THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLANS FOR:
BRANDYWINE SOUTH PEDESTRIAN
AND TRAIL IMPROVEMENTS

CONTRACT NUMBER: T201620006
FEDERAL AID PROJECT NUMBER: ETEA-2015(42)

COUNTY: NEW CASTLE
M.R. #: N/A

BEGIN CONSTRUCTION
SOUTH PARK DRIVE
STATION 300+07

END CONSTRUCTION
NORTH VAN BUREN STREET
STATION 104+41

PROJECT LOCATION
NOT TO SCALE

BEGIN CONSTRUCTION
NORTH VAN BUREN STREET
STATION 102+10

END CONSTRUCTION
SOUTH PARK DRIVE
STATION 204+94

ASSOCIATED CONTRACTS

<table>
<thead>
<tr>
<th>CONTRACT NO.</th>
<th>CONTRACT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-53-022</td>
<td>VAN BUREN STREET E/B REPAIRES</td>
</tr>
<tr>
<td>02-074-042</td>
<td>REPAIRS TO BRIDGE 1-680 OVER BRANDYWINE CREEK</td>
</tr>
<tr>
<td>04-04-002</td>
<td>1-65</td>
</tr>
<tr>
<td>12-52 &amp; 020</td>
<td>1-65</td>
</tr>
</tbody>
</table>

UNOFFICIAL WEBSITE COPY

APPROVED FOR ADVERTISEMENT

[Signature]
DIRECTOR OF PLANNING

DATE: 10/30/19
<table>
<thead>
<tr>
<th>SECTION</th>
<th>SHEET DESCRIPTION</th>
<th>SHEET NO(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>INDEX OF SHEETS</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>ADDENDA AND REVISIONS</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>LEGEND</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>NOTES</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>TYPICAL SECTIONS</td>
<td></td>
<td>6-9</td>
</tr>
<tr>
<td>HORIZONTAL AND VERTICAL CONTROL</td>
<td></td>
<td>10-11</td>
</tr>
<tr>
<td>CONSTRUCTION PLANS</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>PROFILES</td>
<td></td>
<td>13-14</td>
</tr>
<tr>
<td>GRADES AND GEOMETRICS</td>
<td></td>
<td>15-17</td>
</tr>
<tr>
<td>GRADING PLAN</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>CONSTRUCTION DETAIL R</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>CONSTRUCTION PHASING M.O.T. ANE EROSION CONTROL PLANS</td>
<td></td>
<td>20-24</td>
</tr>
<tr>
<td>DETOUR PLANS</td>
<td></td>
<td>25-29</td>
</tr>
<tr>
<td>LANDSCAPING PLANS</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>SIGNING, STEERING AND CROUCH PLANS</td>
<td></td>
<td>31-33</td>
</tr>
<tr>
<td>SIGNALIZATION PLANS</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>
PROJECT NOTES (CONT.)

SECTION 600

4. DRAINAGE INLET GRATES ADJACENT TO THE ROAD, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE I OR TYPE II, SHALL BE REPLACED, THE ACTUAL LOCATIONS OF CRACKS OR OTHER DAMAGES TO THE DRAINAGE INLET GRATES SHALL BE DETERMINED BY THE ENGINEER. ALL REPLACED GRATES/FRAMES SHALL BE DELIVERED TO THE NEAREST DISTRICT MAINTENANCE YARD WITH THE COST OF DELIVERY INCURRED TO ITEM 762001 - SAW CUTTING EXISTING CURB. PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DISTRICT MAINTENANCE YARD SUPERVISOR.

SECTION 700

5. IN AREAS WHERE PROPOSED CURB MEETS EXISTING CURB AND THE TWO CURB TYPES ARE NOT SIMILAR, THE PROPOSED CURB SHALL BE TRANSFORIZED IN 10 LINEAR FEET, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK, INCLUDING SAW CUTTING EXISTING CURB, SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.

6. WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, THE EXISTING SIDEWALK SHALL BE SAWCUT AT THE 1:40 RATIO OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE IN DEPTH, UNLESS OTHERWISE DIRECTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 762001 - SAW CUTTING, CONCRETE, FULL DEPTH.

7. ALL PAVED AREAS TO BE RECONSTRUCTED OR WORKED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO BE INSTALLED OR THE EXISTING PAVEMENT.

