

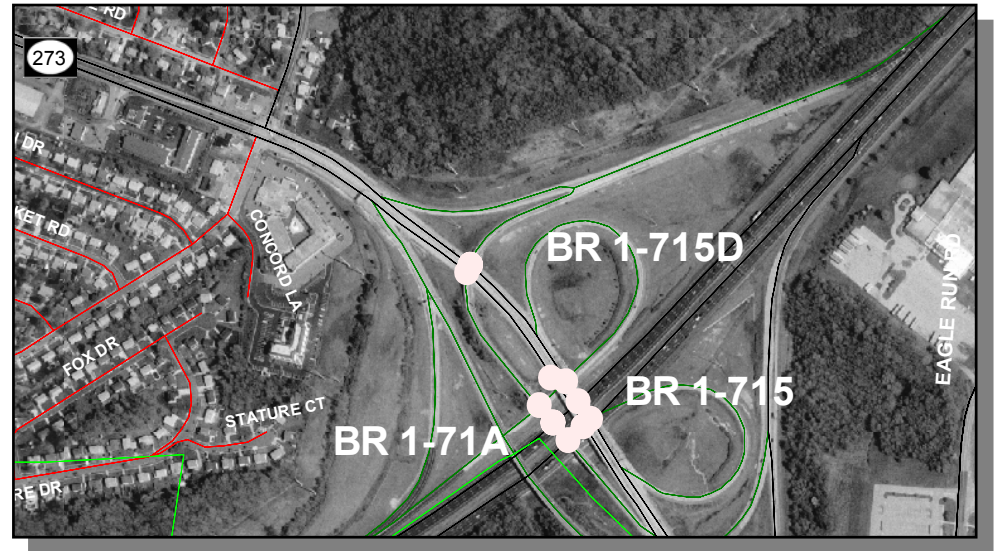
***BR 1-715, BR 1-715A, AND BR 1-715D AT I-95 / SR273 INTERCHANGE, NEAR CHRISTIANA [Project No. 22-074-09]***

**PROJECT SCOPE/DESCRIPTION:** The existing project bridges to be rehabilitated include Bridge 1-715 on SR273 over I-95, Bridge 1-715A on I-95 Southbound Ramp F over I-95 and Bridge 1-715D on I-95 Southbound Ramp F over SR273. All three bridges are multi-span steel beam and concrete deck structures supported by concrete rigid frame piers. As a result of an in-depth inspection, all three bridges will be rehabilitated to extend their useful service life. The extent of rehabilitation includes placing a new concrete overlay, cleaning and painting the steel superstructures, repairing/restoring concrete structural elements, re-building the concrete end posts, replacing concrete approach slabs and other miscellaneous structural steel repairs. Repairs to the bridge roadways will be completed under staged construction.

A portion of this project also includes the replacement of pavement along Ramp A (I-95 Northbound to SR273 Westbound), Ramp C (SR273 Westbound to I-95 Southbound), Ramp E (I-95 Southbound to SR273 Westbound) and Ramp F (I-95 Southbound to SR273 Eastbound). The new pavement section will consist of hot-mix superpave. Replacement of the pavement on Ramps E and F will be completed using staged construction. Replacement of the pavement on Ramps A and C will be completed under ramp closure (one at a time) utilizing a detour up to SR 7.

A third component of the project has been added that will extend the pavement replacement limits of Ramp E along SR273 Westbound up to the intersection with Harmony Road, or approximately 1,300-feet. This project was advertised for construction bids in December 2003. Construction should begin in summer 2004.

**PROJECT JUSTIFICATION:** Bridges 1-715, 1-715A, and 1-715D are located in the Christiana portion of the Delaware Turnpike that is a critical asset for the state. These projects are grouped together because of their close proximity with each other. The bridges are in need of repair to maintain their serviceability and are currently ranked 157<sup>th</sup>, 90<sup>th</sup>, and 148<sup>th</sup>, respectively, out of 1,399 on the department's bridge deficiency list (via the bridge management program).



|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            |                       |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Preservation          |
| <b>Representative District:</b> | 18, 26                |
| <b>Senatorial District:</b>     | 9, 11                 |



