

GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION



CONSTRUCTION PLANS FOR:

HIGH FRICTION SURFACE TREATMENT, 5 - 200K

CONTRACT NUMBER: T202100701
FEDERAL AID PROJECT NUMBER: ESTP-2020(34)

COUNTY: STATEWIDE M.R. #: MULTIPLE

U.S. CUSTOMARY
UNITS

DESIGN DESIGNATION

SEE LOCATION SPECIFIC PLANS

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA / REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME

APPROVED FOR ADVERTISEMENT

Adam S. Weiser
DIRECTOR OF TRANSPORTATION SOLUTIONS

09/02/2020
DATE

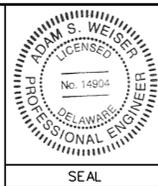
PREPARED BY

WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

09-01-2020

DATE

THIS SEAL APPLIES TO ALL SHEETS
BEARING THE "WRA" SECTION DESIGNATION.



SEAL

HIGH FRICTION SURFACE TREATMENT LOCATIONS

- ① LOCATION U1 - CEDAR CREEK ROAD
- ② LOCATION U2 - SR 273 / I-95 RAMP
- ③ LOCATION U3 - SR 9 (RIVER ROAD)
- ④ LOCATION U4 - RAMP FROM I-95 TO SR 1 SB
- ⑤ LOCATION U5 - I-495



DESIGN DESIGNATION	
SEE LOCATION SPECIFIC PLANS	
INDEX OF SHEETS	
<small>SHEET NO</small>	<small>TABLE OF CONTENTS</small>
1	TITLE
2	INDEX OF SHEETS / LOCATION MAP / ADDENDA AND REVISIONS
3	NOTES AND DETAIL
4-12	LOCATION AND DETOUR PLANS
<small>TOTAL SHEETS: 12</small>	

ADDENDUM PREPARED BY	
Whitman, Requardt and Associates, LLP <small>Engineers Architects Environmental Planners Est. 1915</small>	
<small>THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.</small>	<small>DATE</small>
<small>SEAL</small>	<small>SEAL</small>

REVISION PREPARED BY	
Whitman, Requardt and Associates, LLP <small>Engineers Architects Environmental Planners Est. 1915</small>	
<small>THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.</small>	<small>DATE</small>
<small>SEAL</small>	<small>SEAL</small>

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<small>ADDENDA / REVISIONS</small>	NOT TO SCALE	HIGH FRICTION SURFACE TREATMENT 5 - 200K	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: 8px;"><small>CONTRACT</small></td> <td style="font-size: 8px;"><small>ROAD NO.</small></td> </tr> <tr> <td style="font-size: 8px;">T202100701</td> <td></td> </tr> <tr> <td style="font-size: 8px;"><small>COUNTY</small></td> <td style="font-size: 8px;"><small>DESIGNED BY: D. GUNYUZLU</small></td> </tr> <tr> <td style="font-size: 8px;">STATEWIDE</td> <td style="font-size: 8px;"><small>CHECKED BY: A. WEISER</small></td> </tr> </table>	<small>CONTRACT</small>	<small>ROAD NO.</small>	T202100701		<small>COUNTY</small>	<small>DESIGNED BY: D. GUNYUZLU</small>	STATEWIDE	<small>CHECKED BY: A. WEISER</small>	INDEX /MAP	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: 8px;"><small>SECTION</small></td> </tr> <tr> <td style="font-size: 8px;">WRA</td> </tr> <tr> <td style="font-size: 8px;"><small>SHEET NO.</small></td> </tr> <tr> <td style="font-size: 8px;">2</td> </tr> </table>	<small>SECTION</small>	WRA	<small>SHEET NO.</small>	2
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WRA																	
<small>SHEET NO.</small>																	
2																	

GENERAL NOTES

- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2016 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2018, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.
- ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

(X)	NONE
()	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
()	ALL PLAN SHEETS, IN PDF FORMAT.
()	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
()	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
()	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

NOTE: THE DOCUMENT ENTITLED "RELEASE FOR DELIVERY OF DOCUMENTS IN ELECTRONIC FORM TO A CONTRACTOR" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

PROJECT NOTES

SECTION 100

- THE CONTRACTOR WILL CONTACT THE DELAWARE TMC AT 302-659-4600 PRIOR TO ANY UNMANNED AERIAL VEHICLE (UAV) FLIGHTS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE FOLLOWING INFORMATION: THE REGISTRATION NUMBER OF THE UAV, THE FLIGHT TIME, LOCATION OF THE FLIGHT, THE PILOT'S NAME AND THE PILOT'S CONTACT NUMBER DURING THE FLIGHT.

SECTION 400

- UNLESS SPECIFIED, OVERLAY WIDTHS SHALL MATCH EXISTING WIDTHS.
- THE COST OF CLIPPING BACK THE EDGES OF THE ROADWAY, SHOULDERS AND THE FIRST 3' OF UNPAVED DRIVEWAY ENTRANCES, PICKING UP AND DISPOSING OF WASTE AND EXCESS MATERIAL, AND CLEANING THE EXISTING PAVEMENT PRIOR TO OVERLAY SHALL BE INCIDENTAL TO SECTION 401.

SECTION 700

- MASK ALL UTILITY MANHOLES, JUNCTION WELL COVERS, DRAINAGE INLETS, BRIDGE DECK JOINTS AND OTHER IN-ROADWAY APPURTENANCES SO AS NOT TO COVER THESE APPURTENANCES WITH HIGH FRICTION SURFACE TREATMENT MATERIAL. UPON COMPLETION OF THE HIGH FRICTION SURFACE TREATMENT INSTALLATION, REMOVE MASKING MATERIALS FROM THESE APPURTENANCES.
- ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE STATED.
- ALL PAVING, INCLUDING TURN LANES, SHOULDERS AND INTERSECTIONS, IS TO BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FROM THE TIME THE AREA WAS MILLED. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.
- THE CONTRACTOR SHALL TAKE CARE IN REMOVING PAVEMENT AROUND UTILITIES, BUTT JOINTS, CURBS, ETC. SO THAT EXISTING PAVEMENT BEYOND THE SPECIFIED DEPTHS IS NOT DAMAGED. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS MAY RESULT IN PLACING LEVELING COURSES AT THE CONTRACTOR'S EXPENSE. THE REMOVAL AND CLEAN UP OF THE HOT MIX RESIDUE WEDGE REMAINING AFTER MILLING OPERATIONS SHALL BE INCIDENTAL TO THE MILLING ITEM. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS (RPM'S) SHALL BE INCIDENTAL THE APPLICABLE MILLING ITEM.

SECTION 800

- THE CONTRACTOR SHALL NOT SPRAY HIGH FRICTION SURFACE TREATMENT MATERIAL ON EXISTING PAVEMENT MARKINGS. ANY PAVEMENT MARKINGS THAT CANNOT BE AVOIDED BY MAKING ADJUSTMENTS TO APPLICATION EQUIPMENT SHALL BE MASKED AND PROTECTED UNLESS OTHERWISE INDICATED IN THE LOCATION SPECIFIC PLANS. NO MARKINGS SHALL BE REMOVED UNLESS INDICATED ON THE LOCATION PLANS OR AS DIRECTED BY THE ENGINEER.
- PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE DELAWARE MUTCD AND SHALL MATCH THE EXISTING CONFIGURATION UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, WHITE EDGE LINES SHALL WRAP AROUND THE RADIUS OF ALL SIDE STREETS AND MAJOR COMMERCIAL ENTRANCES TO A TANGENT POINT. YELLOW CENTERLINES SHALL BE CONTINUOUS AROUND MEDIAN ISLANDS. ALL DOUBLE YELLOW CENTERLINES SHALL BE PLACED IN A 5-6-5 CONFIGURATION (2 EACH, 5" YELLOW STRIPES WITH A 6" GAP BETWEEN).
- ANY ERRONEOUS MARKINGS WILL NOT BE PAID FOR AND SHALL BE CORRECTED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. ERRONEOUS MARKINGS OR SHADOWS THAT EXCEED ONE (1) INCH IN WIDTH SHALL BE REMOVED BY EITHER SAND OR WATER BLASTING AS DIRECTED BY THE ENGINEER. NO OTHER REMOVAL METHODS WILL BE ALLOWED. ANY DAMAGE TO THE PAVEMENT OR THE HIGH FRICTION SURFACE TREATMENT CAUSED BY REMOVAL OF ERRONEOUS MARKINGS SHALL BE REPAIRED / REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- STOP LINES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 3B.16 OF THE DELAWARE MUTCD.
- ALL CROSSWALKS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 3B.18 OF THE DELAWARE MUTCD.