MISCELLANEOUS

8. THE CONTRACTOR SHALL CONTACT JOHN CARMAL, PLANNER FOR DART FIRST STATE AT 302-576-6064, OR DAVID VANDE, SENIOR PLANNER AT DART FIRST STATE AT 302-576-6064, 14 DAYS PRIOR TO THE START OF CONSTRUCTION.

9. THE CONTRACTOR COORDINATOR FOR DART FIRST STATE AT 302-576-6064, SHOULDS BE CONTACTED IF JOHN OR DAVID CANNOT BE REACHED.

10. THE CONTRACTOR SHALL MARK THEIR NAME IN THE SIDEWALK, EITHER BY STAMPING OR BY INLAYING AN APPROVED METAL PLATE. THE STAMPED LETTERS SHALL BE ONE INCH TALL AND ONE QUARTER INCH DEPTH, IF A METAL PLATE IS USED, THE TOP PLATE SHALL BE 1/16 THICK WITH THE TOP OF THE SIDEWALK. THE CONTRACTOR’S NAME SHALL BE PLACED IN ACCORDANCE WITH THE WILLMINGTON CODE OF ORDINANCES.

11. THE CONTRACTOR SHALL SALVAGE ANY GRANITE OR STONE CURB WITHIN THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. SALVAGED GRANITE OR STONE CURB SHALL BE DELIVERED TO THE CITY OF WILMINGTON’S DEPARTMENT OF PUBLIC WORKS CITY YARD ON 1200 NORTH AVE. BIRKLEY. ANY WORK ASSOCIATED WITH THE SALVAGING OF GRANITE OR STONE CURB SHALL BE INCIDENTAL TO ITEM 201001 - EXCAVATION AND EMBANKMENT.

12. EXCAVATION FOR THE EXISTING ISOLATION IS PAID FOR UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT.
UNOFFICIAL

EX. TRAVEL LANE
4 :1 MAX

ITEM 701010 - P.C.C. CURB, TYPE 1-2
2.25" 3.0"

ITEM 908020 - EROSION CONTROL BLANKET MULCH
2" 8"

SECTION
0' TO 8'
6.0"

ITEM 209006 - BORROW, TYPE F
6"

ITEM 401005 - SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)
4.0"

ITEM 908016 - PERMANENT GRASS SEEDING, SUBDIVISION
2.0" 0' TO 5'

ITEM 701013 - P.C.C. CURB, TYPE 1-8
MAX.
1.25" 3.0"

ITEM 701011 - P.C.C. CURB, TYPE 1-4
EX. TURN LANE

ITEM 001502 - STONE CURB, 3" REVEAL
H EX. MEDIAN

ITEM 401029 - SUPERPAVE TYPE C, PG 64-22, PATCHING
S

ITEM 908004 - TOPSOIL, 6" DEPTH

ITEM 701000 - P.C.C. SIDEWALK, 4"

ITEM 701002 - STONE CURB, 3" REVEAL

ITEM 701006 - BORROW, TYPE F

ITEM 701012 - P.C.C. CURB, TYPE 1-6

ITEM 401031 - SUPERPAVE TYPE BCBC, PG 64-22, PATCHING
ITEM 401030 - SUPERPAVE TYPE B, PG 64-22, PATCHING

ITEM 705006 - STONE CURB, 3" REVEAL

ITEM 401005 - SUPERPAVE TYPE C, PG 64-22, PATCHING
ITEM 908006 - BORROW, TYPE F

ITEM 701000 - P.C.C. SIDEWALK, 4"

ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE

ITEM 401029 - SUPERPAVE TYPE C, PG 64-22, PATCHING

ITEM 701002 - STONE CURB, 3" REVEAL

ITEM 908006 - BORROW, TYPE F

ITEM 401031 - SUPERPAVE TYPE BCBC, PG 64-22, PATCHING
ITEM 401030 - SUPERPAVE TYPE B, PG 64-22, PATCHING

ITEM 701000 - P.C.C. SIDEWALK, 4"

ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE

ITEM 401005 - SUPERPAVE TYPE C, PG 64-22, PATCHING

ITEM 701000 - P.C.C. SIDEWALK, 4"

