED	
		LS								LS		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
		63								63		503	21100	63	CY	UNCLASSIFIED EXCAVATION	
		3,696								3,696		509	10000	3,696	LB	EPOXY COATED STEEL REINFORCEMENT	
		12								12		511	46000	12	SY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
		27								27		511	46510	27	CY	CLASS QC1 CONCRETE, FOOTING	
		1								1		511	46610	1	CY	CLASS QC1 CONCRETE, HEADWALL	
		41								41		512	10050	41	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
		189								189		512	33000	189	SY	TYPE 2 WATERPROOFING	
		26								26		516	13600	26	SF	1" PREFORMED EXPANSION JOINT FILLER	
		6								6		518	21200	6	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
		72								72		611	94936	72	FT	9' X 4' CONDUIT, TYPE A, 706.05	
<b>STRUCTURE OVER 20 FOOT SPAN (DEL-00521-12.750)</b>																	
		LS								LS		202	11002	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN	
		111								111		202	22900	111	SY	APPROACH SLAB REMOVED	
		LS								LS		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
		605								605		503	21100	605	CY	UNCLASSIFIED EXCAVATION	
		19,112								19,112		509	10000	19,112	LB	EPOXY COATED STEEL REINFORCEMENT	
		171								171		511	46512	171	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
		13								13		511	46610	13	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
		2								2		511	46610	2	CY	CLASS QC1 CONCRETE, HEADWALL	
		82								82		512	10050	82	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
		161								161		512	33000	161	SY	TYPE 2 WATERPROOFING	
		289								289		512	33010	289	SY	TYPE 3 WATERPROOFING	
		31								31		516	13600	31	SF	1" PREFORMED EXPANSION JOINT FILLER	
		13								13		518	21200	13	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
		72								72		611	70000	72	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT (34'-0" SPAN X 10'-0" RISE)	

GENERAL SUMMARY

DESIGN AGENCY  
  
 www.bgegroup.com  
 5560 WILCOX PLACE, SUITE C  
 DUBLIN, OHIO 43016

DESIGNER  
 JEP

REVIEWER  
 RG 08-28-24

PROJECT ID  
 105433

SHEET TOTAL  
 P.13 | 101



**GENERAL NOTES:**

**DESIGN SPECIFICATIONS:**

THIS STRUCTURE CONFORMS TO "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9th EDITION, 2020, SUPPLEMENTAL SPECIFICATIONS 800, 832, AND 902, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:**

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:  
 800-2023 REVISED 1/19/2024  
 832 REVISED 7/21/2023  
 902 REVISED 7/19/2019

**DESIGN LOADING:**

HL93 AND THE ALTERNATE MILITARY LOADING.  
 FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT.

**DESIGN STRESSES:**

CAST-IN-PLACE STRUCTURES:  
 CONCRETE CLASS "QC1" -  $f_c = 4,000$  PSI SUBSTRUCTURE  
 REINFORCING STEEL - ASTM A615 OR A996 -  $F_y = 60,000$  PSI

**FOUNDATION BEARING RESISTANCE:**

REAR AND FORWARD CULVERT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 5.1 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 8.1 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 11.2 KIPS PER SQUARE FOOT.

**STANDARD ABBREVIATIONS:**

- BRGS. - BEARINGS
- C/C - CENTER TO CENTER
- C.J. - CONSTRUCTION JOINT
- CPP. - CORRUGATED PLASTIC PIPE
- CLR. - CLEAR
- DIA. - DIAMETER
- E.F. - EACH FACE
- EQ. - EQUAL
- EXIST. - EXISTING
- EXP. - EXPANSION
- F.A. - FORWARD ABUTMENT
- F.F. - FAR FACE
- F.S. - FIELD SPLICE
- MIN. - MINIMUM
- N.F. - NEAR FACE
- PEJF - PERFORMED EXPANSION JOINT FILLER
- R.A. - REAR ABUTMENT
- SPA. - SPACING/SPACES
- TYP. - TYPICAL
- MAX. - MAXIMUM
- SER. - SERIES
- STR. - STRAIGHT
- (T). - TOP
- (B). - BOTTOM
- (T&B). - TOP AND BOTTOM
- INC. - INCREMENT

