

THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION
OFFICE OF TRANSPORTATION SOLUTIONS
CONSTRUCTION PLANS AND SPECIFICATIONS FOR

PAVEMENT & REHABILITATION – SUSSEX I (BRIDGEVILLE), 2013

CONTRACT NUMBER - T201306301.01

PRIMAVERA ID – 13-06301

FEDERAL AID NUMBER - NONE

SOUTH DISTRICT MAINTENANCE

PLANS PREPARED BY: Paul Farkas
DESIGN TECHNICIAN

DATE RECOMMENDED: 10/7/2014

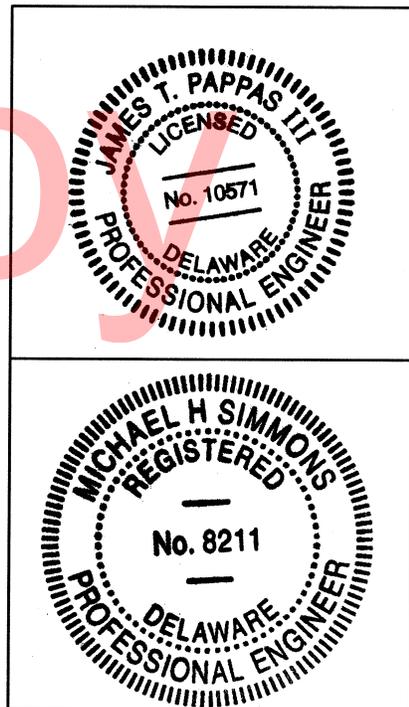
Bradford L Sabnis
GROUP ENGINEER, CONSTRUCTION

DATE RECOMMENDED: 10.8.14

James T Pappas III
ASSIST. DIRECTOR, DESIGN

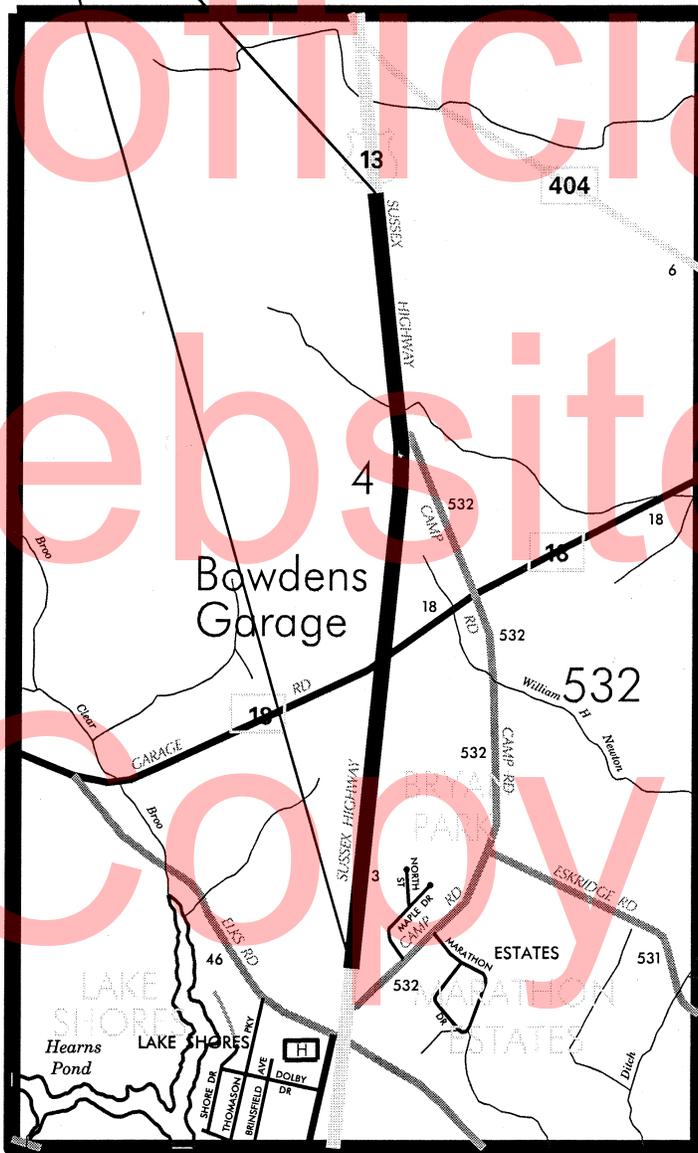
DATE RECOMMENDED: 10/8/14

Michael H. Simmons for RM
CHIEF ENGINEER (ACTING)



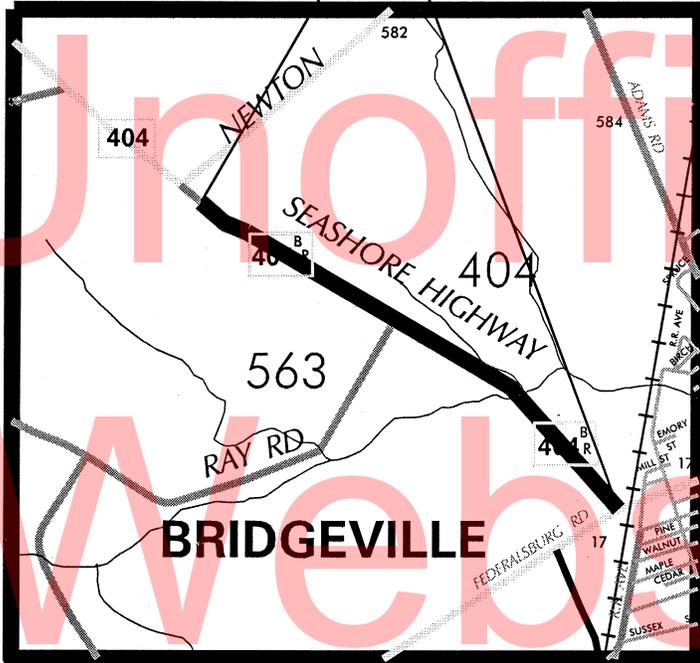
Location 1

LOCATION MAP

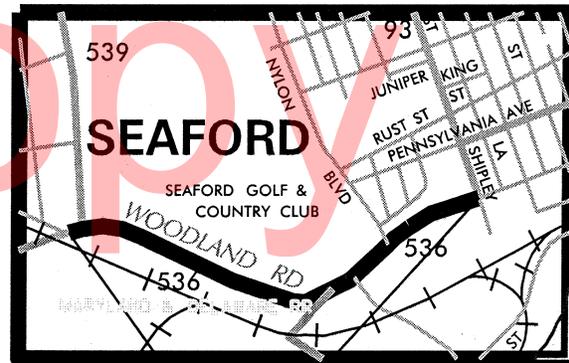


**Sussex Hwy Northbound & Southbound from
hmj's 1700' & 1150' south of Rt 404
to 1100' north of Elks Rd.**

Location 2 LOCATION MAP



Seashore Hwy from Market St to hmj @ Newton Rd.



Location 3

Woodland Rd/Harrington St from railroad crossing to hmj @ Shipley Rd.

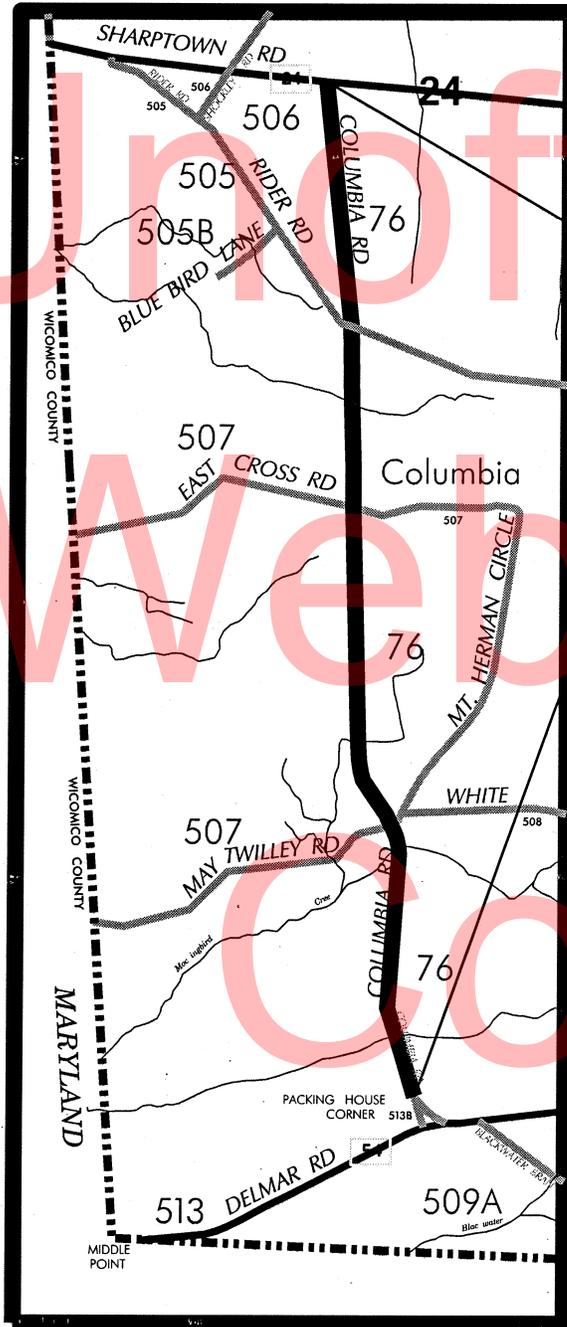
DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 4 OF 35

VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

LOCATION MAP



Location 4

Columbia Rd from
Delmar Rd to Sharptown rd.

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

GENERAL CONTRACT PLAN NOTES

REVISED 7/11

GENERAL

1. CONSTRUCTION OF THIS CONTRACT SHALL CONFORM TO DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED AUGUST 2001 AS AMENDED BY THE SUPPLEMENTAL SPECIFICATIONS, THE SPECIAL PROVISIONS, THE MOST RECENT STANDARD CONSTRUCTION DETAILS, DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THESE PLANS.
2. THE PURPOSE OF THIS CONTRACT IS TO MAKE GENERAL IMPROVEMENTS TO ROADS AND/OR STREETS WITHIN THE DISTRICT HEREIN SPECIFIED. DEPENDING ON FUND AVAILABILITY, THE DEPARTMENT RESERVES THE RIGHT TO ADD OR DELETE LOCATIONS AND/OR QUANTITIES FOR THIS CONTRACT. SUCH LOCATION OR QUANTITY ADDITIONS OR DELETIONS SHALL NOT BE CAUSE FOR AN INCREASE OR DECREASE IN ANY CONTRACT UNIT BID PRICES. NO ITEM PRICES ARE TO BE RENEGOTIATED DUE TO EITHER AN INCREASE OR DECREASE IN QUANTITY USAGE RESULTING FROM SAID ADDITIONS OR DELETIONS.
3. THE CONTRACTOR SHALL PROVIDE ALL RESIDENTS AND BUSINESSES WHO LIVE ADJACENT TO THE WORK ZONE A MINIMUM 48 HR. PRIOR WRITTEN NOTICE FOR THE START OF CONSTRUCTION WORK. THIS NOTIFICATION SHALL INCLUDE THE SCOPE OF WORK, WORKING HOURS, ANTICIPATED START AND COMPLETION DATES, CONTRACTOR NAME & ADDRESS, AND DELDOT CONTACT NUMBERS. FAILURE TO GIVE PROPER NOTICE WILL RESULT IN A SUSPENSION OF WORK REQUIRING NOTICE, UNTIL PROPER NOTICE IS PROVIDED. ACCESS TO ALL BUSINESSES AND RESIDENCES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS CONTRACT. ANY TEMPORARY CLOSURE OF A DRIVEWAY FOR TIE-IN PURPOSES SHALL BE COORDINATED WITH THE ENGINEER AND/OR PROPERTY OWNER IN ADVANCE OF THE CLOSURE.
4. THE CONTRACTOR SHALL SUBMIT THE REQUIRED COPIES OF A DETAILED PROGRESS SCHEDULE (PSC) AS OUTLINED IN STANDARD SPECIFICATION 108.04 PRIOR TO OR AT THE PRECONSTRUCTION MEETING. DETAILS SHALL INCLUDE A DESCRIPTION OF EACH WORK ACTIVITY, THE PLANNED DAYS OF WORK, MULTIPLE CREWS OR SHIFTS, AND SCHEDULED WORKING HOURS. DURING THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TWO-WEEK (OR AS REQUIRED) "LOOK AHEAD" SCHEDULES TO THE AREA ENGINEER/ MANAGER NO LATER THAN NOON OF EACH THURSDAY. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

MAINTENANCE OF TRAFFIC

5. THE CONTRACTOR SHALL BE REQUIRED TO SHOW PROOF THAT HE HAS SUFFICIENT APPROVED STRIPING MATERIALS ON HAND TO ENSURE STRIPING IS COMPLETED PRIOR TO FULL OPENING ROADWAY TO TRAFFIC.
6. AT THE END OF EACH DAY'S OPERATION AND BEFORE TRAFFIC IS RETURNED TO UNRESTRICTED ROADWAY USE, TEMPORARY STRIPING SHALL BE UTILIZED AT LOCATIONS THAT REQUIRE PERMANENT STRIPING, SHALL BE INSTALLED IN ACCORDANCE WITH THE TEMPORARY STRIPING POLICY. TEMPORARY PAVEMENT STRIPING MUST MATCH PERMANENT PAVEMENT STRIPING IN ALL REGARDS. TEMPORARY PAVEMENT MARKINGS SHALL BE PAID AT THE APPLICABLE CONTRACT UNIT PRICE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE TEMPORARY MARKINGS IN GOOD CONDITION SUCH THAT THE PAVEMENT IS PROPERLY DELINEATED AT ALL TIMES. ANY REFRESHING OF THE TEMPORARY MARKINGS WILL BE AT THE CONTRACTOR'S EXPENSE.
7. ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL REASONABLY PROVIDE THE LEAST

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

GENERAL CONTRACT PLAN NOTES

PRACTICABLE OBSTRUCTION TO ALL ROAD USERS, INCLUDING VEHICULAR, PEDESTRIAN AND BICYCLE TRAFFIC, AND SHALL CONFORM TO THE REQUIREMENTS OF THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART 6, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT FOR BIDS.