ITEM 401031 - SUPERPAVE TYPE BCBC, PG 64-22, PATCHING
ITEM 401030 - SUPERPAVE TYPE B, PG 64-22, PATCHING

ITEM 701000 - P.C.C. SIDEWALK, 4"

ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE

ITEM 401029 - SUPERPAVE TYPE C, PG 64-22, PATCHING

ITEM 908006 - BORROW, TYPE F

ITEM 701000 - P.C.C. SIDEWALK, 4"

ITEM 401031 - SUPERPAVE TYPE BCBC, PG 64-22, PATCHING
ITEM 401030 - SUPERPAVE TYPE B, PG 64-22, PATCHING

ITEM 701000 - P.C.C. SIDEWALK, 4"
<table>
<thead>
<tr>
<th>POINT NO.</th>
<th>STATION</th>
<th>NORTHING</th>
<th>EASTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>80001</td>
<td>200+86.93</td>
<td>339237.73</td>
<td>617974.28</td>
</tr>
<tr>
<td>80002</td>
<td>200+86.70</td>
<td>339236.88</td>
<td>617976.05</td>
</tr>
<tr>
<td>80003</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80004</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80005</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80006</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80007</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80008</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80009</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80010</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
<tr>
<td>80011</td>
<td>200+15.43</td>
<td>339227.07</td>
<td>617985.90</td>
</tr>
</tbody>
</table>

### SOUTH PARK DRIVE

- **POB** SOUTH PARK DRIVE
- **SCALE** 1:120
- **CONSTRUCTION & R/W BASELINE** NORTH VAN BUREN STREET
- **MATCH EXISTING** SOUTH PARK DRIVE

### NORTH VAN BUREN STREET

- **EXISTING**
- **MATCH**
- **S. RUKOWICZ**

### BRANDYWINE SOUTH PEDESTRIAN AND TRAIL IMPROVEMENTS

- **BRIDGE NO.**
- **CHECKED BY:**
- **CONTRACT NO.**

### GRADING AND GEOMETRICS

- **COORDINATE LIST**
- **STATION**
- **EASTING**
- **NORTHING**

### SIGHT DISTANCES

- **CONC. SIDEWALK**
- **BRICK**
- **S. RUKOWICZ**

### DETAIL A

- **T.P. 104**
- **R = 20.00'**
- **STEPS 51.24'**
- **R = 30.00'**

### DETAIL B

- **T.P. 104**
- **R = 20.00'**
- **STEPS 51.24'**
- **R = 30.00'**

### DETAIL C

- **T.P. 104**
- **R = 20.00'**
- **STEPS 51.24'**
- **R = 30.00'**

### DETAIL D

- **T.P. 104**
- **R = 20.00'**
- **STEPS 51.24'**
- **R = 30.00'**

### DETAIL E

- **T.P. 104**
- **R = 20.00'**
- **STEPS 51.24'**
- **R = 30.00'**
SEQUENCE OF CONSTRUCTION (CONTINUED)

9. Remove existing curb, sidewalk, and pavement patch on north side Wawaset Street and South Park Drive. Grade area for new sidewalk and new gutter.
10. Relocate light standards by others.
11. Construct South Park Drive sidewalk, curb, and patching sidewalk A, and construct Wawaset Street sidewalk, curb, and patching sidewalk B.
12. Install traffic signal equipment, and pedestrian signal poles.
13. Install spotter signal poles on both sides of South Park Drive.
15. Restore South Park Drive pedestrian detour plan - Phase 2 and vehicular detour plan - Phase 1.
16. Install plantings, trees, and signs, stabilize all disturbed areas prior to moving to the next phase, remove Phase 1 traffic control.