**THREE-SIDED CULVERT WALL AND TOP SLAB THICKNESS:**

THE WALL AND TOP THICKNESSES SHOWN ON THE PLANS WERE OBTAINED FROM THE MANUFACTURERS AT THE TIME PLANS WERE PREPARED. IF THE WALL AND/OR TOP THICKNESS OF THE CULVERT PROPOSED ARE DIFFERENT FROM WHAT IS SHOWN IN THE PLANS, A MARKED COPY OF THE PROJECT PLANS, INCLUDING ALL PLAN NOTES AND DETAILS SHOWING ALL ITEMS AFFECTED BY THE DIFFERENT CULVERT DIMENSIONS, SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. ALL WORK REQUIRED TO ACCOMMODATE ANY REVISED DIMENSIONS SHALL BE AT NO EXTRA COST TO THE STATE.

**ITEM 512, TYPE 2 WATERPROOFING:**

MEMBRANE WATERPROOFING (SHEET TYPE 2) SHALL EXTEND VERTICALLY DOWN ALL SIDES OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. THE EXTERIOR JOINT GAP ON THE TOP AND SIDES BETWEEN THE PRECAST CULVERT SECTIONS SHALL BE FILLED WITH PORTLAND CEMENT MORTAR PRIOR TO INSTALLING THE MEMBRANE WATERPROOFING. JOINT WRAP AS SPECIFIED IN 611.08 AND CONCRETE SEALING AS SPECIFIED IN 611.09 ARE NOT REQUIRED UNDER THE LIMITS OF THE MEMBRANE WATERPROOFING. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE AND BID PER SQUARE YARD FOR ITEM 512, TYPE 2 WATERPROOFING.

**ITEM 512, TYPE 3 WATERPROOFING:**

MEMBRANE WATERPROOFING (SHEET TYPE 3) SHALL BE APPLIED TO THE TOP SURFACE OF THE PRECAST CULVERT SECTIONS. THE EXTERIOR JOINT GAP ON THE TOP AND SIDES BETWEEN THE PRECAST CULVERT SECTIONS SHALL BE FILLED WITH PORTLAND CEMENT MORTAR PRIOR TO INSTALLING THE MEMBRANE WATERPROOFING. JOINT WRAP AS SPECIFIED IN 611.08 AND CONCRETE SEALING AS SPECIFIED IN 611.09 ARE NOT REQUIRED UNDER THE LIMITS OF THE MEMBRANE WATERPROOFING. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE AND BID PER SQUARE YARD FOR ITEM 512, TYPE 3 WATERPROOFING.

**ASBESTOS NOTIFICATION**

AN ASBESTOS SURVEY OF THE DEL-521-12.75 BRIDGE (SFN 2103664) WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT AT THE BRIDGE.