8. THE CONTRACTOR SHALL MAINTAIN ACCESS TO AND ALONG PEDESTRIAN FACILITIES AT ALL TIMES DURING CONSTRUCTION. EARTH, STONE AND GRAVEL SURFACES ARE NOT ACCEPTABLE FOR PROVIDING PEDESTRIAN ACCESS. WHERE PEDESTRIAN ROUTES ARE CLOSED OR BLOCKED, ALTERNATE PEDESTRIAN ACCESS SHALL BE PROVIDED USING TA-28 AND/OR TA-29 OF THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR TO THE SATISFACTION OF THE ENGINEER. PEDESTRIAN DETOUR ROUTES OR ALTERNATE PEDESTRIAN FACILITIES SHALL CONSIST OF ADA COMPLIANT FACILITIES TO THE LEVEL OF WHICH EXISTS ON THE PEDESTRIAN ROUTE. THE COST FOR ANY PROVISIONS SHALL BE INCIDENTAL TO ITEM 763XXX - MAINTENANCE OF TRAFFIC.

PEDESTRIAN MAINTENANCE OF TRAFFIC: THIS WORK SHALL CONSIST OF PROVIDING AND MAINTAINING AN ACCESSIBLE PEDESTRIAN ROUTE THROUGHOUT THE PROJECT'S LIMITS IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA) TITLE II, PARAGRAPH 35.130.

THE CONTRACTOR SHALL BE REQUIRED TO REVIEW EACH CURB RAMP LOCATION AND SUBMIT THE APPROPRIATE MAINTENANCE OF TRAFFIC DETAIL AND DEVICES TO THE ENGINEER FOR EACH LOCATION AT LEAST 2 WEEKS BEFORE CONSTRUCTION FOR REVIEW, COMMENT, AND APPROVAL. THE FOLLOWING CONSIDERATIONS SHALL BE TAKEN INTO ACCOUNT WHEN ADDRESSING ACCESSIBLE PEDESTRIAN MAINTENANCE OF TRAFFIC:

- **ALL PEDESTRIANS, INCLUDING PERSONS WITH DISABILITIES, SHALL BE PROVIDED WITH A REASONABLY SAFE, CONVENIENT AND ACCESSIBLE PATH THAT REPLICATES AS MUCH AS PRACTICABLE THE EXISTING PEDESTRIAN FACILITIES.**
- **MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.**
- **PROVIDE PEDESTRIAN ACCESS THROUGH OR AROUND THE WORK ZONE. IF A DETOUR IS CHOSEN THE CONTRACTOR MUST SUBMIT THE DETOUR ROUTE TO THE ENGINEER FOR REVIEW AND APPROVAL. THE DETOUR ROUTE MUST MEET OR EXCEED THE CURRENT CONDITIONS.**
- **WORK SHOULD BE PHASED SO THAT ALL AREAS OF AN INTERSECTION/SIDEWALK PATH ARE NOT UNDER CONSTRUCTION AT THE SAME TIME UNLESS A CLEAR PATH IS PROVIDED AND IDENTIFIED.**
- **TRAFFIC CONTROL DEVICES AND OTHER CONSTRUCTION MATERIALS AND FEATURES SHALL NOT INTRUDE INTO THE USABLE WIDTH OF THE SIDEWALK, TEMPORARY PATHWAY OR OTHER PEDESTRIAN FACILITY.**
- **SIGNS AND OTHER DEVICES MOUNTED LOWER THAN 7FT ABOVE THE TEMPORARY PEDESTRIAN PATHWAY SHALL NOT PROJECT MORE THAN 4 IN. INTO ACCESSIBLE PEDESTRIAN ROUTE.**

A SMOOTH, CONTINUOUS HARD SURFACE SHALL BE PROVIDED THROUGHOUT THE ENTIRE LENGTH AND WIDTH OF THE PEDESTRIAN ROUTE THROUGHOUT CONSTRUCTION. THERE SHALL BE NO CURBS OR VERTICAL ELEVATION CHANGES GREATER THAN ¼ IN. IN GRADE OR TERRAIN THAT COULD CAUSE TRIPPING OR BE A BARRIER TO WHEELCHAIR USE.

9. AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR SHALL BE REQUIRED FOR ALL LOCATIONS SPECIFIED IN THE CONTRACT PLANS. A COPY OF THE CERTIFICATION CARD FOR THE ATSSA TRAFFIC CONTROL SUPERVISOR SHALL BE SUBMITTED AT THE PRECONSTRUCTION MEETING. THE PAPER CERTIFICATE IS NOT ACCEPTABLE.

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

GENERAL CONTRACT PLAN NOTES

PAVEMENT MARKINGS

10. AT THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS (INCLUDING BUT NOT LIMITED TO EXISTING STRIPING LENGTHS, LANE AND SHOULDER WIDTHS, TURN LANE LENGTHS, LOCATIONS OF STOP BARS, TURN ARROWS, CROSSWALKS AND RAILROAD CROSSINGS) THAT DEPICT THE EXISTING PAVEMENT MARKINGS FOR EACH PROJECT LOCATION. THESE DRAWINGS WILL BE REVIEWED BY THE DEPARTMENT'S TRAFFIC SECTION TO DETERMINE IF ANY CHANGES TO THE FINAL PAVEMENT MARKINGS ARE REQUIRED. FINAL PAVEMENT MARKINGS SHALL CONFORM TO ALL EXISTING PATTERNS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE DEPARTMENT WILL PROVIDE STRIPING LAYOUT AT LOCATIONS WHERE NO PAVEMENT MARKINGS PREVIOUSLY EXISTED. IF DEPARTMENT FORCES PROVIDE STRIPING LAYOUT ON LOCATIONS WHERE MARKINGS PREVIOUSLY EXISTED, THEN THE CONTRACTOR SHALL REIMBURSE THE DEPARTMENT FOR THE LAYOUT COSTS.

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).

11. ANY ERRONEOUS MARKING WILL NOT BE PAID FOR AND SHALL BE CORRECTED IMMEDIATELY AT THE CONTRACTORS 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. A FLAT BLACK PAINT OR DRIVEWAY SEALER SHALL BE APPLIED IN THE AREA OF THE REMOVED MARKING TO MASK THE REPAIR. ANY DAMAGE TO THE PAVEMENT CAUSED BY REMOVAL OF ERRONEOUS MARKINGS SHALL BE REPAIRED / REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE.

12. STOP LINES "BARS" SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 3B.16 OF THE 2011 DELAWARE MUTCD.

13. ALL CROSSWALKS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 3B.18 OF THE 2011 DELAWARE MUTCD.

TRAFFIC SIGNAL NOTES

14. TRAFFIC DETECTION LOOPS SHALL BE PLACED IN THE FINAL WEARING SURFACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

15. TRAFFIC DETECTION LOOPS THAT ARE CURRENTLY 5'x7' SHALL BE REPLACED WITH LOOPS THAT ARE 6'x6' AT THE SAME LOCATION. STOP BAR DETECTION LOOPS SHALL BE THE SAME SIZE AS CURRENTLY EXISTING, AND SHOULD BE PLACED STARTING TWO FEET BEHIND THE STOP BAR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERSEDE THIS NOTE.

PROJECT

16. UNLESS SPECIFIED, OVERLAY WIDTHS SHALL MATCH EXISTING WIDTHS.

17. THE COST OF CLIPPING BACK THE EDGES OF THE ROADWAY, SHOULDERS, AND THE FIRST 3' OF

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

GENERAL CONTRACT PLAN NOTES

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(.). PREPARING UNPAVED DRIVEWAY ENTRANCES BEYOND THE FIRST 3' SHALL BE PAID UNDER THE APPROPRIATE CONTRACT ITEMS: 202000 AND/OR 30200X.

18. BUTT JOINTS SHALL BE PLACED AT ALL INTERSECTING HOT MIX ROADS AND ANY OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. BUTT JOINTS AT DRAINAGE STRUCTURES NOT TO BE RESURFACED SHALL BE AS PER THE INCLUDED PLAN DETAIL OR LOCATION NOTES. BUTT JOINTS CUT PRIOR TO THE DAY OF THE PAVEMENT OVERLAY SHALL BE RAMPED WITH HOT MIX TRM. IN MILLING AREAS, THERE WILL BE NO SEPARATE PAYMENT FOR BUTT JOINTS. AFTER PAVEMENT MILLING, ALL TRANSVERSE VERTICAL DIFFERENCES, RAISED EDGES OF MANHOLES, CATCH BASINS, WATER VALVE BOXES, ETC...SHALL BE RAMPED WITH HOT-MIX TRM AT A 20:1 OR FLATTER SLOPE PRIOR TO OPENING THE ROADWAY TO TRAFFIC. PAVEMENT MILLINGS WILL NOT BE ALLOWED FOR USE AS RAMPING MATERIAL.

19. TAPER MILLING IS INTENDED FOR MILLING IN THE AREA OF FIXED STRUCTURES (I.E. CURBS GUARDRAIL, ETC.) THE MILLED DEPTH AT THE STRUCTURE SHALL BE THE DEPTH OF THE PROPOSED OVERLAY AND 0" AT A DISTANCE OF +/- 6½' FROM THE STRUCTURE. THE COMPUTED DEPTH FOR PAYMENT PURPOSES IS THE AVERAGE OF THE TWO DEPTHS.

20. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE STATED.

21. EXCAVATION FOR P.C.C. CURBS, SIDEWALK OR VALLEY GUTTER SHALL BE INCIDENTAL TO THE BID PRICE FOR THESE RESPECTIVE ITEMS. EXCAVATED MATERIAL, NOT NEEDED ON THE PROJECT, SHALL BE REMOVED FROM THE CONTRACT AT THE CONTRACTORS EXPENSE. ITEM 732XXX, TOPSOIL, SHALL BE USED AS BACKFILL MATERIAL FOR CURB AND SIDEWALK AS DIRECTED BY THE ENGINEER. TOPSOIL SHALL BE SCREENED/SIFTED SO AS NO MATERIAL GREATER THAN .5" IS PRESENT IN MATERIAL USED FOR BACKFILL. AT EACH LOCATION, BACKFILLING SHALL BE PERFORMED IMMEDIATELY UPON REMOVAL OF FORMS FOR CURB OR SIDEWALK WORK. COMPLETE RESTORATION, TOPSOIL, SEEDING, AND REMOVAL OF ALL MATERIALS FOR CURB & GUTTER OR SIDEWALK; SEALING OF VALLEY GUTTERS AND PARGING OF CATCH BASINS, SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETION OF THE ITEM OF WORK. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

22. ALL ADJUSTMENTS SHALL BE MADE NO MORE THAN SEVEN (7) CALENDAR DAYS PRIOR TO THE PLACEMENT OF THE FINAL COURSE OF HOT MIX UNLESS OTHERWISE APPROVED BY THE ENGINEER. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

23. 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.

24. THE CONTRACTOR SHALL TAKE CARE IN REMOVING PAVEMENT AROUND UTILITIES, BUTT JOINTS, CURBING, 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 TO THE APPLICABLE MILLING AND/OR RECLAMATION ITEMS.

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

GENERAL CONTRACT PLAN NOTES

25. ALL PORTLAND CEMENT CONCRETE MUST BE RECEIVED FROM AN APPROVED PRODUCTION PLANT UNLESS OTHERWISE APPROVED BY THE ENGINEER. ONLY CALIBRATED VOLUMETRIC CONCRETE TRUCKS WILL BE PERMITTED TO PROVIDE ON-SITE MIXTURES. THIS PERTAINS TO BOTH WORK OCCURRING DURING NORMAL WORKING HOURS AND NIGHTTIME RESTRICTED WORK.

26. DRAINAGE INLETS, WHICH ARE 4' GREATER IN DEPTH AND ARE SLATED FOR REPAIR WILL HAVE STEPS INSTALLED IN ACCORDANCE WITH SECTION 708.07 OF THE STANDARD SPECIFICATIONS. PAYMENT SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 710001.