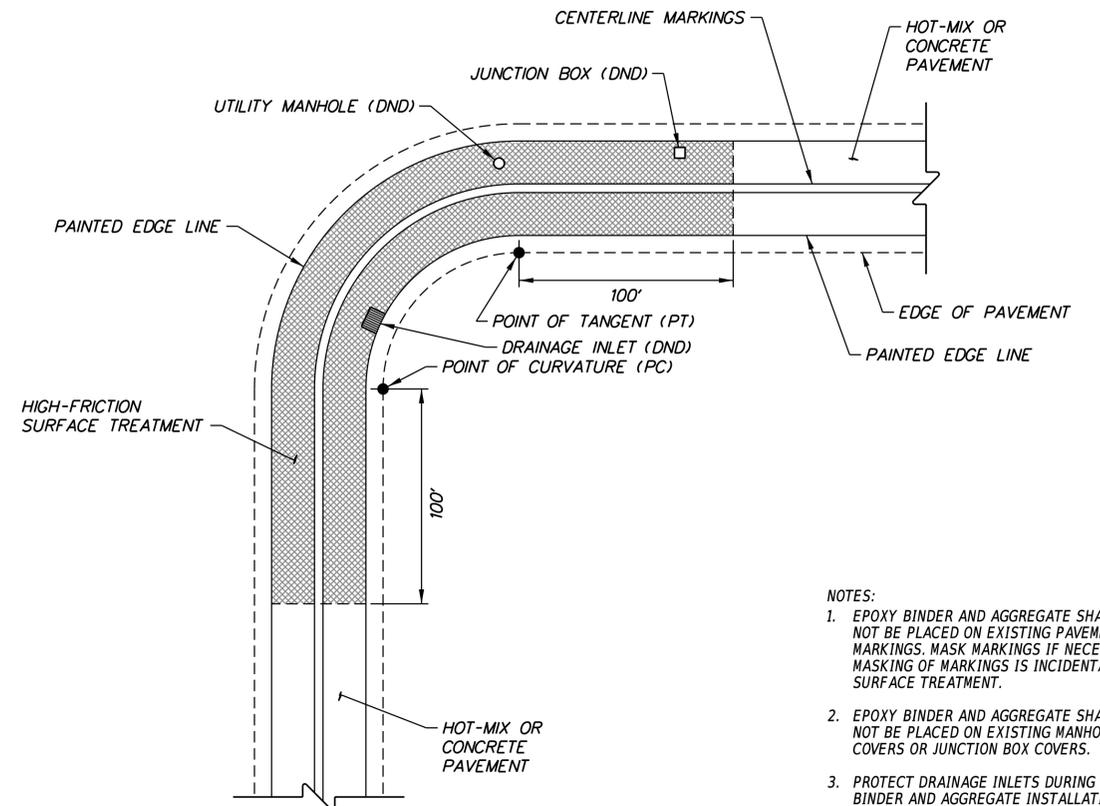
MISCELLANEOUS

- THE CONTRACTOR SHALL CONTACT THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6191 OR BY EMAIL NOTIFICATION TO DOT_Detours@state.de.us.

MAINTENANCE OF TRAFFIC NOTES

- MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO THE TYPICAL APPLICATIONS OF THE DELAWARE MUTCD THAT ARE PROVIDED IN THE LOCATION SPECIFIC SEQUENCE OF CONSTRUCTION NOTES.

HIGH FRICTION SURFACE TREATMENT INSTALLATION - CURVE (TYPICAL)



NOTES:

- EPOXY BINDER AND AGGREGATE SHALL NOT BE PLACED ON EXISTING PAVEMENT MARKINGS. MASK MARKINGS IF NECESSARY. MASKING OF MARKINGS IS INCIDENTAL TO SURFACE TREATMENT.
- EPOXY BINDER AND AGGREGATE SHALL NOT BE PLACED ON EXISTING MANHOLE COVERS OR JUNCTION BOX COVERS.
- PROTECT DRAINAGE INLETS DURING EPOXY BINDER AND AGGREGATE INSTALLATION.

MAINTENANCE OF TRAFFIC NOTES (CONT.)

- AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR REQUIREMENT FOR THIS PROJECT.

(X)	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
()	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 801000.

- THE USE OF MILLINGS AND GRADED AGGREGATE BASE COURSE (GABC) IN THE TRAVEL WAY, TEMPORARY TRAVEL WAY, HIGH VOLUME ENTRANCES AND ACCESS RAMP FOR THE PURPOSE OF PROVIDING A TEMPORARY ROADWAY SURFACE, POT HOLE REPAIR, TAPERED EDGE FOR UTILITIES, BUTT JOINTS, AND LONGITUDINAL DROP-OFFS (MILLING AND PAVING OPERATIONS) IS PROHIBITED UNLESS IT IS OTHERWISE DESIGNATED TO BE USED IN THE CONTRACT PLANS. USE COLD PATCH, BITUMINOUS CONCRETE, BITUMINOUS CONCRETE WEDGE, OR TAPER MILL, AS NOTED IN THE CONTRACT DOCUMENTS OR APPROVED BY THE ENGINEER. PAYMENT FOR COLD PATCH, BITUMINOUS CONCRETE OR BITUMINOUS CONCRETE WEDGE SHALL BE PAID AS NOTED IN THE CONTRACT DOCUMENTS. TAPER MILL BITUMINOUS CONCRETE SHALL BE PAID UNDER THE BITUMINOUS CONCRETE MILLING ITEM.

MILLINGS OR GABC SHALL BE USED AT THE FOLLOWING LOCATIONS WHERE ACCESS TO A BUSINESS, RESIDENCE, OR EDGE DROP OFF NEEDS TO BE MAINTAINED UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER TO USE BITUMINOUS CONCRETE OR COLD PATCH. ALL MILLINGS AND GABC WILL BE ROLLED AND COMPACTED TO HELP PREVENT THE MATERIAL FROM UNRAVELLING:

- DRIVEWAYS
- ENTRANCES
- LOW VOLUME ACCESS RAMPS (IDENTIFIED IN THE CONTRACT DOCUMENTS)
- EDGE DROP-OFFS ADJACENT TO LIVE ROADWAY (LANES AND SHOULDER) AND THE PROPOSED ROAD CONSTRUCTION
- EDGE OF ROADWAY DROP-OFF

GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED FOR ROADWAY WEDGE/FILLET BETWEEN TRAVEL LANES AND PAVEMENT BOX, EDGE OF TRAVELWAY, DRIVEWAY OR ENTRANCE ACCESS SHALL BE INCIDENTAL TO ITEM NO. 801000 - MAINTENANCE OF TRAFFIC. THE BASE COURSE MATERIAL SHALL BE PLACED AT NO GREATER THAN THE SLOPE SPECIFIED IN TABLE 6G-1 AND SHALL BE COMPACTED. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE PAY ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR MILLINGS OR GABC TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM.

VERTICAL DIFFERENCES SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

- LANE CLOSURES AND ROAD CLOSURES ARE PROHIBITED FROM OCCURRING DURING THE FIREFLY MUSIC FESTIVAL EVENT IN DOVER, DE FROM 12:00 AM WEDNESDAY PRIOR TO THE EVENT THROUGH 12:00 AM TUESDAY FOLLOWING THE EVENT. THE ENGINEER WILL PROVIDE THE DATES OF THE EVENT TWO WEEKS PRIOR TO THE RESTRICTION BEING IMPLEMENTED.
- THE CONTRACTOR SHALL PROVIDE ONE TRAFFIC OFFICER FOR ANY OPERATION WHERE AN EXISTING SIGNALIZED INTERSECTION IS PLACED IN FLASH MODE. THE TRAFFIC OFFICER IS THE ONLY INDIVIDUAL THAT CAN PLACE A TRAFFIC SIGNAL IN FLASH MODE, AND THE TRAFFIC OFFICER SHALL STAY ON LOCATION UNTIL THE SIGNAL IS PLACED BACK IN STOP-AND-GO OPERATION IN ACCORDANCE WITH DELDOT'S TEMPORARY TRAFFIC CONTROL WITHIN INTERSECTIONS MEMORANDUM (WWW.MUTCD.DELDOT.GOV).