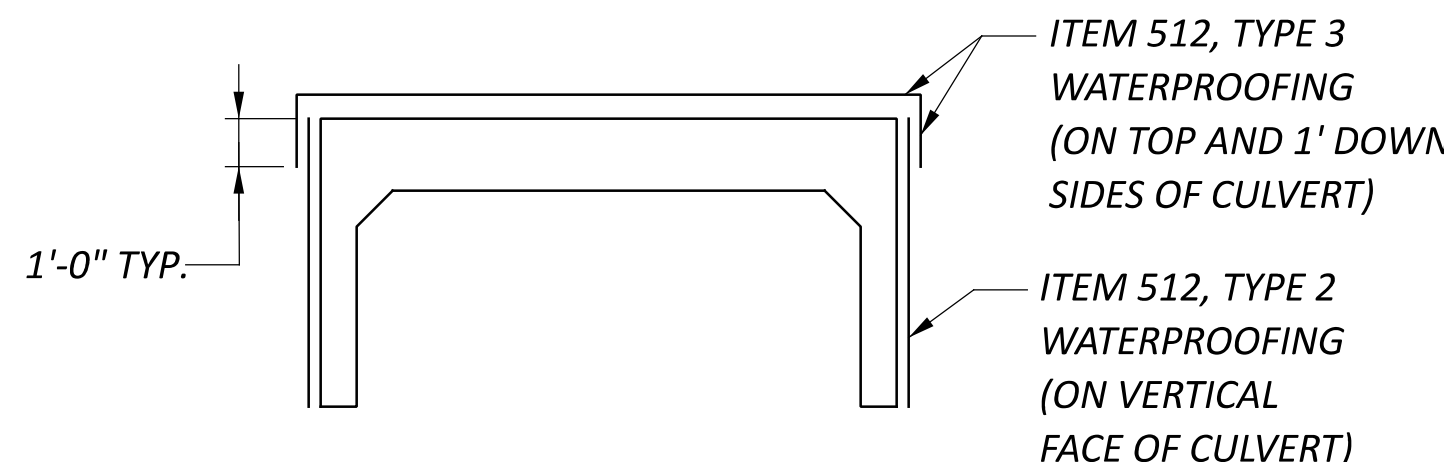
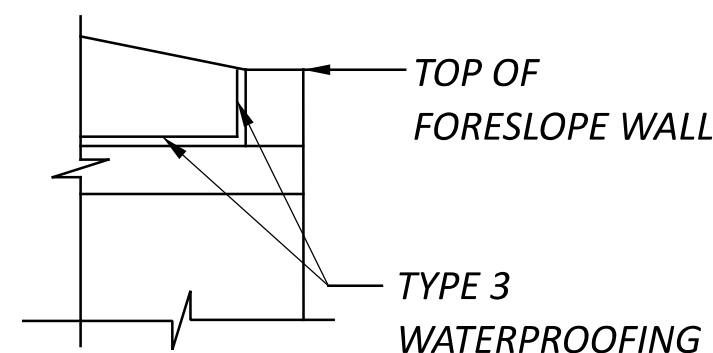
A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA ELECTRONICALLY OR VIA US MAIL TO:

OHIO EPA  
 DAPC-ASBESTOS  
 P.O. BOX 1049  
 COLUMBUS, OHIO 43216-1049

AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION. THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER.

INFORMATION REQUIRED ON THE FORM WILL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.



ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION
202	11002	LUMP	LUMP	STRUCTURE REMOVED, OVER 20 FOOT SPAN
202	22900	111	SY	APPROACH SLAB REMOVED
503	11100	LUMP	LUMP	COFFERDAMS AND EXCAVATION BRACING
503	21100	605	CY	UNCLASSIFIED EXCAVATION
509	10000	19112	LB	EPOXY COATED STEEL REINFORCEMENT
511	46010	13	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING
511	46512	171	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING
511	46610	2	CY	CLASS QC1 CONCRETE, HEADWALL
512	10050	82	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)
512	33000	161	SY	TYPE 2 WATERPROOFING
512	33010	289	SY	TYPE 3 WATERPROOFING
516	13600	31	SF	1" PREFORMED EXPANSION JOINT FILLER
518	21200	13	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC
611	70000	72	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT (34'-0" SPAN x 10'-0" RISE)

GENERAL NOTES AND ESTIMATED QUANTITIES  
 BRIDGE NO. DEL-00521-12.750  
 S.R. 521 OVER LITTLE WALNUT CREEK

SFN 2103665  
 DESIGNER LA CHECKER RG/GA REVIEWER GTB 06-05-24  
 PROJECT ID 105433  
 SUBSET 2 TOTAL 10  
 SHEET P.80 TOTAL 101