27. THE PORTLAND CEMENT CONCRETE USED WITHIN ITEM 701002 - ADJUST AND REPAIR EXISTING MAN HOLES AND ITEM 750000 - ADJUST WATER VALVE BOX SHALL CONFORM TO THE REQUIREMENTS OF CLASS A CONCRETE AS STATED WITHIN SECTION 503.02 OF THE DEPARTMENT'S STANDARD SPECIFICATIONS.

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DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 10 OF 35

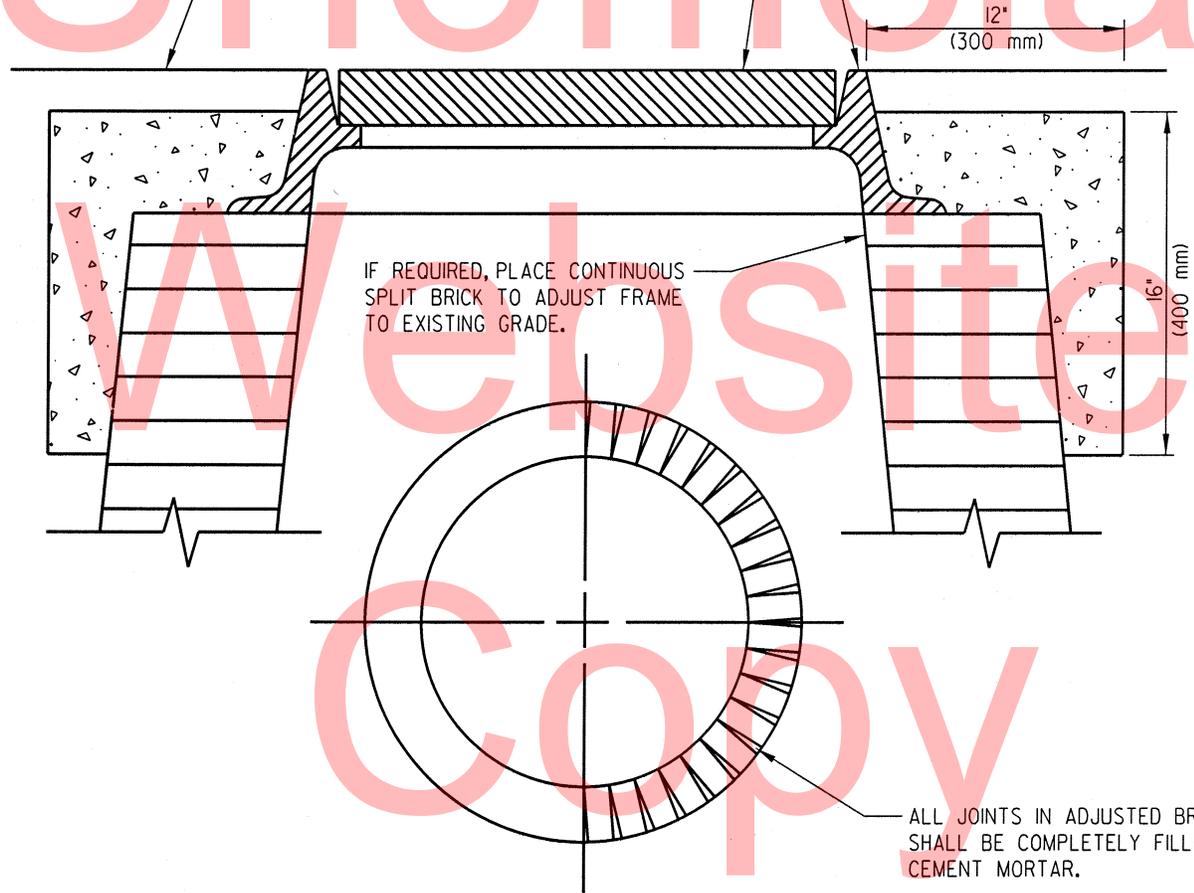
SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET

REMOVE AND DISPOSE OF EXISTING FRAME AND COVER AS DIRECTED BY OWNER IF NOT UTILIZED IN THE ADJUSTMENT. PLACE NEW OR EXISTING FRAME AND COVER (AS REQUIRED), TO CORRECT ELEVATION AND RECOLLAR. NEW FRAME AND COVER (IF REQUIRED) TO BE PROVIDED BY OWNER.

REMOVE BIT. ASPHALT MIX AND CONCRETE COLLAR FROM AROUND MANHOLE.

Unofficial



ADJUSTING AND REPAIRING MANHOLE

N.T.S.

NOTES:

1. MANHOLES IN CONCRETE ROADWAYS SHALL BE SAWCUT FULL DEPTH TO THE SPECIFIED DIMENSION PRIOR TO ANY ADJUSTMENT BEING MADE. THE SAWCUTTING SHALL BE INCIDENTAL TO ITEM 710002.
2. ANY ADJUSTMENTS AND/OR RELOCATIONS OF MUNICIPALLY OWNED SEWER OR WATER FACILITIES SHALL BE DONE IN ACCORDANCE TO THE RESPECTIVE AGENCIES STANDARD SPECIFICATIONS AS DIRECTED BY THE ENGINEER.

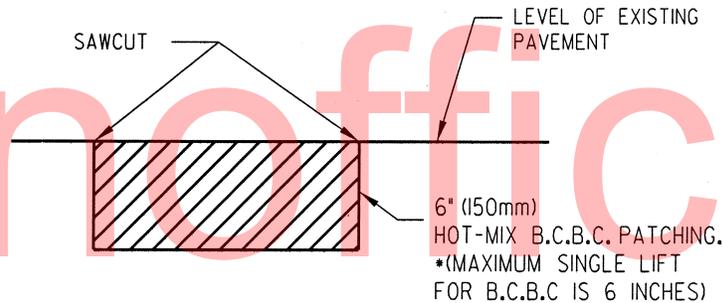
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 11 OF 35

SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET



BITUMINOUS CONCRETE MIX PATCH DETAIL

N.T.S.

NOTE: ALL EDGES TO BE SAWCUT. CUTTING BY USE OF AIR HAMMERS MAY BE SUBSTITUTED FOR SAWCUTTING IF THE AREA IS TO BE OVERLAID UNDER THE SAME CONTRACT. THIS DETAIL SHALL BE USED FOR ALL HOT-MIX PATCHES UNLESS OTHERWISE SHOWN ON THE PLANS.

WHEN PCC PATCHING IS REQUIRED ON A COMPOSITE PAVEMENT(HOT-MIX OVER CONCRETE), THE CONTRACTOR MAY ELECT TO ELIMINATE ANY GRADE DIFFERENCE BETWEEN THE TOP OF THE CONCRETE PATCH AND THE TOP OF THE EXISTING HOT-MIX PAVEMENT BY EITHER PLACING HOT-MIX TRM MATERIAL(PAYMENT UNDER ITEM 402000) OR PLACING CONCRETE FLUSH WITH EXISTING HOT-MIX PAVEMENT(ADDITIONAL CONCRETE PAID AS ITEM 503503). IF CONCRETE IS PLACED FLUSH WITH EXISTING HOT MIX, THE MILLING OF THE CONCRETE WILL BE PAID FOR AS MILLING HOT-MIX.

P.C.C. PATCHING NOTES

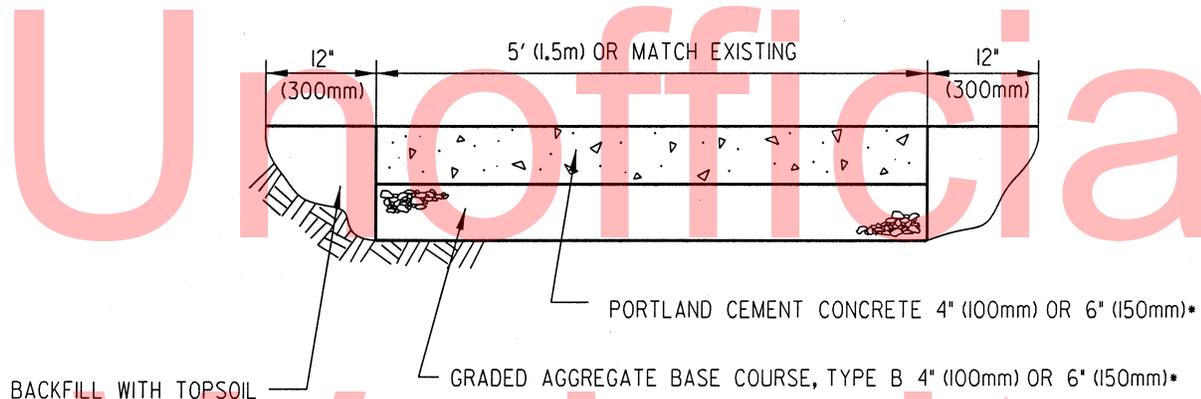
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 12 OF 35

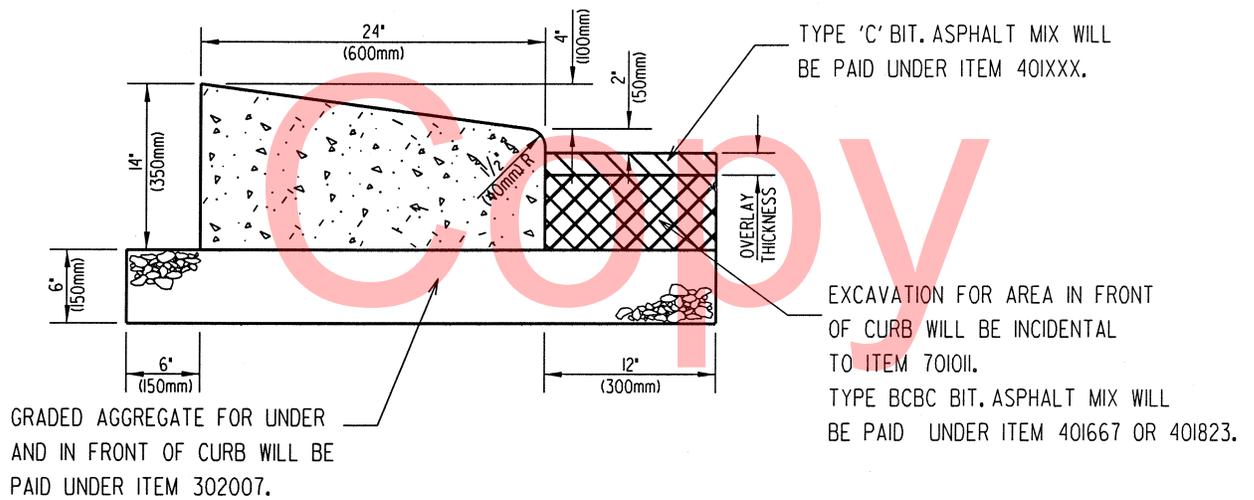
SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET



P.C.C. SIDEWALK
N.T.S.

• **NOTE:** 6" (150mm) CONCRETE OVER 6" (150mm) GRADED AGGREGATE TO BE USED FOR DRIVEWAY PLACEMENT



P.C.C. CURB TYPE 2
N.T.S.

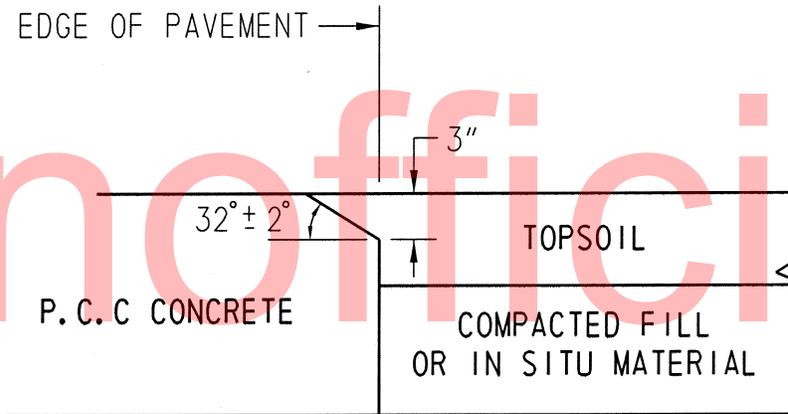
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 13 OF 35

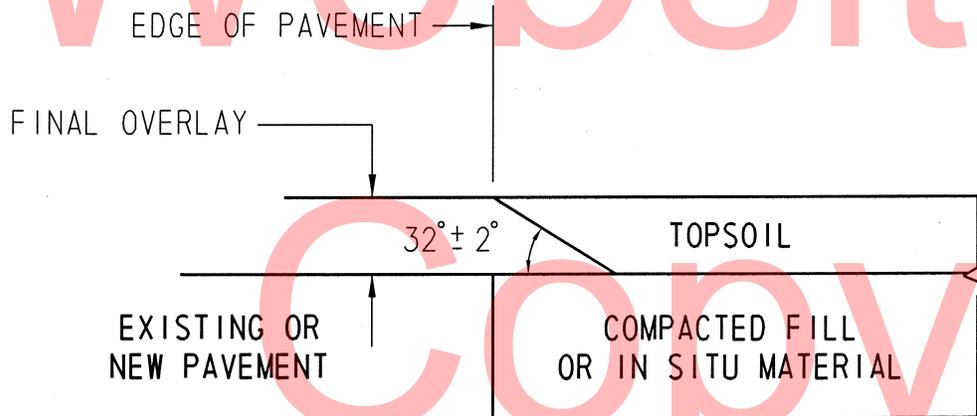
SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET



CONCRETE PAVEMENTS

NOT TO SCALE



BIT. ASPHALT MIX PAVEMENTS AND OVERLAYS

NOT TO SCALE

SAFETY EDGE DETAIL

NOT TO SCALE

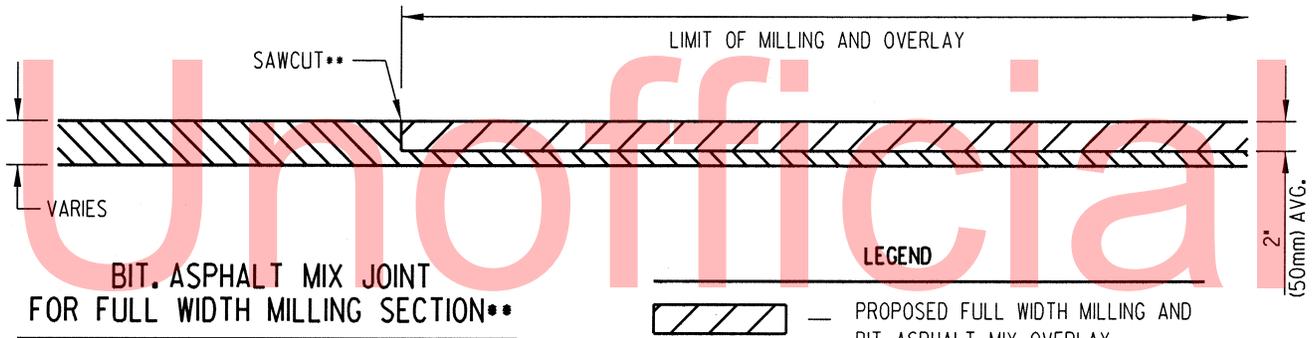
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 14 OF 35

SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET

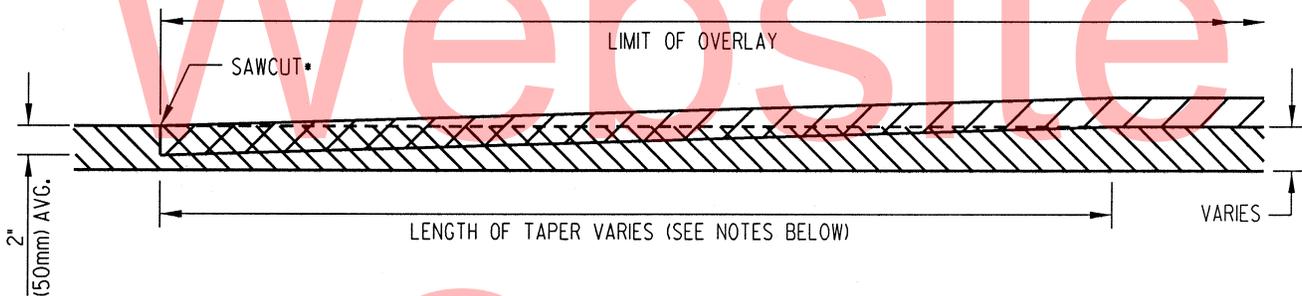


BIT. ASPHALT MIX JOINT FOR FULL WIDTH MILLING SECTION**

PAYMENT INCIDENTAL TO ITEM 760XXX, MILLING.
 **SAWCUT SHALL BE PAID UNDER ITEM 76200I.

LEGEND

	— PROPOSED FULL WIDTH MILLING AND BIT. ASPHALT MIX OVERLAY
	— EXISTING PAVEMENT (TO REMAIN)



BIT. ASPHALT MIX JOINT FOR OVERLAY SECTION*

PAYMENT UNDER ITEM 76100I.
 *SAWCUT IS INCIDENTAL TO ITEM 76100I.

LEGEND

	— PROPOSED OVERLAY
	— EXISTING PAVEMENT
	— EXISTING PAVEMENT TO BE REMOVED

NOTES:

- THE FOLLOWING LENGTHS ARE BASED ON THE POSTED SPEED OF THE ROADWAY:
1. EQUAL TO OR GREATER THAN 55 MPH = 40 FT (9.1m) PER 1" (25mm) OF OVERLAY DEPTH.
 2. LESS THAN 55 MPH = 30 FT (6m) PER 1" (25mm) OF OVERLAY DEPTH.
 3. AT STOP SIGNS = 15 FT (4.6m) PER 1" (25mm) OF OVERLAY DEPTH.

BITUMINOUS ASPHALT MIX JOINT DETAILS

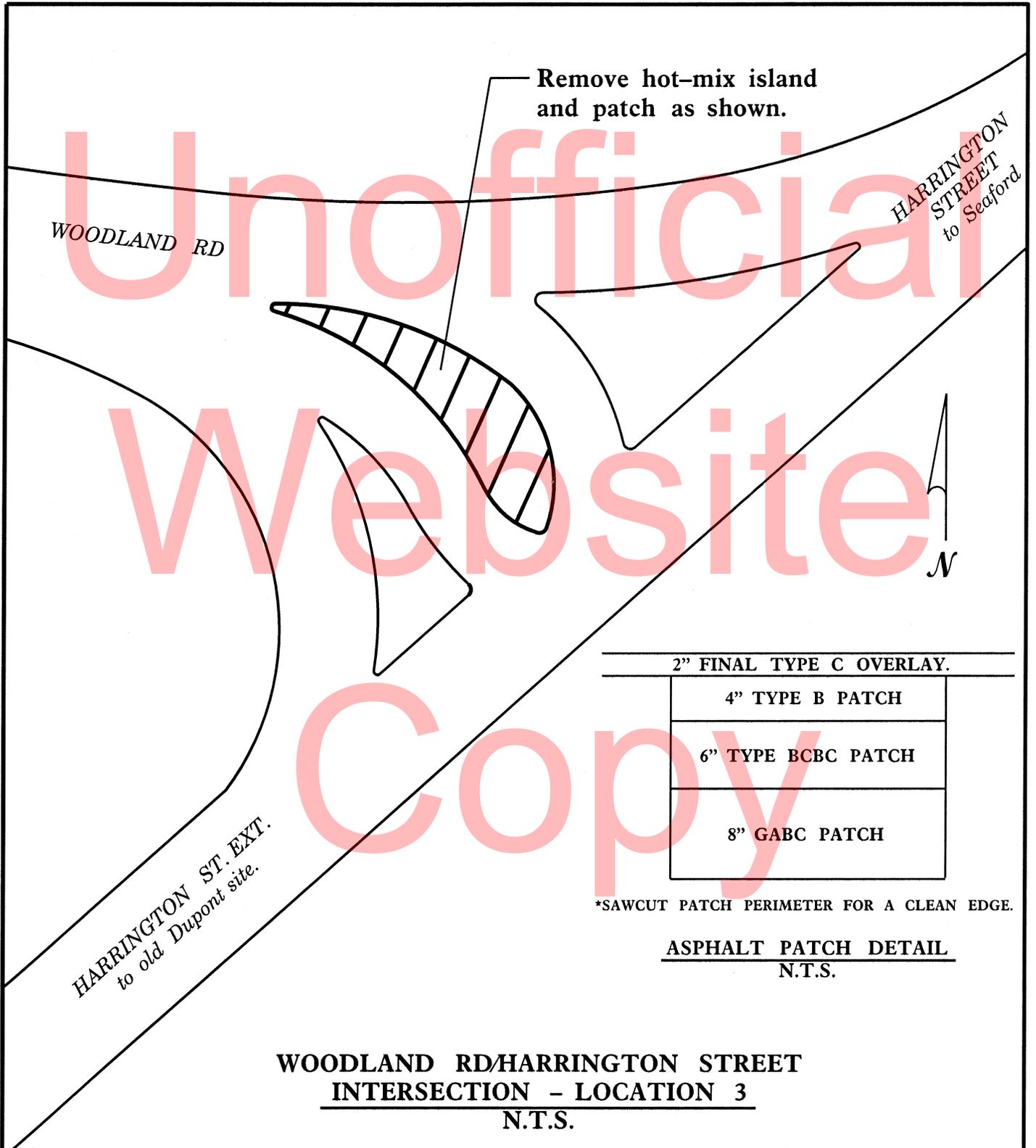
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 15 OF 35

SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET



DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

PAGE 16 OF 35

SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET

REPLACE THE TWO EXISTING
ET-PUS END TREATMENT SYSTEMS.

REPLACE EXISTING GUARDRAIL AND GUARDRAIL
OVER CULVERT SYSTEM. RE- ESTABLISH MAINTENANCE
STRIP FOR GUARDRAIL AS PER STANDARD
CONSTRUCTION DETAILS.

BIT. ASPHALT MIX PATCH
AND REPAIR ASPHALT SHOULDER
IN KIND.

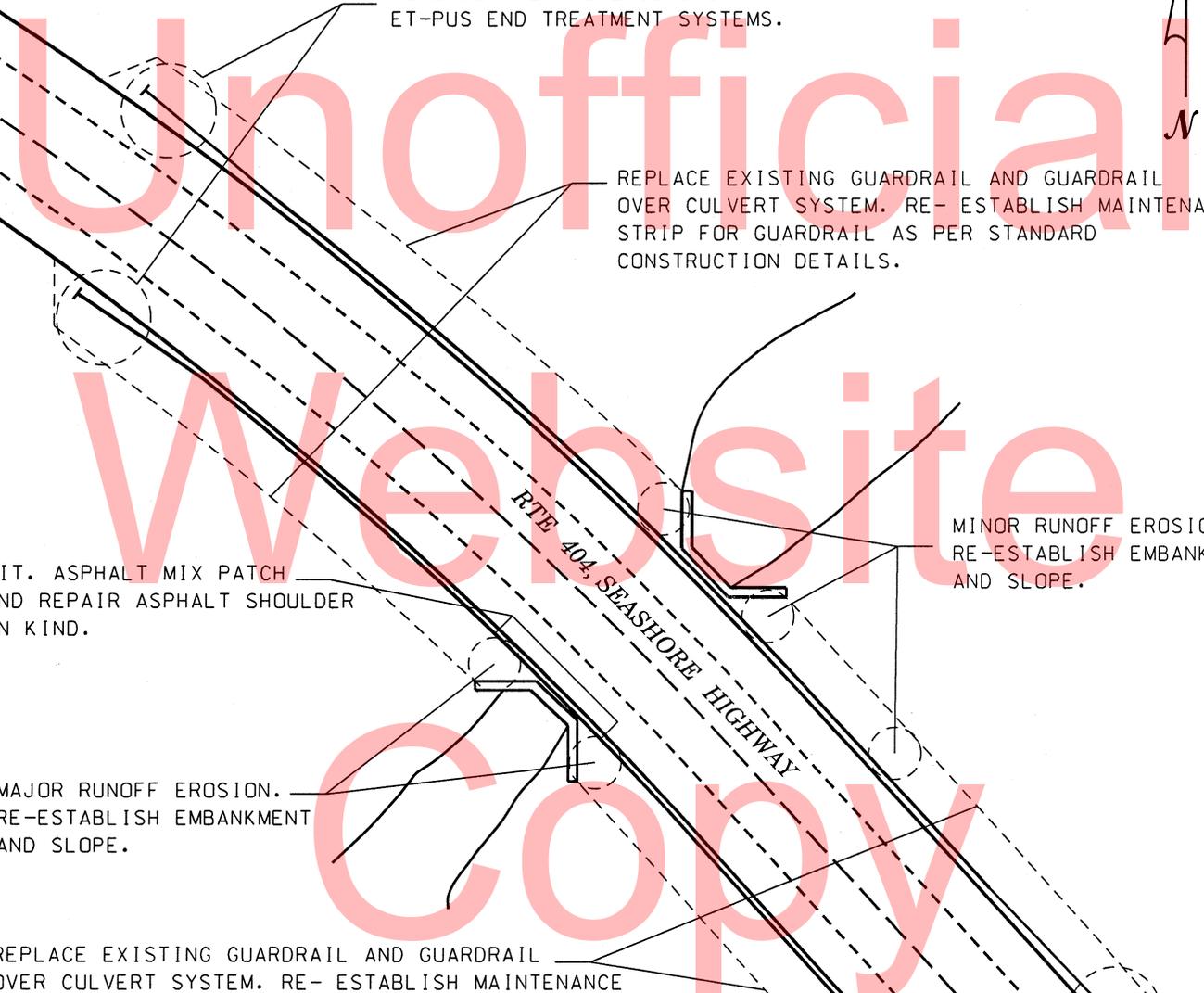
MINOR RUNOFF EROSION.
RE-ESTABLISH EMBANKMENT
AND SLOPE.

MAJOR RUNOFF EROSION.
RE-ESTABLISH EMBANKMENT
AND SLOPE.