NO. 22785-02815-000 HFST - URBAN/PNO1-URBAN (SHEET 3).dgn 9/22/2020 10:50 PM

ADDENDA / REVISIONS

NOT TO SCALE

HIGH FRICTION SURFACE TREATMENT
5 - 200K

CONTRACT	ROAD NO.
T202100701	
COUNTY	DESIGNED BY: D. GUNYUZLU
STATEWIDE	CHECKED BY: A. WEISER

NOTES

SECTION
WRA
SHEET NO.
3



**LOCATION PLAN
CEDAR CREEK ROAD (S212)**

QUANTITIES

ITEM	U. O. M.	ITEM DESCRIPTION	QUANTITY
401005	TON	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	198
760004	LF	RUMBLE STRIPS, BITUMINOUS PAVEMENT, SHALLOW DEPTH	650
760010	SY-IN	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	3,482
760504	GAL	HIGH FRICTION SURFACE TREATMENT	633
762000	LF	SAW CUTTING, BITUMINOUS CONCRETE	48
805001	EA-DY	PLASTIC DRUMS	314
808001	EA-DY	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	22
810001	EA-DY	TEMPORARY WARNING SIGNS AND PLAQUES	109
811009	HR	FLAGGER, SUSSEX COUNTY, FEDERAL	154
811018	HR	FLAGGER, SUSSEX COUNTY, FEDERAL, OVERTIME	38
817003	LF	TEMPORARY MARKINGS, 4"	5,200
817013	LF	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	2,600

ALLOWABLE LANE CLOSURE HOURS - CEDAR CREEK ROAD

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY																								
MONDAY																								
TUESDAY																								
WEDNESDAY																								
THURSDAY																								
FRIDAY																								
SATURDAY																								

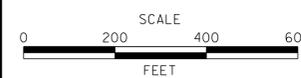
Lane Closure Permitted
 All Lanes Open

SEQUENCE OF CONSTRUCTION:

1. PLACE 'ROAD WORK AHEAD' AND 'END ROAD WORK' SIGNS IN EACH DIRECTION, 1000 FEET UPSTREAM AND DOWNSTREAM OF WORK AREA. THESE SIGNS SHALL REMAIN IN PLACE UNTIL HIGH FRICTION SURFACE TREATMENT IS INSTALLED.
2. USING TA-10 DURING ALLOWABLE LANE CLOSURE HOURS, MILL 2" OF BITUMINOUS CONCRETE PAVEMENT WITHIN THE LIMITS SHOWN. AT THE END OF EACH DAY'S OPERATION, PRIOR TO REMOVING TEMPORARY TRAFFIC CONTROL, PLACE TEMPORARY STRIPING TO MATCH EXISTING STRIPING.
3. USING TA-10 DURING ALLOWABLE LANE CLOSURE HOURS, PAVE THE TYPE C WEARING COURSE WITHIN THE LIMITS SHOWN. AT THE END OF EACH DAY'S OPERATION, PRIOR TO REMOVING TEMPORARY TRAFFIC CONTROL, PLACE TEMPORARY STRIPING TO MATCH EXISTING STRIPING.
4. USING TA-17A DURING ALLOWABLE LANE CLOSURE HOURS, PLACE PERMANENT STRIPING.
5. USING TA-10 DURING ALLOWABLE LANE CLOSURE HOURS, MASK PAVEMENT MARKINGS, AND UTILITY APPURTENANCES AND PLACE HIGH FRICTION SURFACE TREATMENT IN EACH TRAVEL LANE WITHIN THE LIMITS SHOWN. AFTER PLACING HIGH FRICTION SURFACE TREATMENT, SWEEP ROADWAY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REMOVE PAVEMENT MARKING MASKING AND OPEN TRAVEL LANES. REMOVE 'ROAD WORK AHEAD' AND 'END ROAD WORK' SIGNS.
6. PERFORM ADDITIONAL SWEEPING AS REQUIRED BY THE CONTRACT DOCUMENTS.

DESIGN DESIGNATION			
M/RD #: S212	ROAD NAME: CEDAR CREEK ROAD		
FUNCTIONAL CLASS: MAJOR COLLECTOR	D.H.V. PROJECTED: N/A	YEAR: N/A	
TYPE OF CONSTRUCTION: PAVEMENT OVERLAY	DESIGN SPEED: N/A		
A.A.D.T. CURRENT: 6,098	YEAR: 2019	TRUCKS: N/A	
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A	

ADDENDA / REVISIONS



**HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U1 - CEDAR CREEK RD**

CONTRACT	ROAD NO.	S212
T202100701	DESIGNED BY:	D. GUNYUZLU
COUNTY	CHECKED BY:	A. WEISER
SUSSEX		

**CONSTRUCTION PLAN
AND SEQUENCE
OF CONSTRUCTION**

SECTION	WRA
SHEET NO.	4



LOCATION PLAN
RAMP (N6047) FROM SR 273 EB (CHRISTIANA ROAD) TO I-95 NB

QUANTITIES

ITEM	U. O. M.	ITEM DESCRIPTION	QUANTITY
401007	TON	SUPERPAVE TYPE C, PG 76-22 (CARBONATE STONE)	107
760010	SY-IN	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	1,894
760504	GAL	HIGH FRICTION SURFACE TREATMENT	702
762000	LF	SAW CUTTING, BITUMINOUS CONCRETE	30
810003	EA-DY	ARROW PANELS TYPE C	13
803001	EA-DY	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	28
804001	EA-DY	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	36
805001	EA-DY	PLASTIC DRUMS	1,575
806001	HR	TRAFFIC OFFICERS	24
808001	EA-DY	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	25
810001	EA-DY	TEMPORARY WARNING SIGNS AND PLAQUES	286
813001	LF-DY	TEMPORARY BARRICADES, TYPE III	216
817003	LF	TEMPORARY MARKINGS, 4"	2,770
817013	LF	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	1,175
817014	LF	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 10"	210
817027	EACH	RAISED / RECESSED PAVEMENT MARKER	30

ALLOWABLE LANE CLOSURE HOURS - RAMP FROM SR 273 EB TO I-95 NB

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY																								
MONDAY																								
TUESDAY																								
WEDNESDAY																								
THURSDAY																								
FRIDAY																								
SATURDAY																								

Lane / Ramp Closure Permitted
 All Lanes Open

SEQUENCE OF CONSTRUCTION:

1. PLACE PERMANENT WARNING SIGNS, AS SHOWN. THESE SIGNS SHALL REMAIN IN PLACE UNTIL HIGH FRICTION SURFACE TREATMENT IS INSTALLED.
2. USING THE MAINTENANCE OF TRAFFIC PLAN AND DETOUR PLAN ON SHEETS 6 AND 7 DURING ALLOWABLE LANE CLOSURE HOURS, MILL 2" OF BITUMINOUS CONCRETE PAVEMENT WITHIN THE LIMITS SHOWN. THE CONCRETE BRIDGE DECK AND BRIDGE JOINTS SHALL NOT BE DISTURBED. AT THE END OF EACH DAY'S OPERATION, PRIOR TO REMOVING TEMPORARY TRAFFIC CONTROL, PLACE TEMPORARY STRIPING TO MATCH EXISTING STRIPING.
3. USING THE MAINTENANCE OF TRAFFIC PLAN AND DETOUR PLAN ON SHEETS 6 AND 7 DURING ALLOWABLE LANE CLOSURE HOURS, PAVE THE TYPE C WEARING COURSE WITHIN THE LIMITS SHOWN. THE CONCRETE BRIDGE DECK AND BRIDGE JOINTS SHALL NOT BE DISTURBED. AT THE END OF EACH DAY'S OPERATION, PRIOR TO REMOVING TEMPORARY TRAFFIC CONTROL, PLACE TEMPORARY STRIPING TO MATCH EXISTING STRIPING.
4. USING TA-35C AND TA-35 DURING ALLOWABLE LANE CLOSURE HOURS, PLACE PERMANENT STRIPING.
5. USING THE MAINTENANCE OF TRAFFIC PLAN AND DETOUR PLAN ON SHEETS 6 AND 7 DURING ALLOWABLE LANE CLOSURE HOURS, MASK PAVEMENT MARKINGS, BRIDGE JOINTS, AND UTILITY APPURTENANCES AND PLACE HIGH FRICTION SURFACE TREATMENT IN EACH TRAVEL LANE WITHIN THE LIMITS SHOWN, INCLUDING ON THE BRIDGE DECKS. AFTER PLACING HIGH FRICTION SURFACE TREATMENT, SWEEP ROADWAY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REMOVE PAVEMENT MARKING MASKING AND OPEN TRAVEL LANES. REMOVE PERMANENT WARNING SIGNS.
6. PERFORM ADDITIONAL SWEEPING AS REQUIRED BY THE CONTRACT DOCUMENTS.

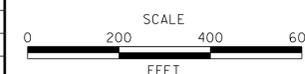
NOTE:

1. WORK SHALL BE COORDINATED WITH ACTIVE DELDOT CONTRACTS T201507402 (CHAPMAN ROAD OVER I-95 BRIDGE REPLACEMENT) AND T200800713 (I-95/SR 273 HSIP). IF WORK IS OCCURRING ON T200800713, THIS LOCATION SHALL NOT BE WORKED UNTIL THAT PROJECT IS SUBSTANTIALLY COMPLETE.

DESIGN DESIGNATION

MRD #: N6047	ROAD NAME: RAMP FROM SR 273 EB (CHRISTIANA ROAD) TO I-95 NB		
FUNCTIONAL CLASS: INTERSTATE	D.H.V. PROJECTED: N/A	YEAR: N/A	
TYPE OF CONSTRUCTION: PAVEMENT OVERLAY	DESIGN SPEED: N/A		
A.A.D.T. CURRENT: N/A	YEAR: N/A	TRUCKS: N/A	
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A	

ADDENDA / REVISIONS



HIGH FRICTION SURFACE TREATMENT
 5 - 200K
 LOCATION U2 - SR273 /I-95 RAMP

CONTRACT
T202100701
COUNTY
SUSSEX

ROAD NO. **N6047**
 DESIGNED BY: D. GUNYUZLU
 CHECKED BY: A. WEISER

CONSTRUCTION PLAN AND SEQUENCE OF CONSTRUCTION

SECTION
WRA
SHEET NO.
5

PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

RAMP TO
I-95 NB
TO CLOSE

STARTING
XXXXXX
XXPM-XXAM

DURING DETOUR
(DISPLAY FOR DURATION OF DETOUR)

PCMS-1

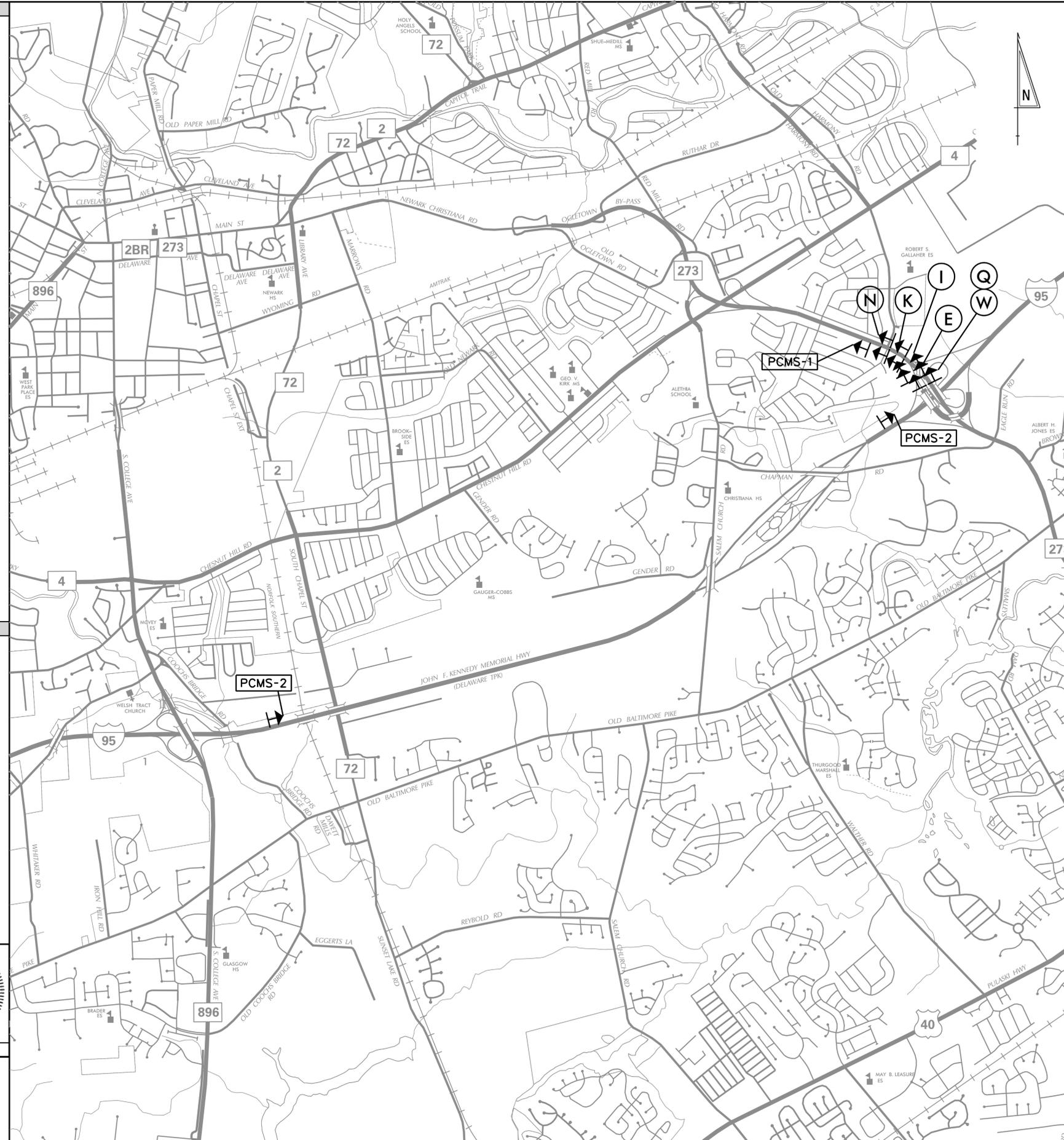
RAMP TO
I-95 NB
CLOSED

USE 95S
TO 896S
TO I-95N

DURING DETOUR
(DISPLAY FOR DURATION OF DETOUR)

PCMS-2

TO I-95N
USE
EXIT 1A



LEGEND

(A) DETOUR M4-9-DE	(B) DETOUR M4-9	(C) DETOUR M4-9	(D) DETOUR M4-9	(E) DETOUR M4-9
(F) DETOUR M4-9	(G) DETOUR M4-9	(H) DETOUR M4-9	(I) DETOUR M4-9	(J) END M4-8a
(K) DETOUR AHEAD W20-2	(L) DETOUR 1000 FT W20-2	(M) DETOUR 500 FT W20-2		
(N) RAMP CLOSED AHEAD W20-3	(O) RAMP CLOSED 1000 FT W20-3	(P) RAMP CLOSED 500 FT W20-3		
(Q) RAMP CLOSED R11-2	(R) DETOUR M4-10(L)	(S) DETOUR M4-10(R)		
(T) ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3a	(U) BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3b	(V) ROAD CLOSED TO THRU TRAFFIC R11-4		
(W)	(X)			

GENERAL NOTES

- ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
- SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
- "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

CONCURRENCE FOR IMPLEMENTATION

Donald A. Maggister Jr. 9/2/20
DATE

PREPARED BY
WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

ADAM S. WEISER
LICENSED PROFESSIONAL ENGINEER
No. 14904
DELAWARE

08-28-2020 DATE
SEAL

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.