***BR 1-715, BR 1-715A, AND BR 1-715D AT I-95 / SR273 INTERCHANGE, NEAR CHRISTIANA (CONTINUED)***

***Bridge 1-715***



***Bridge 1-715A***



***Bridge 1-715D***



**BR 1-715, BR 1-715A, AND BR 1-715D AT I-95 / SR273 INTERCHANGE, NEAR CHRISTIANA (CONTINUED)****PROJECT FUNDING INFORMATION**

| Project   | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|---|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| BR 1-715, BR 1-715A, and BR 1-715D at I-95 / SR273 Interchange, near Christiana |              | \$ 10,610.1       |                  |               |                          |                         |                                     |                         |
| Prior Years   | State        |                   |                  | \$ 3,474.1    | \$ 676.8                 | \$ 470.7                | \$ 206.1                            | \$ 2,797.3              |
|   | Federal      |                   |                  | \$ 7,136.0    | \$ 5,743.6               | \$ 4,089.7              | \$ 1,653.9                          | \$ 1,392.4              |
|   | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005   | State        |                   | \$ 10,610.1      | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 2,797.3              |
|   | Federal      |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 1,392.4              |
|   | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request   | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2007 Projected   | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2008 Projected   | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2009-2011 Projected  | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| Total Projected   | State        |                   |                  | \$ 3,474.1    | \$ 676.8                 |                         |                                     | \$ 2,797.3              |
|   | Federal      |                   |                  | \$ 7,136.0    | \$ 5,743.6               |                         |                                     | \$ 1,392.4              |
|   | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds   |              | \$ 10,610.1       | \$ 10,610.1      | \$ 10,610.1   | \$ 6,420.4               | \$ 4,560.4              | \$ 1,860.0                          | \$ 4,189.6              |

**BR 1-715, BR 1-715A, AND BR 1-715D AT I-95 / SR273 INTERCHANGE, NEAR CHRISTIANA (CONTINUED)****PROJECT TIMELINE INFORMATION**

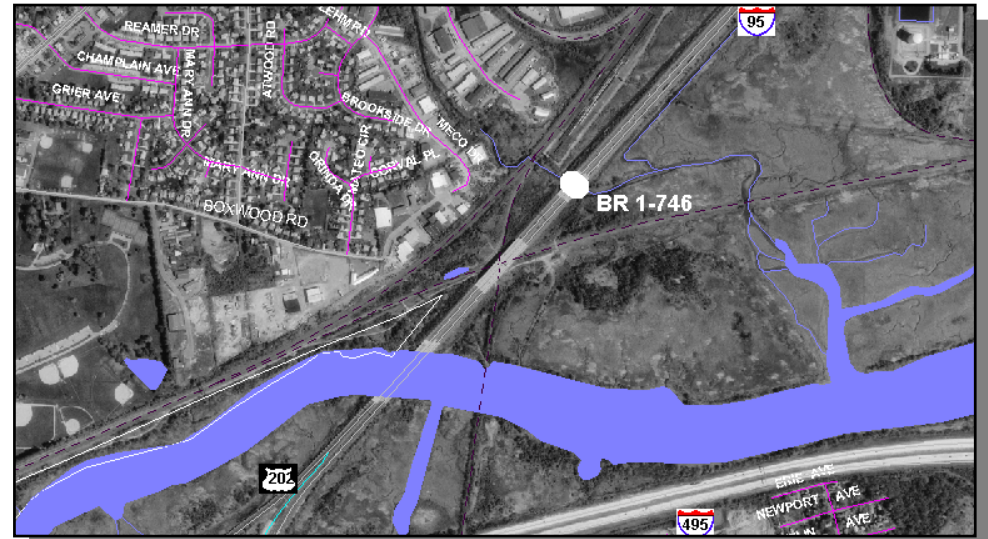
| Project # | Description  | Phase | Funding Schedule | Current Estimate | Prior Years | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 -2011 |
|-----------|--|-------|------------------|------------------|-------------|---------|---------|---------|---------|---------------|
| 22-074-09 | <b>BR 1-715, BR 1-715A, and BR 1-715D at I-95 / SR273 Interchange, near Christiana</b> | PE    | 100% ST          | \$ 1,690.1       | \$ 1,690.1  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |
|           |  | PE    | 80% FHWA         | 340.0            | 340.0       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0           |
|           |  | C     | 80% FHWA         | 4,480.0          | 4,480.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0           |
|           |  | C     | 80% FHWA         | 4,100.0          | 4,100.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0           |
|           |  |       |                  |                  |             |         |         |         |         |               |
|           | Total All Funds  |       |                  | \$ 10,610.1      | \$ 10,610.1 | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |



***BR 1-746 ON I-95 OVER LITTLE MILL CREEK, NEAR WILMINGTON [Project No. 22-074-10]***

**PROJECT SCOPE/DESCRIPTION:** In order to maintain the interstate system and prolong premature replacement of its bridges, work will be performed as follows: replace the expansion bearings; replace portions of the approach slabs and backwalls on the abutments; replace the joint seals to prevent moisture intrusion; rehabilitate the substructure units by crack sealing and waterproofing the surface; replace missing anchor bolts, place riprap along stream to prevent erosion; repair structural steel; clean and paint the structural steel and replace the trough system beneath the finger joints.

**PROJECT JUSTIFICATION:** Bridge 1-746 is located near Wilmington on the interstate system that is a critical asset for the state. The bridge is in need of repair to maintain its structural integrity and is currently ranked 15<sup>th</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).



|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            |                       |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Preservation          |
| <b>Representative District:</b> | 13, 16                |
| <b>Senatorial District:</b>     | 3, 13                 |

***Bridge 1-746***

**BR 1-746 ON I-95 OVER LITTLE MILL CREEK, NEAR WILMINGTON (CONTINUED)****PROJECT FUNDING INFORMATION**

| Project  | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|--|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| BR 1-746 on I-95 over Little Mill Creek, near Wilmington |              | \$ 2,697.0        |                  |               |                          |                         |                                     |                         |
| Prior Years  | State        |                   |                  | \$ 252.9      | \$ 252.9                 | \$ 25.4                 | \$ 227.5                            | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 2,275.9    | \$ 2,275.9               | \$ 228.6                | \$ 2,047.3                          | \$ 0.0                  |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005  | State        |                   | \$ 11,291.8      | \$ 876.3      | \$ 569.1                 | \$ 0.0                  | \$ 569.1                            | \$ 307.2                |
|  | Federal      |                   |                  | \$ 7,886.7    | \$ 4,788.3               | \$ 0.0                  | \$ 4,788.3                          | \$ 3,098.4              |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request  | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2007 Projected  | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2008 Projected  | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2009-2011 Projected                                   | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| Total Projected  | State        |                   |                  | \$ 1,129.2    | \$ 822.0                 |                         |                                     | \$ 307.2                |
|  | Federal      |                   |                  | \$ 10,162.6   | \$ 7,064.2               |                         |                                     | \$ 3,098.4              |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds  |              | \$ 2,697.0        | \$ 11,291.8      | \$ 11,291.8   | \$ 7,886.2               | \$ 254.0                | \$ 7,632.2                          | \$ 3,405.6              |

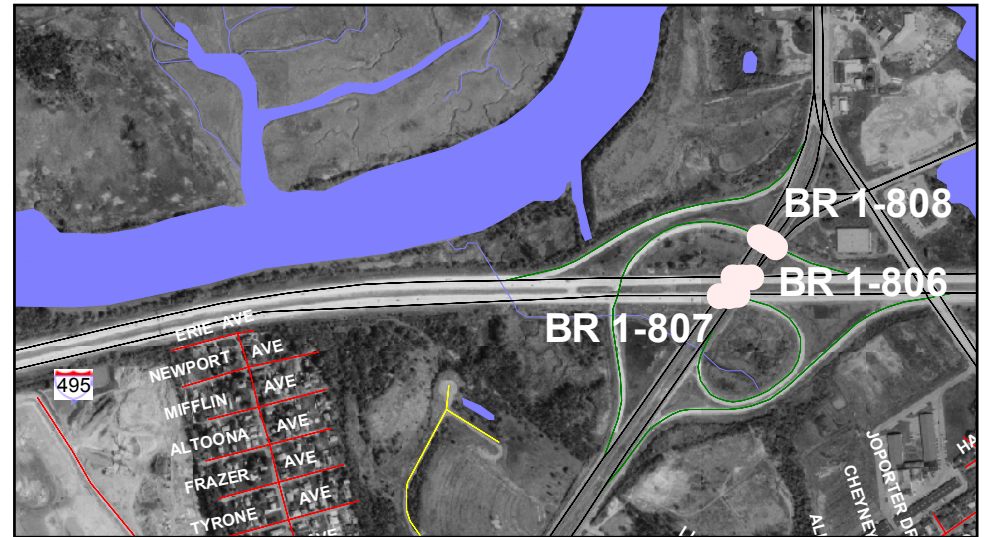
**BR 1-746 ON I-95 OVER LITTLE MILL CREEK, NEAR WILMINGTON (CONTINUED)****PROJECT TIMELINE INFORMATION**