REPLACE EXISTING GUARDRAIL AND GUARDRAIL
OVER CULVERT SYSTEM. RE- ESTABLISH MAINTENANCE
STRIP FOR GUARDRAIL AS PER STANDARD
CONSTRUCTION DETAILS.

REPLACE THE TWO EXISTING
ET-PLUS END TREATMENT SYSTEMS.

RT404, SEASHORE HIGHWAY CULVERT
BRIDGEVILLE - LOCATION 2
N.T.S.



DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

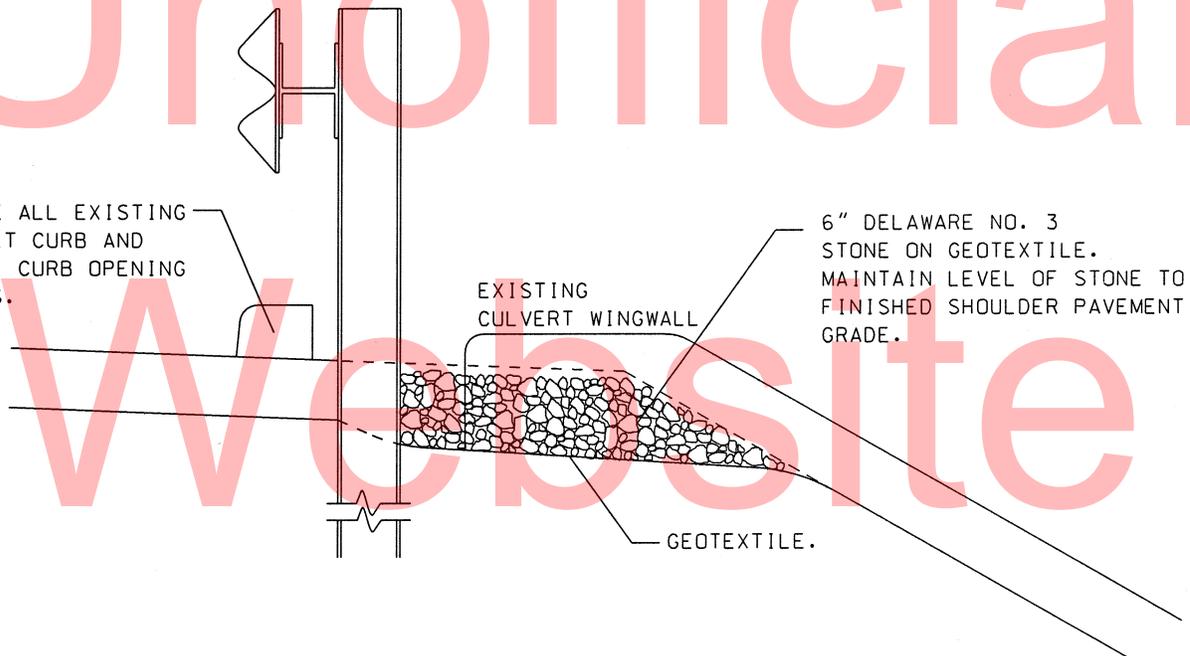
PAGE 17 OF 35

SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET

Unofficial

REMOVE ALL EXISTING ASPHALT CURB AND P.C.C. CURB OPENING INLETS.



6" DELAWARE NO. 3 STONE ON GEOTEXTILE. MAINTAIN LEVEL OF STONE TO FINISHED SHOULDER PAVEMENT GRADE.

GEOTEXTILE.

Notes

1. REMOVE ALL EXISTING ASPHALT CURB AND (FIVE) P.C.C. CURB OPENING INLETS (INCLUDING CORR. PIPE, 12" X 8') TO BE PAID UNDER ITEM 758000.
2. REPAIR AND RE-ESTABLISH MAINTENANCE STRIP AS DIRECTED BY THE FIELD ENGINEER AS PER THE STANDARD CONSTRUCTION DETAILS TO BE PAID UNDER ITEMS 202000, 209010, 713001 AND 302011 RESPECTIVELY.
3. HOT-MIX PATCH EXISTING SHOULDER AS DIRECTED BY THE FIELD ENGINEER.
4. REPLACE ALL FOUR EXISTING ET-PLUS END TREATMENT SYSTEMS TO BE PAID UNDER ITEM 720585.
5. REPLACE ALL GUARDRAIL AND GUARDRAIL OVER CULVERT SYSTEMS TO BE PAID UNDER ITEMS 720050 AND 720054.
NORTHSIDE GUARDRAIL TOTAL LENGTH - 320LF.
SOUTHSIDE GUARDRAIL TOTAL LENGTH - 300LF.

**RT404, SEASHORE HIGHWAY CULVERT
BRIDGEVILLE - LOCATION 2
N.T.S.**

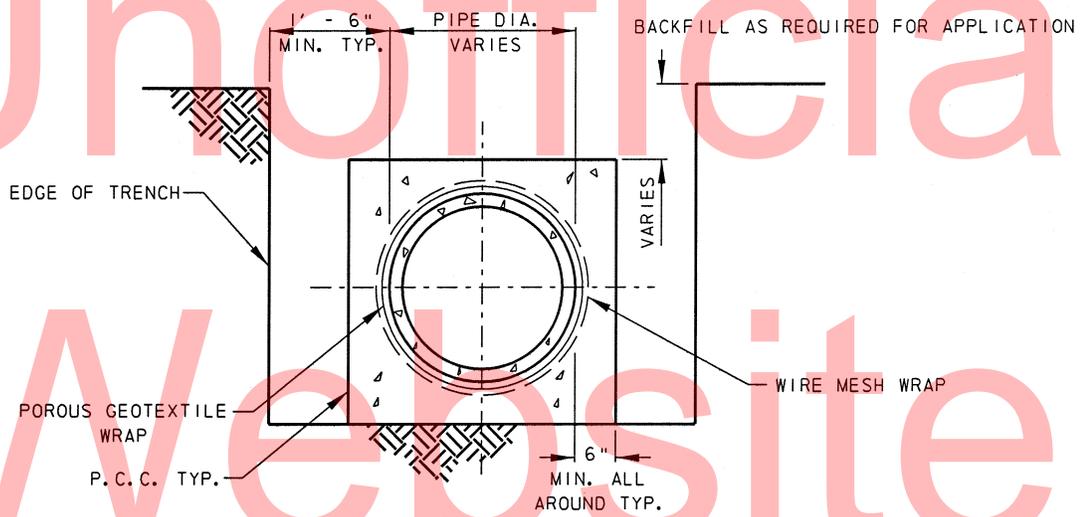
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201306301

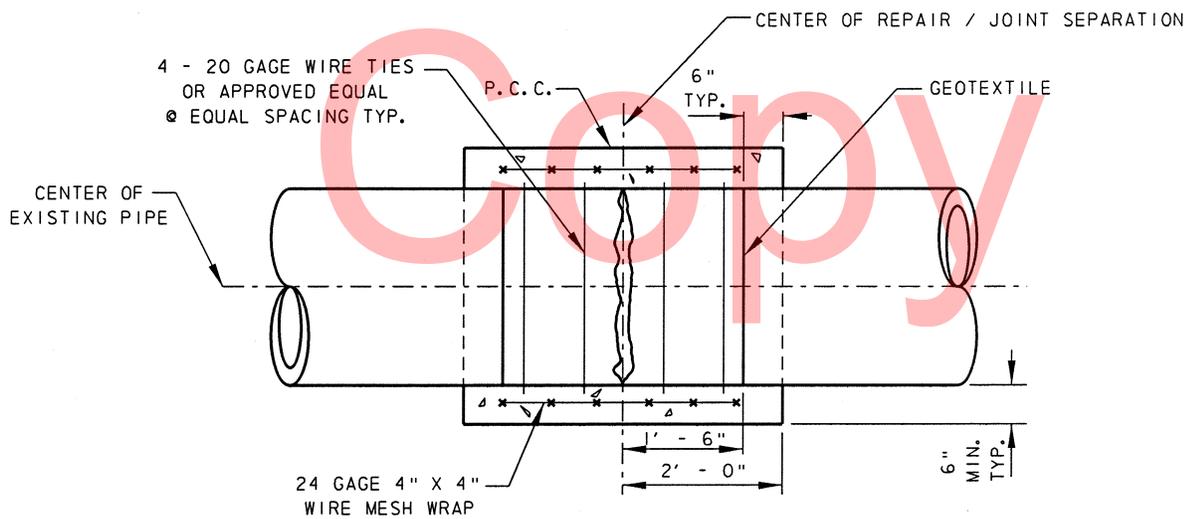
PAGE 18 OF 35

SOUTH MAINTENANCE VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET



CONCRETE PIPE REPAIR DETAIL
NOT TO SCALE



SECTION
NOT TO SCALE

DELAWARE DEPARTMENT OF TRANSPORTATION

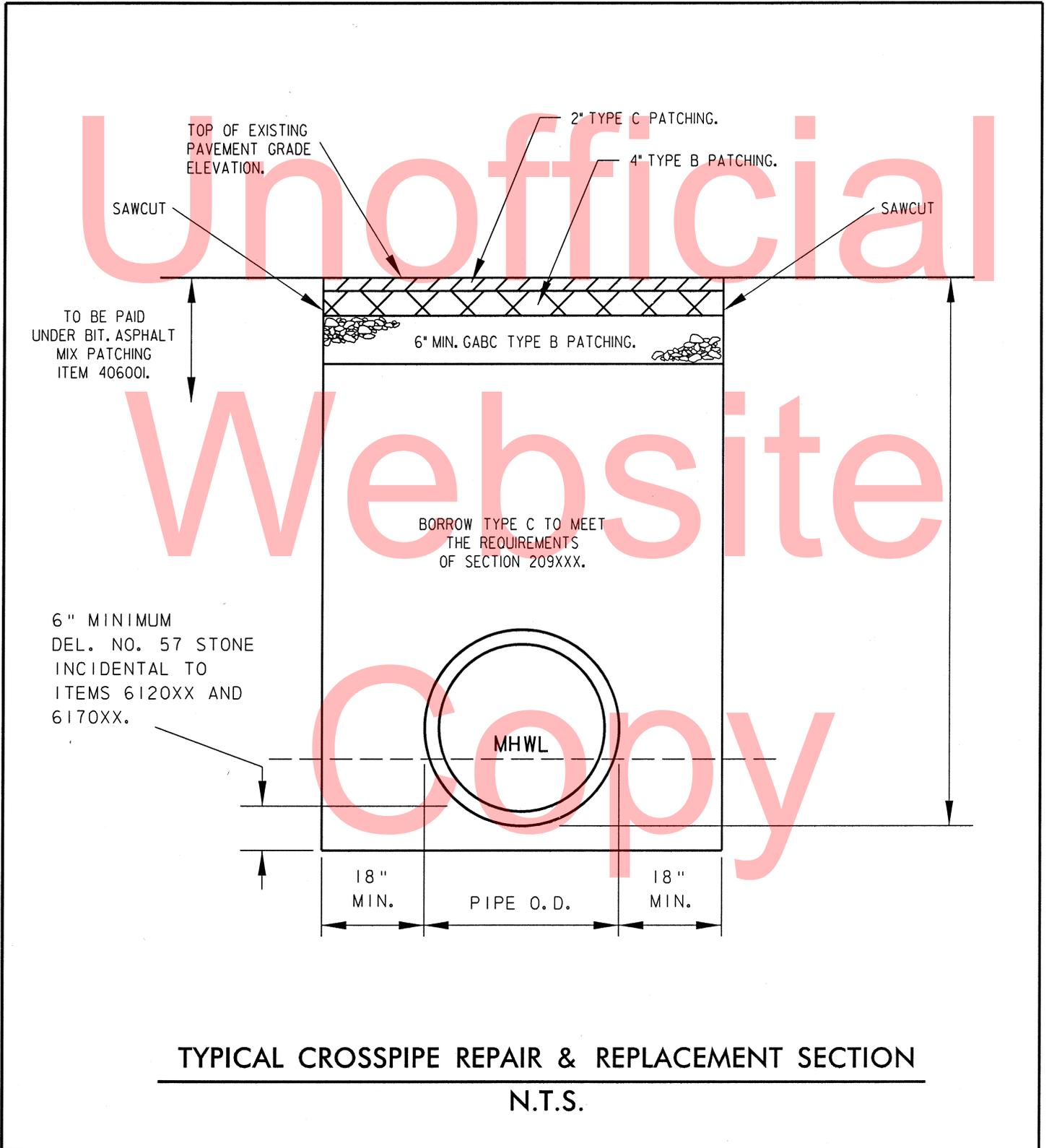
CONTRACT NUMBER- T201306301

PAGE 19 OF 35

SOUTH MAINTENANCE

VARIOUS LOCATIONS AROUND BRIDGEVILLE AND SEAFORD.