[Signature]
QA/QC REVIEWER 8/28/2020 DATE

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

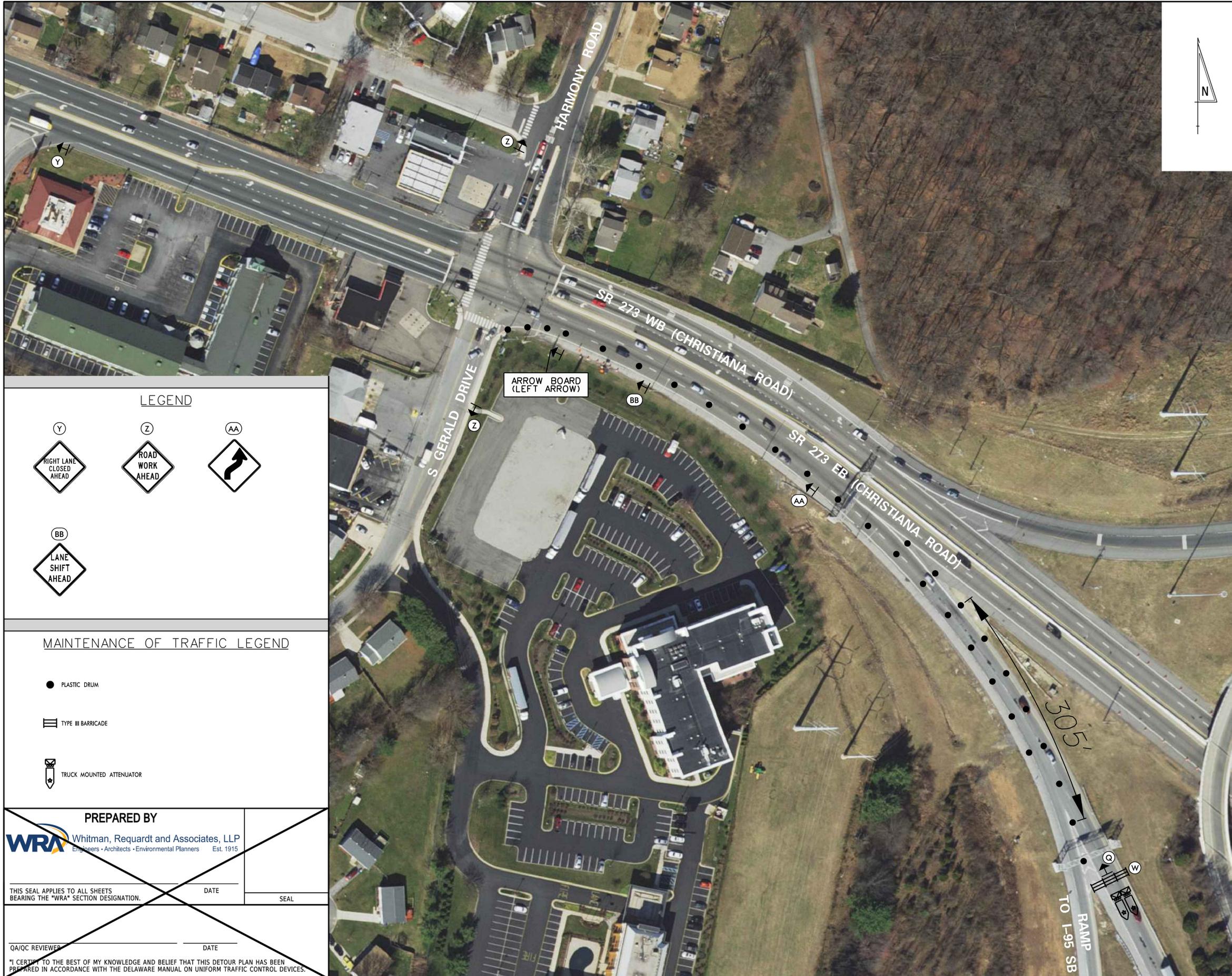
ADDENDA / REVISIONS

HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U2-SR273EB1-95NB RAMP

CONTRACT T202100701
COUNTY NEW CASTLE
ROAD NO. N6047
DESIGNED BY: D. GUNYUZLU
CHECKED BY: A. WEISER

SECTION WRA
SHEET NO. 6
DETOUR PLAN

LAST REVISED: 9/1/2018
8/28/2020 1:37:17 PM
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LEGEND				
(A) DETOUR M4-9-DE	(B) DETOUR M4-9	(C) DETOUR M4-9	(D) DETOUR M4-9	(E) DETOUR M4-9
(F) DETOUR M4-9	(G) DETOUR M4-9	(H) DETOUR M4-9	(I) DETOUR M4-9	(J) END DETOUR M4-8a
(K) DETOUR AHEAD W20-2	(L) DETOUR 1000 FT W20-2	(M) DETOUR 500 FT W20-2		
(N) RAMP CLOSED AHEAD W20-3	(O) RAMP CLOSED 1000 FT W20-3	(P) RAMP CLOSED 500 FT W20-3		
(Q) RAMP CLOSED CUSTOM	(R) DETOUR M4-10(L)	(S) DETOUR M4-10(R)		
(T) ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3a	(U) BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3b	(V) ROAD CLOSED TO THRU TRAFFIC R11-4		
(W)		(X)		

LEGEND		
(Y) RIGHT LANE CLOSED AHEAD	(Z) ROAD WORK AHEAD	(AA) [Symbol]
(BB) LANE SHIFT AHEAD		

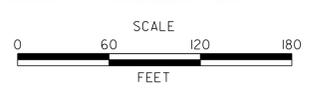
MAINTENANCE OF TRAFFIC LEGEND	
●	PLASTIC DRUM
[Symbol]	TYPE III BARRICADE
[Symbol]	TRUCK MOUNTED ATTENUATOR

PREPARED BY	
Whitman, Requardt and Associates, LLP Engineers • Architects • Environmental Planners Est. 1915	
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.	DATE
QA/QC REVIEWER	DATE
*I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.	

- GENERAL NOTES**
- ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
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 - "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
 - BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

CONCURRENCE FOR IMPLEMENTATION	
TRAFFIC SAFETY	DATE

ADDENDA / REVISIONS



HIGH FRICTION SURFACE TREATMENT
 5 - 200K
 LOCATION U2-SR273EB1-95NB RAMP

CONTRACT	T202100701
COUNTY	NEW CASTLE
ROAD NO.	N6047
DESIGNED BY:	D. GUNYUZLU
CHECKED BY:	A. WEISER

MAINTENANCE OF TRAFFIC PLAN	
SECTION	WRA
SHEET NO.	7

LAST REVISED: 9/11/2018
 8/28/2020
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**LOCATION PLAN
RIVER ROAD (N378)**

QUANTITIES			
ITEM	U. O. M.	ITEM DESCRIPTION	QUANTITY
401005	TON	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	154
760010	SY- IN	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	2,706
760504	GAL	HIGH FRICTION SURFACE TREATMENT	492
762000	LF	SAW CUTTING, BITUMINOUS CONCRETE	48
803001	EA-DY	PORTABLE CHANGEABLE MESSAGE SIGN	20
805001	EA-DY	PLASTIC DRUMS	184
810001	EA-DY	TEMPORARY WARNING SIGNS AND PLAQUES	109
811007	HR	FLAGGER, NEW CASTLE COUNTY, FEDERAL	102
811016	HR	FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	26
817003	LF	TEMPORARY MARKINGS, PAINT, 4"	4,088
817013	LF	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	2,044
817027	EA	RAISED/RECESSED PAVEMENT MARKER	10