PHASE 2

1. Place Phase 2 EB controls per CS-03.
2. Place Phase 2 EB controls per CS-03.
3. Initiate pedestrian detour plan - Phase 2.
4. Construct north curb ramp and patching on Wawaset Street.
5. Install temporary curb ramp at northwest corner of South Park Drive and North Wawaset Street.
6. Construct curb ramp, concepts, and patching.
7. Remove existing signal poles on northwest and northeast corners and install pedestrian signal pole.
8. Remove pedestrian detour plan - Phase 3 and temporary curb ramp.
9. Remove temporary curb ramp at northeast corner of South Park Drive and North Wawaset Street.
10. Remove GABC temporary roadway material (TRM) used to protect edge.
11. Restore both travel lanes and shoulders.
12. Place Phase 3 traffic controls.
13. Initiate vehicular detour plan - Phase 3.
14. Place temporary roadway material on north Wawaset Street.
15. Remove GABC temporary roadway material.
16. Remove vehicular detour plan - Phase 2 and Phase 3 traffic control.
17. Using TA-10, perform mill and 2" overlay, signing and striping.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. The erosion and sediment control devices shall be installed for all disturbed areas as directed by the engineer.
2. Contractor training program, as defined in Section 6.3 of the Delaware sediment and stormwater regulations.
3. The disturbed area for this project is 0.44 acres.
4. There is no additional impervious area for this project.
NOTES:
1. USE FLAGGING OPERATION TO ESCORT PEDESTRIANS ACROSS SOUTH PARK DRIVE AND THROUGH THE WORK ZONE DURING WORK HOURS.
2. VEHICULAR DETOUR FOR RIGHT TURNING MOVEMENT FROM NORTH VAN BUREN STREET TO EASTBOUND SOUTH PARK DRIVE SHOWN ON DP-04
3. USE TA-10 AND TA-20 TO CONSTRUCT THE SOUTHWEST CORNER OF THE INTERSECTION.
4. RESTORE BOTH TRAVEL LANES ON NORTH VAN BUREN STREET AT THE END OF THE WORK.

JANINE BUSEMANN WILLIAMS, BOTH SINGLE, JOINT TENANTS

JAMES K. BUCKLEY AND JANICE E. COLGATE

STEPHANIE YOUNG AND MICHAEL J. CUTRONA III,
BOTH SINGLE, JOINT TENANTS

DESIGNED BY:

INSTR. NO. 20050503-0041 825

CONSTRUCTION PHASING, EROSION, AND EROSION
CONTROL PLAN – PHASE 1

BRANDYWINE SOUTH PEDESTRIAN
AND TRAIL UPROVEMENTS

CONTRACT

COUNTY

DP&L

GRAVEL

WOOD GUARD RAIL

4" SOLID YELLOW TEMPORARY PAINT PAVEMENT

4" SOLID WHITE TEMPORARY PAINT PAVEMENT

4.3.

RENOVATE BOTH TRAVEL LANES ON SOUTH PARK DRIVE SHOWN ON DP-04

IN S T R . NO . 201 20403 -001 8447

RESTORE BOTH TRAVEL LANES ON NORTH VAN BUREN STREET AT THE END OF THE WORK.

JANINE BUSEMANN WILLIAMS, BOTH SINGLE, JOINT TENANTS

JAMES K. BUCKLEY AND JANICE E. COLGATE

STEPHANIE YOUNG AND MICHAEL J. CUTRONA III,
BOTH SINGLE, JOINT TENANTS

DESIGNED BY:

INSTR. NO. 20050503-0041 825

CONSTRUCTION PHASING, EROSION, AND EROSION
CONTROL PLAN – PHASE 1

BRANDYWINE SOUTH PEDESTRIAN
AND TRAIL UPROVEMENTS

CONTRACT

COUNTY

DP&L

GRAVEL

WOOD GUARD RAIL

4" SOLID YELLOW TEMPORARY PAINT PAVEMENT

4" SOLID WHITE TEMPORARY PAINT PAVEMENT

4.3.

RENOVATE BOTH TRAVEL LANES ON SOUTH PARK DRIVE SHOWN ON DP-04

IN S T R . NO . 201 20403 -001 8447

RESTORE BOTH TRAVEL LANES ON NORTH VAN BUREN STREET AT THE END OF THE WORK.
NOTES:
1. MAINTAIN PEDESTRIAN ACCESS ALONG VAN BUREN STREET AT ALL TIMES USING TEMPORARY CURB RAMPS AND TEMPORARY PLYWOOD WALKWAY.
2. MAINTAIN TEMPORARY LANE STRIPING INSTALLED DURING PHASE 1. UPDATE CROSSWALK STRIPING ACROSS SOUTH PARK DRIVE.
3. USE FLASHER OPERATION TO ESCORT PEDESTRIANS ALONG NORTH VAN BUREN STREET AND THROUGH THE WORK ZONE.