DETAILS SHEET



DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 20 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 1 SUSSEX HWY(S3) NORTHBOUND & SOUTHBOUND FROM HMJ'S 1700' & 1150'
SOUTH OF RT404 TO 1100' NORTH OF ELKS RD(S46)

LENGTH 6812.28 m 22350 L.F. AADT 24702

GENERAL IMPROVEMENTS

2" WARM-MIX TYPE C FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

302005	GRADED AGGREGATE BASE COURSE, TYPE B	38.00 TON
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	233.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	4,262.00 TON
401830	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)	8,003.00 TON
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	2.00 EACH
743003	ARROW PANELS, TYPE C	20.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	14.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	81.00 EA-DY
743007	** TRAFFIC OFFICERS	203.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	20.00 EA-DY
743052	** FLAGGER, SUSSEX COUNTY, STATE	813.00 HOUR
743064	** FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	122.00 HOUR
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	880.00 L.F.
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	954.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	55,875.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	954.00 S.F.
748502	RAISED/RECESSED PAVEMENT MARKER	280.00 EACH
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	55,875.00 L.F.
749690	INSTALLATION OR REMOVAL OF TRAFFIC SIGNS ON MULTIPLE SIGN POSTS	90.00 S.F.
760012	RUMBLE STRIPS, BIKE-FRIENDLY, HOT-MIX	11,175.00 L.F.
760016	RUMBLE STRIPS, HOT-MIX	11,175.00 L.F.
760502	PAVEMENT MILLING, TAPER CUT	267.00 SY-IN
760507	PROFILE MILLING, HOT-MIX	3,000.00 SY-IN
761001	BUTT JOINTS, HOT MIX	2,060.00 S.Y.
762001	SAW CUTTING, HOT MIX	1,340.00 L.F.
908001	TOPSOIL (TON)	615.00 TON

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 21 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 1 SUSSEX HWY(S3) NORTHBOUND & SOUTHBOUND FROM HMJ'S 1700' & 1150'
SOUTH OF RT404 TO 1100' NORTH OF ELKS RD(S46)

LENGTH 6812.28 m 22350 L.F. AADT 24702

GENERAL IMPROVEMENTS

2" WARM-MIX TYPE C FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

908014 PERMANENT GRASS SEEDING, DRY GROUND

7,450.00 S.Y.

** DENOTES FIXED PRICE ITEM

Unofficial

Website

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DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 22 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 1 SUSSEX HWY(S3) NORTHBOUND & SOUTHBOUND FROM HMJ'S 1700' & 1150' SOUTH
OF RT404 TO 1100' NORTH OF ELKS RD(S46)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-33, OPT. B (TRAVEL LANES).
TYPICAL APPLICATION, TA-3A (SHOULDERS).
2. NIGHTTIME WORK HOURS: 7:00P - 7:00A, (SUNDAY PM - FRIDAY AM).
3. ON THE MAIN CONSTRUCTION ROAD AND ALL INTERSECTING ROADS, "ROAD WORK AHEAD AND END" SIGNS FACING THE TRAFFIC SHALL BE PLACED AT 1500', 1000' AND 500' APPROACHING THE WORK ZONE. IN THOSE CASES, WHERE IT IS DIFFICULT TO MEET THE ABOVE CRITERIA BECAUSE OF DISTANCE LIMITATIONS, THE SIGN SHALL BE PLACED AS DIRECTED BY THE FIELD ENGINEER
4. THE GABC ITEM 302005 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS.
5. THE MILLING ITEM AND QUANTITY IS INTENDED FOR AREAS THAT MAY REQUIRE MILLING ESPECIALLY AROUND P.C.C. MEDIANS/ISLANDS AS DIRECTED BY THE FIELD ENGINEER.
6. HOT-MIX OVERLAY NOTES

 - A. USE 70-22 (NC) TYPE C WARM-MIX FOR MAINLINE TRAVEL LANES TURN LANES @ DE18.
USE 64-22 (C) TYPE C WARM-MIX FOR MEDIAN CROSSOVERS & TURN LANES AND OUTSIDE SHOULDERS.
 - B. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS SHALL BE INCIDENTAL TO THE OVERLAY INCLUDING PLACING BACK COMPACTED HOT-MIX MATERIAL TO FILL THE EXPOSED VOID.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF
HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 23 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 2 SEASHORE HIGHWAY(S404) FROM MARKET ST(S17) TO HMJ @ NEWTON RD(S532)

LENGTH 2048.2560 m 6720.0000 L.F. AADT 5497

GENERAL IMPROVEMENTS

4" COLD IN PLACE RECYCLING AND 2" WARM-MIX TYPE C FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 2

202000	EXCAVATION AND EMBANKMENT	31.00 C.Y.
209010	BORROW, TYPE C	22.00 TON
302005	GRADED AGGREGATE BASE COURSE, TYPE B	12.00 TON
302007	GRADED AGGREGATE BASE COURSE, TYPE B	24.00 C.Y.
302011	DELAWARE NO. 3 STONE	45.00 TON
401636	COLD RECYCLED BITUMINOUS PAVEMENT	73,280.00 SY-IN
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	89.00 TON
401713	EMULSIFIED ASPHALT	32,928.00 GAL
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	1,567.00 TON
401807	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (CARBONATE STONE)	2,036.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	16.00 TON
701011	PORTLAND CEMENT CONCRETE CURB, TYPE 2	420.00 L.F.
705002	P.C.C. SIDEWALK, 6"	63.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	20.00 S.F.
705008	CURB RAMP, TYPE 1	90.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	190.00 S.F.
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	6.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	1.00 EACH
713001	GEOTEXTILES, STABILIZATION	176.00 S.Y.
720050	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	289.00 L.F.
720054	GUARDRAIL OVER CULVERTS, TYPE 2-31	2.00 EACH
720585	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	4.00 EACH
743003	ARROW PANELS, TYPE C	16.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	14.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	65.00 EA-DY
743007	** TRAFFIC OFFICERS	162.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	16.00 EA-DY

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 24 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 2 SEASHORE HIGHWAY(S404) FROM MARKET ST(S17) TO HMJ @ NEWTON RD(S532)

LENGTH 2048.2560 m 6720.0000 L.F. AADT 5497

GENERAL IMPROVEMENTS

4" COLD IN PLACE RECYCLING AND 2" WARM-MIX TYPE C FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 2

743052	** FLAGGER, SUSSEX COUNTY, STATE	486.00 HOUR
743064	** FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	73.00 HOUR
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	110.00 L.F.
748014	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 4"	300.00 L.F.
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	63.00 S.F.
748017	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 6"	300.00 L.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	36,960.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	126.00 S.F.
748502	RAISED/RECESSED PAVEMENT MARKER	84.00 EACH
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	18,480.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	10.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	31.00 S.Y.
760011	RUMBLE STRIPS, FULL LANE WIDTH	300.00 L.F.
760502	PAVEMENT MILLING, TAPER CUT	720.00 SY-IN
760507	PROFILE MILLING, HOT-MIX	1,800.00 SY-IN
761001	BUTT JOINTS, HOT MIX	1,000.00 S.Y.
762001	SAW CUTTING, HOT MIX	650.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	42.00 L.F.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	3.00 HOUR
908001	TOPSOIL (TON)	249.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	2,263.00 S.Y.

** DENOTES FIXED PRICE ITEM

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 2 SEASHORE HIGHWAY(S404) FROM MARKET ST(S17) TO HMJ @ NEWTON RD(S532)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (CIPR)
 . TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
 . TYPICAL APPLICATION, TA-10 (SHOULDERS).
 . TYPICAL APPLICATION, TA-28 (SIDEWALK).
2. DAYTIME WORK HOURS: 8:00A - 6:00P, (MONDAY THRU THURSDAY).
3. ON THE MAIN CONSTRUCTION ROAD AND ALL INTERSECTING ROADS, "ROAD WORK AHEAD AND END" SIGNS FACING THE TRAFFIC SHALL BE PLACED AT 1500', 1000' AND 500' APPROACHING THE WORK ZONE. IN THOSE CASES, WHERE IT IS DIFFICULT TO MEET THE ABOVE CRITERIA BECAUSE OF DISTANCE LIMITATIONS, THE SIGN SHALL BE PLACED AS DIRECTED BY THE FIELD ENGINEER
4. GABC ITEM 302005 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS.
5. THE 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
6. REPLACE P.C.C. MEDIAN CURB IN KIND ON SOUTH END TOWARDS MARKET ST. TO BE PAID UNDER ITEM 701011. LENGTH OF CURB APPROX. 210+/-, WIDTH IS 4'.
7. ITEM 748014 AND 748017 ARE FOR PAYMENT OF THE RUMBLESTRIP MATERIAL ONLY. INSTALLATION OF RUMBLESTRIPS SHALL BE PAID UNDER ITEM 760011 AND INSTALLED IN ACCORDANCE TO THE DELAWARE MUTCD MANUAL, CHAPTER 3J.
8. 2" MILL FULL WIDTH 100' IN EACH DIRECTION FROM CENTER LINE OF CULVERT AND PLACE BACK 2" HOT-MIX TYPE C OVERLAY OR AS DIRECTED BY THE FIELD ENGINEER.
9. REFERENCE DETAIL SHEETS AND NOTES FOR LOCATION SPECIFIC REPAIR AND UPGRADES AT CULVERT LOCATED APPROX. 2000LF FROM MARKET ST.
10. HOT-MIX OVERLAY NOTES

 A. USE 76-22(C) TYPE C WARM-MIX FOR TRAVEL & TURN LANES.
 . USE 64-22(C) TYPE C WARM-MIX FOR OUTSIDE SHOULDERS.
11. COLD IN PLACE RECYCLING NOTES

 A. COLD IN PLACE RECYCLING IS LIMITED TO THE TRAVEL LANES ONLY - MAINLINE WIDTH IS 22FT. AND TURN LANES.
 B. SEE ATTACHED PAGES 25A & 25B FOR CORE INFORMATION. CORE DATA IS FOR INFORMATIONAL PURPOSES ONLY.
 C. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS SHALL BE INCIDENTAL TO THE COLD IN PLACE RECYCLING OPERATION.
 D. A ENGINEERED DESIGN EMULSION MIX SHALL BE USED FOR THIS LOCATION, INCIDENTAL TO ITEM 401713, EMULSIFIED ASPHALT. REFERENCE SPECIFICATIONS FOR 304508 FOR EMULSION.

CORE RESULTS

Maintenance # S404

Road Name: Seashore Highway

Coring Date: 3 / 7 / 2012

Limits: Market Street (S17) and Newton Road (S582)

Core #	Location Description	Lane	Offset	GPS Coordinates	HMA	PCC	ST	ATB	CTB	SC	CR	Stone	Sand	Other	Layer Order
1	180' North of Market Street	Shoulder	6 ft. Right Edgeline	3			0.75							original	HMA - ST
2	500' North of Market Street	Travel	6 ft. Right Centerline	8.5	6.5									original	
3	1800' North of Market Street	Travel	6 ft. Right Centerline	8.75	6.25									original	
4	3500' North of Market Street	Travel	5 ft. Right Centerline	8.75	6.5									original	
5	4900' North of Market Street	Travel	4 ft. Right Edgeline	9	6.5									original	
6	4900' North of Market Street	Shoulder	3 ft. Right Edgeline	3				3.25						original	
7	6500' North of Market Street	Travel	6 ft. Right Centerline	10	6.5									original	
8	800' South of Newton Road	Shoulder	5 ft. Right Edgeline	3.5				2.75						original	

Abbreviations: HMA - Asphalt PCC - Concrete ST - Surface Treatment ATB - Asphalt Treated Base CTB - Cement Treated Base SC - Soil Cement CR - Crusher Run

Maintenance # S404

Road Name: Seashore Highway

Coring Date: 3 / 7 / 2012

Limits: Market Street (S17) and Newton Road (S582)

Core #	Location Description	Lane	Offset	GPS Coordinates	HMA	PCC	ST	ATB	CTB	SC	CR	Stone	Sand	Other	Layer Order
9 SB	900' South of Newton Road	Travel	6 ft. Right Centerline		13	6.5								original	
10 SB	2400' South of Newton Road	Travel	5 ft. Right Centerline		3.25	11								original	
11 SB	3900' South of Newton Road	Travel	6 ft. Right Centerline		3.25	11+									
12 SB	6200' South of Newton Road	Travel	6 ft. Right Centerline		8.25	6.5								original	
13 SB	6400' South of Newton Road	Shoulder	5 ft. Right Edgeline		7									original	

Unofficial Website Copy

Abbreviations: HMA - Asphalt PCC - Concrete ST - Surface Treatment ATB - Asphalt Treated Base CTB - Cement Treated Base SC - Soil Cement CR - Crusher Run

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 3 **WOODLAND RD/HARRINGTON ST(S536) - (SEAFORD) FROM RAILROAD
CROSSING THRU SHIPLEY RD. INTERSECTION TO HMJ.**

LENGTH 1203.96 m 3950 L.F. AADT 4023

GENERAL IMPROVEMENTS

1" MILLING, HM PATCHING AND 1 1/2" WARM-MIX TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 3

202000	EXCAVATION AND EMBANKMENT	24.00 C.Y.
302008	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	183.00 C.Y.
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	27.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	1,805.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	190.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	373.00 TON
406001	BITUMINOUS CONCRETE PATCHING	15,900.00 SY-IN
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	60.00 S.F.
705008	CURB RAMP, TYPE 1	450.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	190.00 S.F.
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	5.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	3.00 EACH
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	14.00 EA-DY
743052	** FLAGGER, SUSSEX COUNTY, STATE	375.00 HOUR
743064	** FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	56.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	628.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	15,800.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	628.00 S.F.
748027	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 12"	150.00 L.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	15,800.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	10.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	437.00 S.Y.
760507	PROFILE MILLING, HOT-MIX	20,493.00 SY-IN
761001	BUTT JOINTS, HOT MIX	242.00 S.Y.
762001	SAW CUTTING, HOT MIX	3,520.00 L.F.
763502	MAINTENANCE OF RAILROAD TRAFFIC	1.00 L.S.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	5.00 HOUR

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 3 WOODLAND RD/HARRINGTON ST(S536) - (SEAFORD) FROM RAILROAD CROSSING
THRU SHIPLEY RD. INTERSECTION TO HMJ.