ALLOWABLE LANE CLOSURE HOURS - RIVER ROAD																									
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	
SUNDAY																									
MONDAY																									
TUESDAY																									
WEDNESDAY																									
THURSDAY																									
FRIDAY																									
SATURDAY																									

Lane Closure Permitted
 All Lanes Open

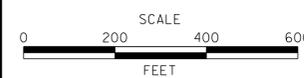
SEQUENCE OF CONSTRUCTION:

1. PLACE 'ROAD WORK AHEAD' AND 'END ROAD WORK' SIGNS IN EACH DIRECTION, 1000 FEET UPSTREAM AND DOWNSTREAM OF WORK AREA. THESE SIGNS SHALL REMAIN IN PLACE UNTIL HIGH FRICTION SURFACE TREATMENT IS INSTALLED.
2. USING TA-10 DURING ALLOWABLE LANE CLOSURE HOURS, MILL 2" OF BITUMINOUS CONCRETE PAVEMENT WITHIN THE LIMITS SHOWN. AT THE END OF EACH DAY'S OPERATION, PRIOR TO REMOVING TEMPORARY TRAFFIC CONTROL, PLACE TEMPORARY STRIPING TO MATCH EXISTING STRIPING.
3. USING TA-17 DURING ALLOWABLE LANE CLOSURE HOURS, PAVE THE TYPE C WEARING COURSE WITHIN THE LIMITS SHOWN. AT THE END OF EACH DAY'S OPERATION, PRIOR TO REMOVING TEMPORARY TRAFFIC CONTROL, PLACE TEMPORARY STRIPING TO MATCH EXISTING STRIPING.
4. USING TA-17A DURING ALLOWABLE LANE CLOSURE HOURS, PLACE PERMANENT STRIPING.
5. USING TA-10 DURING ALLOWABLE LANE CLOSURE HOURS, MASK PAVEMENT MARKINGS AND UTILITY APPURTENANCES AND PLACE HIGH FRICTION SURFACE TREATMENT IN EACH TRAVEL LANE WITHIN THE LIMITS SHOWN. AFTER PLACING HIGH FRICTION SURFACE TREATMENT, SWEEP ROADWAY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REMOVE PAVEMENT MARKING MASKING AND OPEN TRAVEL LANES. REMOVE 'ROAD WORK AHEAD' AND 'END ROAD WORK' SIGNS.
6. USING TA-10 DURING ALLOWABLE LANE CLOSURE HOURS, PERFORM ADDITIONAL SWEEPING AS REQUIRED BY THE CONTRACT DOCUMENTS.

DESIGN DESIGNATION			
MRD #: N378	ROAD NAME: RIVER ROAD		
FUNCTIONAL CLASS: MINOR ARTERIAL	D.H.V. PROJECTED: N/A	YEAR: N/A	
TYPE OF CONSTRUCTION: PAVEMENT OVERLAY	DESIGN SPEED: N/A		
A.A.D.T. CURRENT: 6,460	YEAR: 2019	TRUCKS: N/A	
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A	

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ADDENDA / REVISIONS

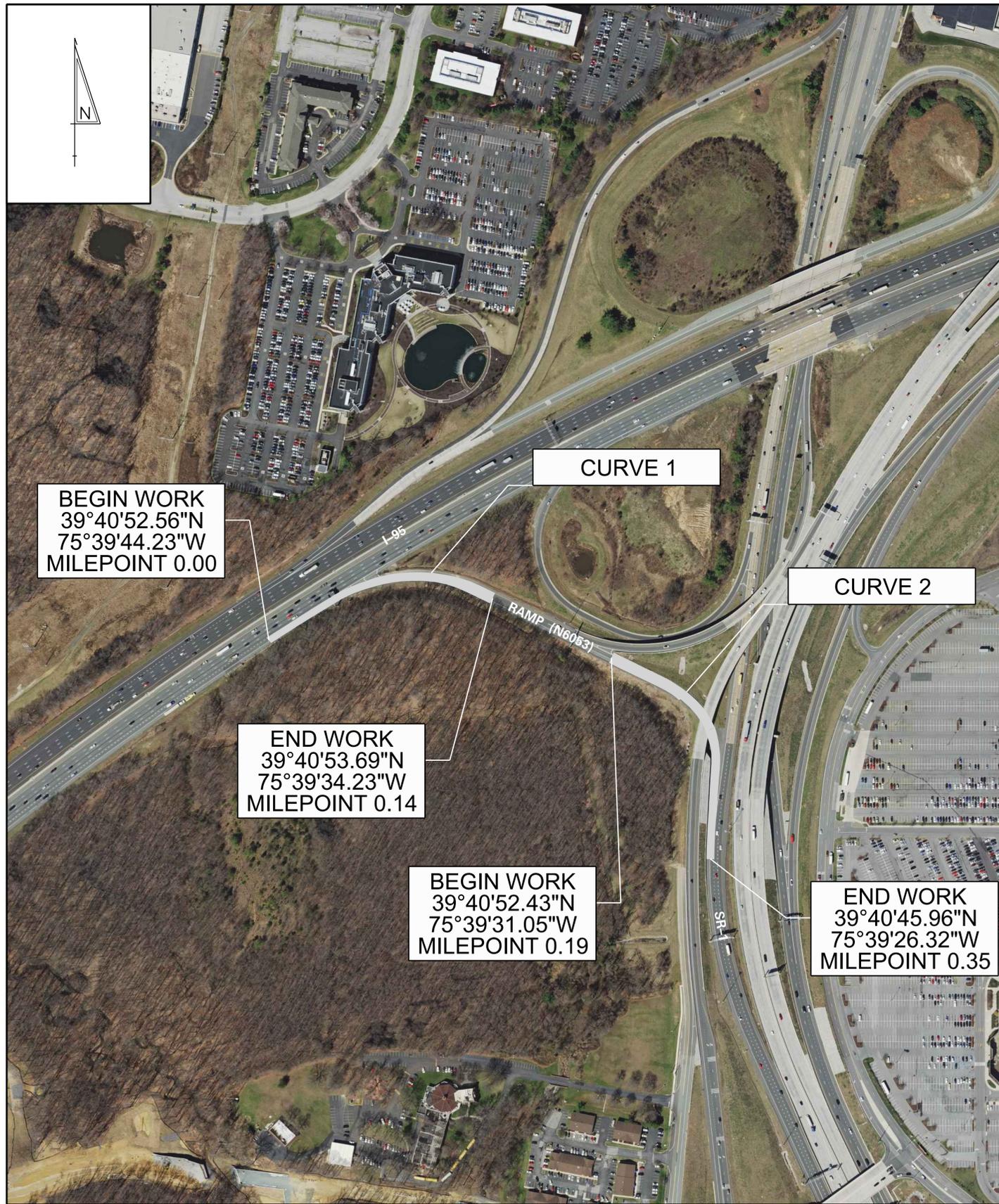


**HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U3 - SR 9 (RIVER ROAD)**

CONTRACT	ROAD NO.	N378
T202100701	DESIGNED BY:	S. HOYE
COUNTY	CHECKED BY:	A. WEISER
NEW CASTLE		

**CONSTRUCTION PLAN
AND SEQUENCE
OF CONSTRUCTION**

SECTION
WRA
SHEET NO.
8



LOCATION PLAN
RAMP FROM I-95 NB TO SR 1 SB (N6053)

QUANTITIES

ITEM	U. O. M.	ITEM DESCRIPTION	QUANTITY
760504	GAL	HIGH FRICTION SURFACE TREATMENT	1,086
802003	EA-DY	ARROW PANELS TYPE C	6
803001	EA-DY	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	12
804001	EA-DY	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	6
805001	EA-DY	PLASTIC DRUMS	180
806001	HOURL	TRAFFIC OFFICERS	24
808001	EA-DY	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	29
810001	EA-DY	TEMPORARY WARNING SIGNS AND PLAQUES	98
813001	LF-DY	TEMPORARY BARRICADES, TYPE III	32

ALLOWABLE LANE CLOSURE HOURS - INTERSTATE 95 NB, SR 1 SB AND RAMP

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY																								
MONDAY																								
TUESDAY																								
WEDNESDAY																								
THURSDAY																								
FRIDAY																								
SATURDAY																								