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES) .
 . TYPICAL APPLICATION, TA-3 (SHOULDERS) .
 . TYPICAL APPLICATION, TA-28 (SIDEWALK) .
 . TYPICAL APPLICATION, TA-46 (RAILROAD) .
2. DAYTIME WORK HOURS: 8:00A - 6:00P.
3. ON THE MAIN CONSTRUCTION ROAD AND ALL INTERSECTING ROADS, "ROAD WORK AHEAD AND END" SIGNS FACING THE TRAFFIC SHALL BE PLACED AT 1500', 1000' AND 500' APPROACHING THE WORK ZONE. IN THOSE CASES, WHERE IT IS DIFFICULT TO MEET THE ABOVE CRITERIA BECAUSE OF DISTANCE LIMITATIONS, THE SIGN SHALL BE PLACED AS DIRECTED BY THE FIELD ENGINEER
4. REMOVE EXISTING PCC CONCRETE SLAB AND GABC BASE (IF PRESENT) ON SOUTHEAST CORNER AT SHIPLEY ROAD INTERSECTION. TOPSOIL AND SEED AS NEEDED. RETROFIT CURB RAMPS ON NW & NE CORNERS.
5. REMOVE EXISTING MIDDLE ISLAND AT HARRINGTON STREET EXTENSION AND HOT-MIX PATCH FULL DEPTH AS SHOWN ON THE DETAIL SHEET.
6. HOT MIX PATCH FULL DEPTH (APPROX. 810'+/- X 4'+/-, PER SIDE) FROM SHIPLEY ST. TO NYLON BLVD. ALONG BOTH SIDES OF OLD ROAD PAVEMENT TRAVEL LANES. NOTICABLE BY HEAVY CRACK SEAL.
7. PROJECT LIMITS SHALL INCLUDE HARRINGTON STREET EXTENSION UP TO THE RAILROAD TRACKS.

8. M.O.R. NOTES

MARYLAND DELAWARE

.2 PER DAY (FREIGHT)*

.2 PER NIGHT (FREIGHT)*

*NO PASSENGER SERVICE IS INVOLVED.

THE PAVEMENT AND REHABILITATION CONTRACT MILLING AND FINAL OVERLAY WILL TIE UP TO THE RAILROAD TRACKS.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 29 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 4

COLUMBIA RD(S76) FROM DELMAR RD(S513) TO SHARPTOWN RD(S24)

LENGTH 5830.824 m 19130 L.F. AADT 1659

GENERAL IMPROVEMENTS

4" COLD IN PLACE RECYCLING AND 1 1/2" WARM-MIX TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 4

208000	EXCAVATION AND BACKFILLING FOR PIPE TRENCHES	11.00 C.Y.
210000	FURNISHING BORROW TYPE "C" FOR PIPE, UTILITY TRENCH, AND STRUCTURE BACKFILL	4.80 C.Y.
302005	GRADED AGGREGATE BASE COURSE, TYPE B	65.00 TON
401636	COLD RECYCLED BITUMINOUS PAVEMENT	219,253.00 SY-IN
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	131.00 TON
401713	EMULSIFIED ASPHALT	98,664.00 GAL
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	4,994.00 TON
401821	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING	1.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	2.20 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	3.30 TON
602603	HIGH EARLY STRENGTH CONCRETE	3.00 C.Y.
720002	GALVANIZED STEEL BEAM GUARDRAIL (WOOD POST)	340.00 L.F.
720585	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	2.00 EACH
743003	ARROWPANELS, TYPE C	35.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	14.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	35.00 EA-DY
743052	** FLAGGER, SUSSEX COUNTY, STATE	1,059.00 HOUR
743064	** FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	159.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	98.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	105,215.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	196.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	52,608.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	10.00 EACH
761001	BUTT JOINTS, HOT MIX	1,158.00 S.Y.
762001	SAW CUTTING, HOT MIX	297.00 L.F.
908001	TOPSOIL (TON)	396.00 TON

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306301

PAGE 30 OF 35

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 4

COLUMBIA RD(S76) FROM DELMAR RD(S513) TO SHARPTOWN RD(S24)

LENGTH 5830.824 m 19130 L.F. AADT 1659

GENERAL IMPROVEMENTS

4" COLD IN PLACE RECYCLING AND 1 1/2" WARM-MIX TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 4

908014

PERMANENT GRASS SEEDING, DRY GROUND

6,377.00 S.Y.

** DENOTES FIXED PRICE ITEM

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LOCATION 4 COLUMBIA RD(S76) FROM DELMAR RD(S513) TO SHARPTOWN RD(S24)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (CIPR)
 TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
 TYPICAL APPLICATION, TA-3 (SHOULDERS).
2. DAYTIME WORK HOURS: 8:00A - 6:00P.
3. ON THE MAIN CONSTRUCTION ROAD AND ALL INTERSECTING ROADS, "ROAD WORK AHEAD AND END" SIGNS FACING THE TRAFFIC SHALL BE PLACED AT 1500', 1000' AND 500' APPROACHING THE WORK ZONE. IN THOSE CASES, WHERE IT IS DIFFICULT TO MEET THE ABOVE CRITERIA BECAUSE OF DISTANCE LIMITATIONS, THE SIGN SHALL BE PLACED AS DIRECTED BY THE FIELD ENGINEER
4. GABC ITEM 302005 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS.
5. THE P.C.C. REMOVAL AND 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
6. REINFORCED CONCRETE PIPE JOINT REPAIR
 =====
- A. A CONCRETE COLLAR SHALL BE PLACED AFTER WRAPPING THE PIPE WITH A WELDED WIRE MESH AND APPROVED GEO-TEXTILE MATERIAL FASTENED SECURELY AROUND THE PIPE WITH EPOXY COATED TIE WIRE.
- B. THE COLLAR (SEE ATTACHED DETAIL SHEET) SHALL CONSIST OF A 4x4 INCH WELDED WIRE MESH OFFSET FROM THE PIPE WALL WITH CEMENT BRICK AS REQUIRED. THE COLLAR SHALL SURROUND THE LENGTH OF THE PIPE FAILURE(TOP,BOTTOM AND SIDES). ALL MATERIALS NEEDED(WELDED WIRE MESH, GEO-TEXTILE, FORMS, MORTAR, NON-SHRINK GROUT, ETC...)INCLUDING LABOR AND EQUIPMENT TO FULLY COMPLETE THE REPAIR SHALL BE INCIDENTAL TO ITEMS 208000.
- C. THE CONCRETE SHALL BE A "HI-EARLY" TO BE PAID RESPECTIVELY UNDER ITEM 602603.
- D. NO CONCRETE SHALL BE RELEASED OR PLACED UNTIL THE DEPTH AND THE CHARACTER OF THE FOUNDATION MATERIAL, THE ADEQUACY OF THE FORMS AND FALSE WORK, AND THE PLACING OF REINFORCMENTS HAVE BEEN INSPECTED AND APPROVED BY THE FIELD ENGINEER.
- E. THE COST FOR ANY DEWATERING AND PUMPING REQUIRED TO COMPLETE THE PIPE JOINT REPAIRS SHALL BE INCIDENTAL TO ITEM 208000.

7. REINFORCED CONCRETE PIPE JOINT REPAIR - LOCATIONS
 =====
- A. (1) 42" PIPE LOCATED APPROX. 1440LF SOUTH OF RIDER/JOHN COPPER RD.
 PIPE TRENCH DEPTH IS 4.9 FEET +/-.
- B. (1) 30" PIPE LOCATED APPROX. 1800LF NORTH OF MAY TWILLEY/MT HERMAN RD.
 PIPE TRENCH DEPTH IS 4.9 FEET +/-.

8. COLD IN PLACE RECYCLING NOTES
 =====
- A. COLD IN PLACE RECYCLING IS LIMITED TO THE TRAVEL LANES ONLY - MAINLINE WIDTH IS 22FT. AND TURN LANES.

SOUTH
MAINTENANCE

PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

LOCATION 4 COLUMBIA RD(S76) FROM DELMAR RD(S513) TO SHARPTOWN RD(S24)

B. SEE ATTACHED PAGES 32A - 32C FOR CORE INFORMATION. CORE DATA IS FOR INFORMATIONAL PURPOSES ONLY.

C. A ENGINEERED DESIGN EMULSION MIX SHALL BE USED FOR THIS LOCATION, INCIDENTAL TO ITEM 401713, EMULSIFIED ASPHALT. REFERENCE SPECIFICATIONS FOR 304508 FOR EMULSION SPECS.

9. GUARDRAIL REPLACEMENT

=====

A. THE GUARDRAIL SECTION IS LOCATED SOUTH OF MAYTWILLEY/MT HERMAN RD.

B. REPLACE EXISTING WOOD POST GUARDRAIL SYSTEM, TO BE PAID UNDER ITEM 720002.

C. REPLACE THE TWO EXISTING (ET-PLUS SYSTEM) END TREATMENTS, TO BE PAID UNDER ITEM 720585.

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CORE RESULTS

Maintenance # S76 **Road Name: Columbia Road** **Coring Date: 3/13/2012**

Limits: Delmar Road and Sharptown Road

Core #	Location Description	Lane	Offset	GPS Coordinates	HMA	PCC	ST	ATB	CTB	SC	CR	Stone	Sand	Other	Layer Order
1 WB	500' west of Delmar Road	Travel	5 ft. Right Centerline		10+					yes					
2 WB	2400' West of Delmar Road	Travel	5 ft. Right Centerline		7.5				5.5				yes		
3 WB	3900' West of Delmar Road	Travel	6 ft. Right Centerline		7.25				5.75				yes		
4 WB	5800' West of Delmar Road	Travel	5 ft. Right Centerline		7.75	6.5							yes		
5 WB	7600' West of Delmar Road	Travel	5 ft. Right Centerline		5.5	6.5							yes		
6 WB	9400' West of Delmar Road	Travel	5 ft. Right Centerline		6	6.5							yes		
7 WB	10900' West of delmar Road	Travel	5 ft. Right Centerline		5.75	6.5							yes		
8 WB	12900' West of Delmar Road	Travel	5 ft. Right Centerline		6.25	6.25							yes		

Abbreviations: HMA -Asphalt PCC - Concrete ST - Surface Treatment ATB - Asphalt Treated Base CTB - Cement Treated Base SC - Soil Cement CR - Crusher Run

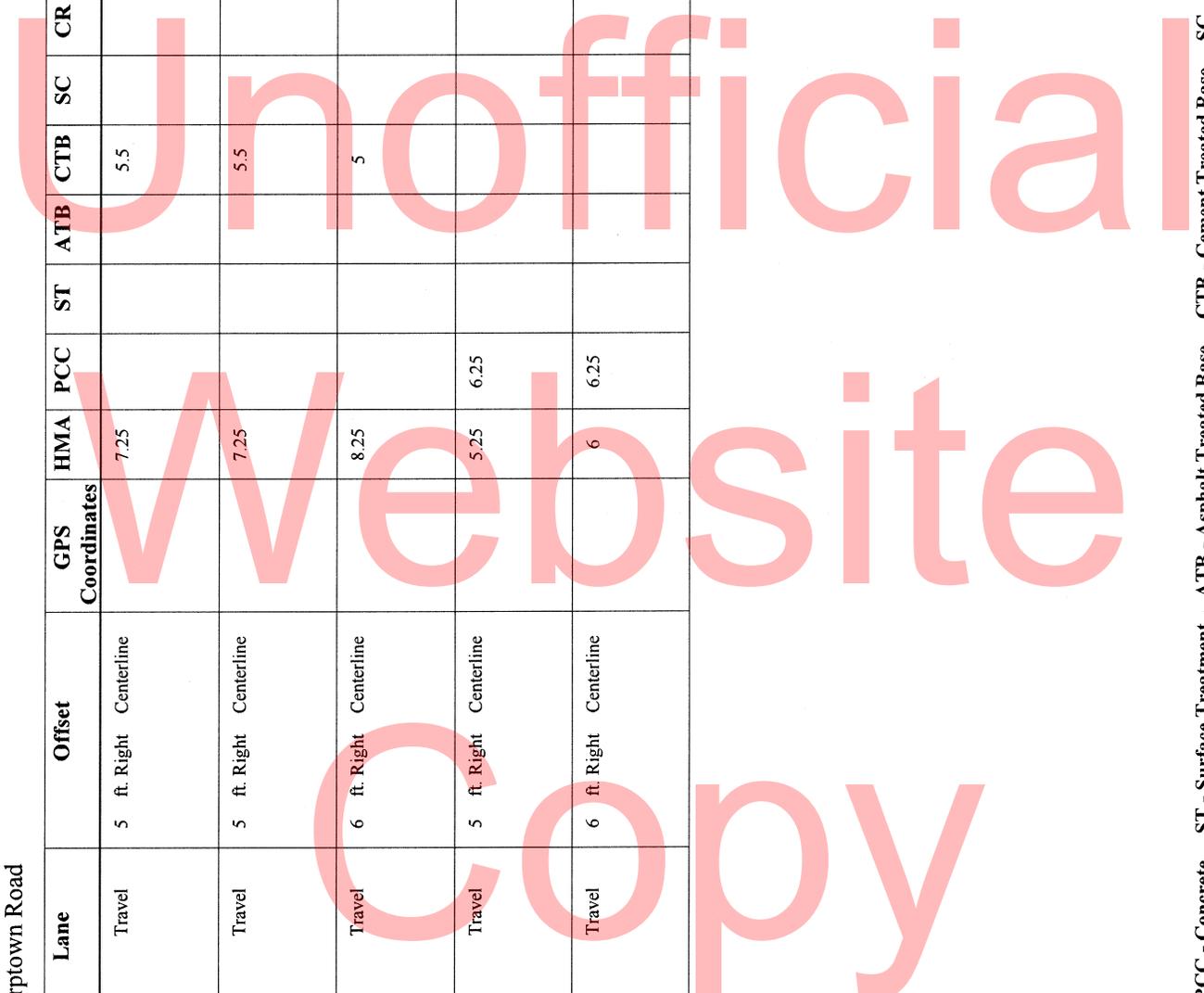
Limits: Delmar Road and Sharptown Road

Core #	Location Description	Lane	Offset	GPS Coordinates	HMA	PCC	ST	ATB	CTB	SC	CR	Stone	Sand	Other	Layer Order
9 WB	14900' West of Delmar Road	Travel	6 ft. Right Centerline	11	6.5								yes		
10 WB	16900' West of Delmar Road	Travel	4 ft. Right Centerline	6.25	6								yes		
11 WB	18900' West of Delmar Road	Travel	5 ft. Right Centerline	5.75	6.25								yes		
12 EB	100' eAst of Sharptown Road	Travel	5 ft. Right Edgeline	6.25				6.25					yes		
13 EB	1700' East of Sharptown Road	Travel	5 ft. Right Centerline	7				5.5					yes		
14 EB	3500' East of Sharptown Road	Travel	6 ft. Right Centerline	7.25				5.5					yes		
15 EB	5500' East of Sharptown Road	Travel	5 ft. Right Centerline	7.5				5.75					yes		
16 EB	7500' East of Sharptown Road	Travel	5 ft. Right Centerline	7.25				5.5					yes		
17 EB	9500' East of Sharptown Road	Travel	6 ft. Right Centerline	7.25				5.75					yes		

Abbreviations: HMA - Asphalt PCC - Concrete ST - Surface Treatment ATB - Asphalt Treated Base CTB - Cement Treated Base SC - Soil Cement CR - Crusher Run

Limits: Delmar Road and Sharptown Road

Core #	Location Description	Lane	Offset	GPS Coordinates	HMA	PCC	ST	ATB	CTB	SC	CR	Stone	Sand	Other	Layer Order
18 EB	11500' East of Sharptown Road	Travel	5 ft. Right Centerline		7.25				5.5				yes		
19 EB	13200' East of Sharptown Road	Travel	5 ft. Right Centerline		7.25				5.5				yes		
20 EB	15200' East of Sharptown Road	Travel	6 ft. Right Centerline		8.25				5				yes		
21 EB	17200' East of Sharptown Road	Travel	5 ft. Right Centerline		5.25	6.25							yes		
22 EB	19400' East of Sharptown Road	Travel	6 ft. Right Centerline		6	6.25							yes		



DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201306301

PAGE 33 OF 35

SOUTH PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013
MAINTENANCE

CONTRACT QUANTITIES SUMMARY SHEET

202000	EXCAVATION AND EMBANKMENT	55.00 C.Y.
208000	EXCAVATION AND BACKFILLING FOR PIPE TRENCHES	11.00 C.Y.
209010	BORROW, TYPE C	12.00 TON
210000	FURNISHING BORROW TYPE "C" FOR PIPE, UTILITY TRENCH, AND STRUCTURE BACKFILL	4.80 C.Y.
302005	GRADED AGGREGATE BASE COURSE, TYPE B	115.00 TON
302007	GRADED AGGREGATE BASE COURSE, TYPE B	24.00 C.Y.
302008	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	183.00 C.Y.
302011	DELAWARE NO. 3 STONE	45.00 TON
401636	COLD RECYCLED BITUMINOUS PAVEMENT	292,533.00 SY-IN
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	480.00 TON
401713	EMULSIFIED ASPHALT	131,592.00 GAL
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	12,628.00 TON
401807	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (CARBONATE STONE)	2,036.00 TON
401821	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING	1.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	192.20 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	392.30 TON
401830	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)	8,003.00 TON
406001	BITUMINOUS CONCRETE PATCHING	15,900.00 SY-IN
602603	HIGH EARLY STRENGTH CONCRETE	3.00 C.Y.
701011	PORTLAND CEMENT CONCRETE CURB, TYPE 2	420.00 L.F.
705002	P.C.C. SIDEWALK, 6"	63.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	80.00 S.F.
705008	CURB RAMP, TYPE 1	540.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	380.00 S.F.
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	13.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	4.00 EACH
713001	GEOTEXTILES, STABILIZATION	176.00 S.Y.
720002	GALVANIZED STEEL BEAM GUARDRAIL (WOOD POST)	340.00 L.F.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201306301

PAGE 34 OF 35

SOUTH PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013
 MAINTENANCE

CONTRACT QUANTITIES SUMMARY SHEET

720050	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	289.00 L.F.
720054	GUARDRAIL OVER CULVERTS, TYPE 2-31	2.00 EACH
720585	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	6.00 EACH
743003	ARROWPANELS, TYPE C	71.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	56.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	146.00 EA-DY
743007	** TRAFFIC OFFICERS	365.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	71.00 EA-DY
743052	FLAGGER, SUSSEX COUNTY, STATE	2,733.00 HOUR
743064	FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	410.00 HOUR
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	990.00 L.F.
748014	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 4"	300.00 L.F.
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	1,743.00 S.F.
748017	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 6"	300.00 L.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	213,850.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	1,904.00 S.F.
748027	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 12"	150.00 L.F.
748502	RAISED/RECESSED PAVEMENT MARKER	364.00 EACH
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	142,763.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	30.00 EACH
749690	INSTALLATION OR REMOVAL OF TRAFFIC SIGNS ON MULTIPLE SIGN POSTS	90.00 S.F.
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	468.00 S.Y.
760011	RUMBLE STRIPS, FULL LANE WIDTH	300.00 L.F.
760012	RUMBLE STRIPS, BIKE-FRIENDLY, HOT-MIX	11,175.00 L.F.
760016	RUMBLE STRIPS, HOT-MIX	11,175.00 L.F.
760502	PAVEMENT MILLING, TAPER CUT	987.00 SY-IN
760507	PROFILE MILLING, HOT-MIX	25,293.00 SY-IN
761001	BUTT JOINTS, HOT MIX	4,460.00 S.Y.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201306301

PAGE 35 OF 35

SOUTH
MAINTENANCE

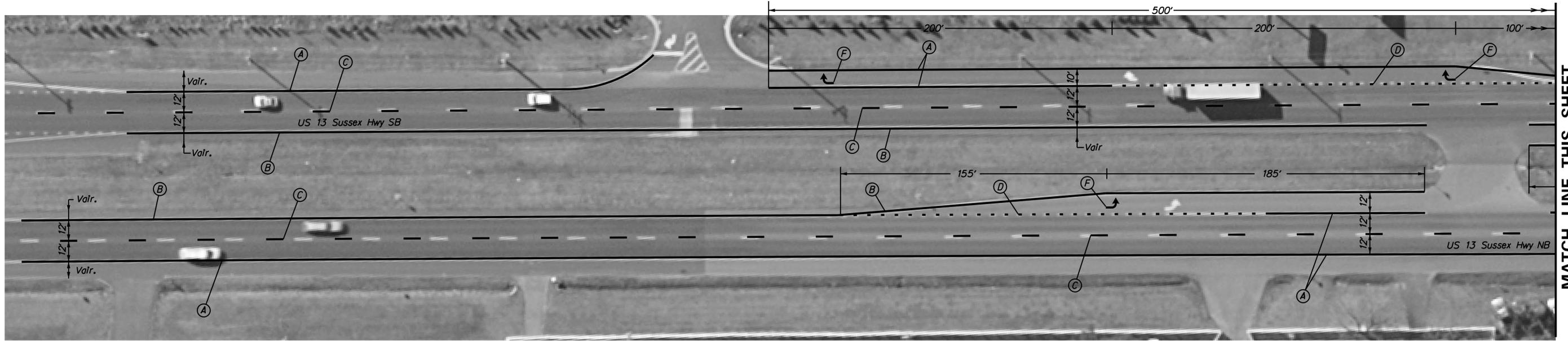
PAVEMENT & REHABILITATION, SUSSEX I, (BRIDGEVILLE) 2013

CONTRACT QUANTITIES SUMMARY SHEET

762001	SAW CUTTING, HOT MIX	5,807.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	42.00 L.F.
763000	INITIAL EXPENSE	LUMP SUM
763502	MAINTENANCE OF RAILROAD TRAFFIC	1.00 L.S.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	8.00 HOUR
763643	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP SUM
908001	TOPSOIL (TON)	1,341.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	17,407.00 S.Y.

** DENOTES FIXED PRICE ITEM

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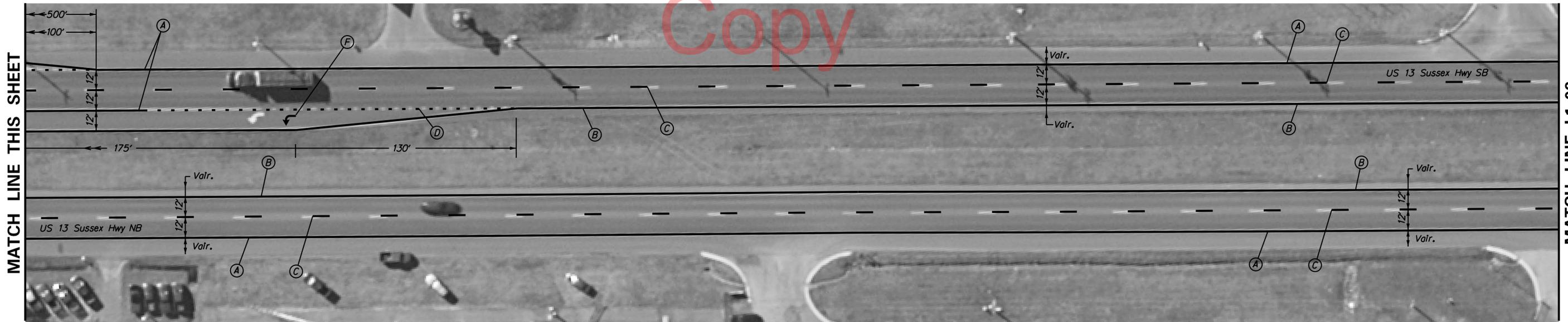


MATCH LINE THIS SHEET

PAVEMENT MARKINGS LEGEND	
SYMBOL	ITEM
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 748548)
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 10' LINE & 30' GAP (ITEM 748548)
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)

PAVEMENT MARKINGS LEGEND	
SYMBOL	ITEM
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)

- ALL PAVEMENT MARKINGS SHOWN ARE PROPOSED. CONTRACTOR TO FOLLOW PROPOSED SIGNING AND PAVEMENT MARKING LEGEND. EXISTING PAVEMENT MARKINGS SHOWN ON AERIAL ARE NOT TO BE REPRODUCED UNLESS CALLED OUT AS SUCH, PER THIS PLAN.
- THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE DE-MUTCD.
- RUMBLE STRIPS ARE CURRENTLY INSTALLED ADJACENT TO THE EDGELINES OF THE INSIDE AND OUTSIDE SHOULDERS OF US 13 (SOUTHBOUND ONLY) BETWEEN SR 18 AND PASSWATER'S FARM ROAD.
- INSTALL BICYCLE-FRIENDLY EDGELINE RUMBLES STRIPS ADJACENT TO THE EDGELINE OF THE OUTSIDE SHOULDERS AND CONTINUOUS EDGELINE RUMBLE STRIPS ADJACENT TO THE EDGELINE OF THE INSIDE SHOULDERS BETWEEN THE PAVE & REHAB PROJECT LIMITS IN BOTH DIRECTIONS OF US 13. REFER TO APPLICABLE DEMUTCD STANDARDS.



MATCH LINE THIS SHEET

MATCH LINE L1-02