Lane Closure Permitted
 All Lanes Open

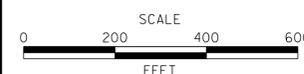
SEQUENCE OF CONSTRUCTION:

- DURING ALLOWABLE LANE CLOSURE HOURS, USING TA-33 ON INTERSTATE 95 NB AND THE DETOUR PLAN ON SHEETS 10 AND 11, CLOSE THE RIGHT-MOST LANE (EXIT LANE) OF INTERSTATE 95 NB APPROACHING THE RAMP TO SR 1. CLOSE THE RAMP TO SR 1. MASK EXISTING PAVEMENT MARKINGS AND UTILITY APPURTENANCES. PLACE HIGH FRICTION SURFACE TREATMENT WITHIN THE LIMITS OF CURVE 1. AFTER PLACING HIGH FRICTION SURFACE TREATMENT, SWEEP ROADWAY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REMOVE MASKING FROM PAVEMENT MARKINGS AND UTILITY APPURTENANCES. OPEN RAMP AND INTERSTATE 95 NB RIGHT LANE (EXIT LANE). REMOVE ALL DETOUR SIGNAGE.
- DURING ALLOWABLE LANE CLOSURE HOURS, CLOSE THE RIGHT-MOST LANE (EXIT LANE) OF INTERSTATE 95 NB APPROACHING THE RAMP TO SR 1 USING TA-33. CLOSE THE RAMP TO SR 1 USING THE DETOUR PLAN ON SHEETS 10 AND 11. CLOSE THE RIGHT TRAVEL LANE ADJACENT TO THE RAMP FROM INTERSTATE 95 NB ON SR 1 SB USING TA-33. MASK EXISTING PAVEMENT MARKINGS AND UTILITY APPURTENANCES. PLACE HIGH FRICTION SURFACE TREATMENT WITHIN THE LIMITS OF CURVE 2. AFTER PLACING HIGH FRICTION SURFACE TREATMENT, SWEEP ROADWAY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REMOVE MASKING FROM PAVEMENT MARKINGS AND UTILITY APPURTENANCES. OPEN RAMP AND SR 1 SB RIGHT LANE. REMOVE ALL DETOUR SIGNAGE.
- DURING ALLOWABLE LANE CLOSURE HOURS, UTILIZING TA-35, PERFORM ADDITIONAL SWEEPING AS REQUIRED BY THE CONTRACT DOCUMENTS.

DESIGN DESIGNATION

MRD #: N6053	ROAD NAME: EXIT 4S, I-95	D.H.V. PROJECTED: N/A	YEAR: N/A
FUNCTIONAL CLASS: INTERSTATE	DESIGN SPEED: N/A		
TYPE OF CONSTRUCTION: PAVEMENT OVERLAY	DESIGN SPEED: N/A		
A.A.D.T. CURRENT: N/A	YEAR: 2017	TRUCKS: N/A	
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A	

ADDENDA / REVISIONS



HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U4-RAMP I-95NB - SR1SB

CONTRACT	ROAD NO.	N6053
T202100701	DESIGNED BY:	C. HOLLOWAY
COUNTY	CHECKED BY:	A. WEISER
NEW CASTLE		

CONSTRUCTION PLAN
AND SEQUENCE
OF CONSTRUCTION

SECTION	WRA
SHEET NO.	9

PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

EXITS
4A-B
TO CLOSE

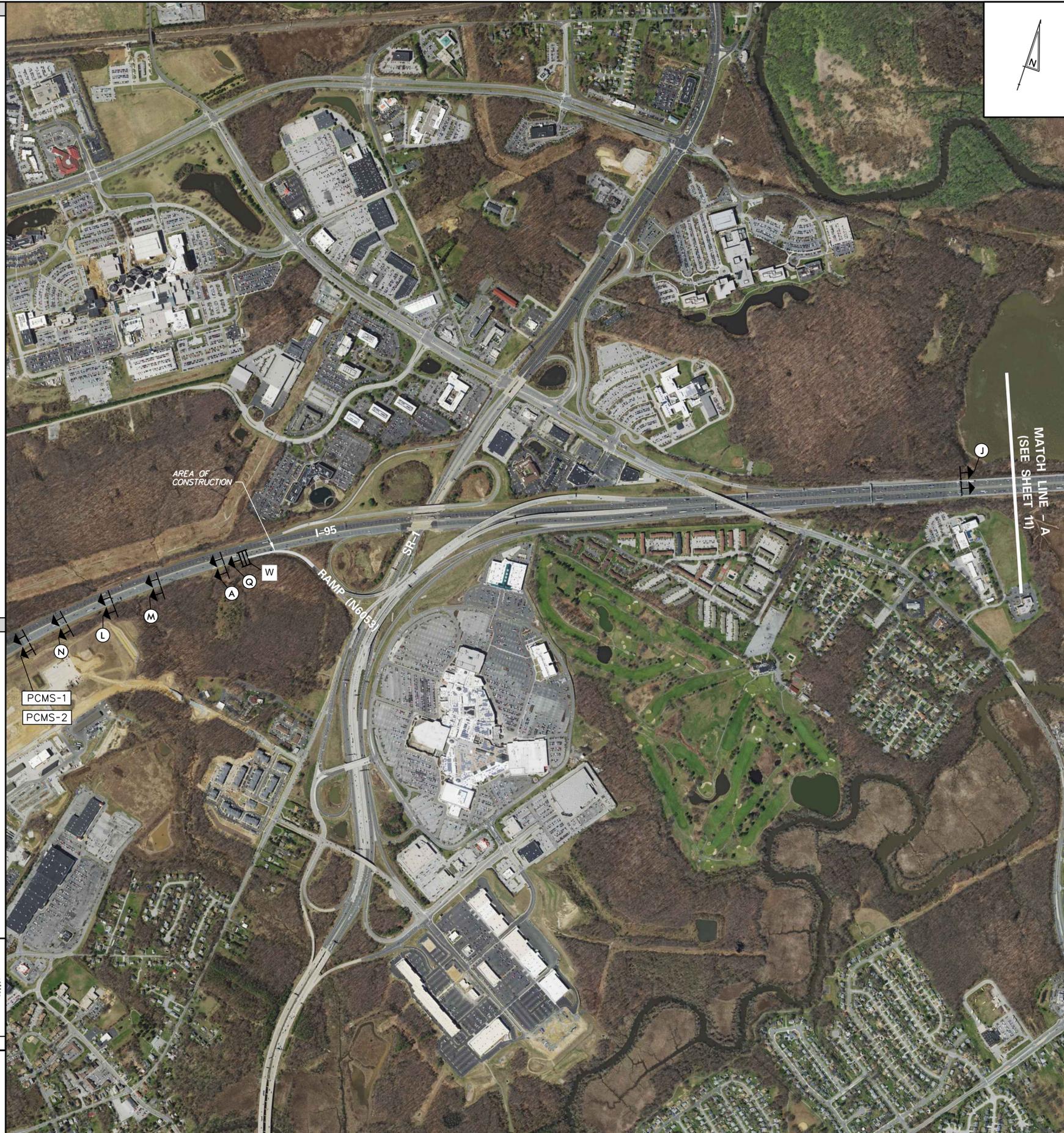
STARTING
XXXXXX
10PM-5AM

DURING DETOUR
(DISPLAY FOR DURATION OF DETOUR)

PCMS-2

EXITS
4A-B
CLOSED

FOLLOW
DETOUR



LEGEND

(A) DETOUR M4-9-DE	(B) DETOUR M4-9	(C) DETOUR M4-9	(D) DETOUR M4-9	(E) DETOUR M4-9
(F) DETOUR M4-9	(G) DETOUR M4-9	(H) DETOUR M4-9	(I) DETOUR M4-9	(J) END DETOUR M4-8a
(K) DETOUR AHEAD W20-2	(L) DETOUR 1000 FT W20-2	(M) DETOUR 500 FT W20-2		
(N) RAMP CLOSED AHEAD W20-3	(O) RAMP CLOSED 1000 FT W20-3	(P) RAMP CLOSED 500 FT W20-3		
(Q) RAMP CLOSED CUSTOM	(R) DETOUR M4-10(L)	(S) DETOUR M4-10(R)		
(T) ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3a	(U) BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3b	(V) ROAD CLOSED TO THRU TRAFFIC R11-4		
(W) [BARRICADE SYMBOL]		(X) [BARRICADE SYMBOL]		

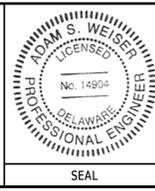
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CONCURRENCE FOR IMPLEMENTATION

TRAFFIC SAFETY *Donald A. Magyisto Jr.* 9/2/20 DATE

PREPARED BY
WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915



THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.
DATE 08-28-2020

QA/QC REVIEWER *[Signature]* DATE 8/28/2020

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

ADDENDA / REVISIONS

HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U4 - I-95NB RAMP-SR1SB

CONTRACT T202100701
COUNTY NEW CASTLE
ROAD NO. N6053
DESIGNED BY: D. CUNYUZLU
CHECKED BY: A. WEISER

SECTION WRA
SHEET NO. 10
DETOUR PLAN

LAST REVISED: 9/11/2018 8/28/2020 1:38:09 PM N:\32128-08-28\CADD\HST - URBAN\DP1_M6053_U4 (SHEET 10).dgn

PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

EXITS
4A-B
TO CLOSE

STARTING
XXXXXX
10PM-5AM

DURING DETOUR
(DISPLAY FOR DURATION OF DETOUR)

PCMS-2

EXITS
4A-B
CLOSED

FOLLOW
DETOUR



LEGEND

(A) DETOUR M4-9-DE	(B) DETOUR M4-9	(C) DETOUR M4-9	(D) DETOUR M4-9	(E) DETOUR M4-9
(F) DETOUR M4-9	(G) DETOUR M4-9	(H) DETOUR M4-9	(I) DETOUR M4-9	(J) END DETOUR M4-8a
(K) DETOUR AHEAD W20-2	(L) DETOUR 1000 FT W20-2	(M) DETOUR 500 FT W20-2		
(N) RAMP CLOSED AHEAD W20-3	(O) RAMP CLOSED 1000 FT W20-3	(P) RAMP CLOSED 500 FT W20-3		
(Q) RAMP CLOSED CUSTOM	(R) DETOUR M4-10(L)	(S) DETOUR M4-10(R)		
(T) ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3a	(U) BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3b	(V) ROAD CLOSED TO THRU TRAFFIC R11-4		
(W) [BARRICADE SYMBOL]		(X) [BARRICADE SYMBOL]		

GENERAL NOTES

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- SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
- "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

CONCURRENCE FOR IMPLEMENTATION

TRAFFIC SAFETY *Donald A. Maggipinto Jr.* DATE 9/2/20

PREPARED BY
WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

ADAM S. WEISER
LICENSED PROFESSIONAL ENGINEER
No. 14904
DELAWARE

08-28-2020 DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.

[Signature]
QA/QC REVIEWER DATE 8/28/2020

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

LAST REVISED: 9/11/2018 8/28/2020 1:38:14 PM N:\32128-08-028\CADD\HST - URBAN\DP2_M6053_U4 (SHEET 11).dgn

ADDENDA / REVISIONS

CONTRACT	T202100701
COUNTY	NEW CASTLE
ROAD NO.	N6053
DESIGNED BY:	D. GUNYUZLU
CHECKED BY:	A. WEISER

HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U4 - I-95NB RAMP-SR1S

DETOUR PLAN

SECTION	WRA
SHEET NO.	11



**LOCATION PLAN
I-495 (N060)**

QUANTITIES

ITEM	U. O. M.	ITEM DESCRIPTION	QUANTITY
760504	GAL	HIGH FRICTION SURFACE TREATMENT	1,656
802003	EA-DY	ARROW PANELS TYPE C	12
803001	EA-DY	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	16
804001	EA-DY	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	12
805001	EA-DY	PLASTIC DRUMS	408
806001	HR	TRAFFIC OFFICERS	48
808001	EA-DY	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE 11	34
810001	EA-DY	TEMPORARY WARNING SIGNS AND PLAQUES	90
817003	LF	TEMPORARY MARKINGS, PAINT, 4"	570
817013	LF	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	570
817019	LF	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK, 5"	570
817031	SF	REMOVAL OF PAVEMENT STRIPING	382

ALLOWABLE LANE CLOSURE HOURS - I-495 NORTHBOUND

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY																								
MONDAY																								
TUESDAY																								
WEDNESDAY																								
THURSDAY																								
FRIDAY																								
SATURDAY																								

- One Travel Lane Permitted To Be Closed/Detour Permitted
- Two Travel Lanes Permitted to be Closed
- All Lanes Open

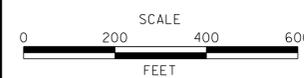
SEQUENCE OF CONSTRUCTION:

1. PLACE ROAD WORK AHEAD 1000 FEET UPSTREAM OF WORK AREA ON INTERSTATE 495 NORTHBOUND. PLACE ROAD WORK AHEAD SIGN ON RAMP FROM GOVERNOR PRINTZ BOULEVARD. PLACE END ROAD WORK SIGN 1000 FEET DOWNSTREAM OF WORK AREA ON INTERSTATE 495 NORTHBOUND. THESE SIGNS SHALL REMAIN IN PLACE UNTIL PERMANENT PAVEMENT MARKINGS HAVE BEEN INSTALLED.
2. USING TA-33 FOR A SINGLE LANE CLOSURE AND TA-37 FOR A DOUBLE LANE CLOSURE, DURING ALLOWABLE LANE CLOSURE HOURS, CLOSE THE TRAVEL LANES ON INTERSTATE 495 NORTHBOUND. REMOVE THE EXISTING DASHED LANE LINES. THE YELLOW AND WHITE EDGELINES SHALL NOT BE DISTURBED. MASK REMAINING EXISTING PAVEMENT MARKINGS, RECESSED PAVEMENT MARKERS AND UTILITY APPURTENANCES. PLACE HIGH FRICTION SURFACE TREATMENT IN THE TRAVEL LANES WITHIN THE LIMITS SHOWN.
3. AFTER PLACING HIGH FRICTION SURFACE TREATMENT, SWEEP ROADWAY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. INSTALL TEMPORARY MARKING PAINT FOR THE LANE LINES REMOVED AT THE BEGINNING OF THE OPERATION. REMOVE MASKING FROM EXISTING PAVEMENT MARKINGS, RECESSED PAVEMENT MARKERS AND UTILITY APPURTENANCES AND OPEN TRAVEL LANES TO TRAFFIC.
5. DURING ALLOWABLE LANE CLOSURE HOURS, UTILIZING TA-35 AND TA-35A, PERFORM ADDITIONAL SWEEPING AS REQUIRED BY THE CONTRACT DOCUMENTS.
6. WITHIN FIVE (5) WORKING DAYS OF INSTALLING HIGH FRICTION SURFACE TREATMENT, UTILIZE TA-35, TA-35A, TA-35E AND TA-35 G DURING ALLOWABLE LANE CLOSURE HOURS TO INSTALL PERMANENT LANE LINE PAVEMENT MARKINGS.

DESIGN DESIGNATION

MRD #: N060	ROAD NAME: I-495	D.H.V. PROJECTED: N/A	YEAR: N/A
FUNCTIONAL CLASS: INTERSTATE	DESIGN SPEED: N/A		
TYPE OF CONSTRUCTION: PAVEMENT OVERLAY	TRUCKS: N/A		
A.A.D.T. CURRENT: 38,886	YEAR: 2017		
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A	

ADDENDA / REVISIONS



**HIGH FRICTION SURFACE TREATMENT
5 - 200K
LOCATION U5 - I-495**

CONTRACT T202100701	ROAD NO. N060
COUNTY NEW CASTLE	DESIGNED BY: C. HOLLOWAY
	CHECKED BY: A. WEISER

**CONSTRUCTION PLAN
AND SEQUENCE
OF CONSTRUCTION**

SECTION
WRA
SHEET NO.
12