| Project # | Description   | Phase | Funding Schedule | Current Estimate | Prior Years | FY 2005    | FY 2006 | FY 2007 | FY 2008 | FY 2009 -2011 |
|-----------|---|-------|------------------|------------------|-------------|------------|---------|---------|---------|---------------|
| 22-074-10 | <b>BR 1-746 on I-95 over Little Mill Creek, near Wilmington</b> | PE    | 90% FHWA         | \$ 2,528.8       | \$ 2,528.8  | \$ 0.0     | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |
|           |   | RW    | 100% ST          | 0.0              | 0.0         | 0.0        | 0.0     | 0.0     | 0.0     | 0.0           |
|           |   | C     | 90% FHWA         | 8,763.0          | 0.0         | 8,763.0    | 0.0     | 0.0     | 0.0     | 0.0           |
|           |   |       |                  |                  |             |            |         |         |         |               |
|           | Total All Funds   |       |                  | \$ 11,291.8      | \$ 2,528.8  | \$ 8,763.0 | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |

***BR 1-806, BR 1-807, AND BR 1-808 ON I-495 OVER US 13 [Project No. 22-071-05]***

**PROJECT SCOPE/DESCRIPTION:** In order to maintain the interstate system and prevent premature replacement of its bridges, work will be performed as follows: replace the expansion bearings; replace portions of the approach slabs and backwalls on the abutments; replace the joint seals to prevent moisture intrusion; rehabilitate the substructure units by crack sealing and waterproofing the surface; repair the structural steel; clean and paint the structural steel and upgrade the guardrail to current standards.

**PROJECT JUSTIFICATION:** Bridges 1-806, 1-807, and 1-808 are located south of Wilmington on the interstate system that is a critical asset for the state. These projects are grouped together because of their close proximity with each other. The bridges are in need of repair to maintain their serviceability and are currently ranked 172<sup>nd</sup>, 235<sup>th</sup>, and 325<sup>th</sup>, respectively, out of 1,399 on the department's bridge deficiency list (via the bridge management program).



|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            |                       |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Preservation          |
| <b>Representative District:</b> | 16                    |
| <b>Senatorial District:</b>     | 13                    |

***Bridge 1-806***



***BR 1- 806, BR 1-807, AND BR 1-808 ON I-495 OVER US 13 (CONTINUED)***

***Bridge 1-807***



***Bridge 1-808***



**BR 1- 806, BR 1-807, AND BR 1-808 ON I-495 OVER US 13 (CONTINUED)****PROJECT FUNDING INFORMATION**

| Project  | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|--|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| BR 1-806, BR 1-807, and BR 1-808 on I-495 over US 13 |              | \$ 3,507.0        |                  |               |                          |                         |                                     |                         |
| Prior Years  | State        |                   |                  | \$ 30.7       | \$ 30.7                  | \$ 15.9                 | \$ 14.8                             | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 276.3      | \$ 276.3                 | \$ 143.5                | \$ 132.8                            | \$ 0.0                  |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005  | State        |                   | \$ 3,507.0       | \$ 640.0      | \$ 640.0                 | \$ 0.0                  | \$ 640.0                            | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 2,560.0    | \$ 2,459.9               | \$ 0.0                  | \$ 2,459.9                          | \$ 100.1                |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request                                      | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2007 Projected                                    | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2008 Projected                                    | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2009-2011 Projected                               | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| Total Projected                                      | State        |                   |                  | \$ 670.7      | \$ 670.7                 |                         |                                     | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 2,836.3    | \$ 2,736.2               |                         |                                     | \$ 100.1                |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds                                      |              | \$ 3,507.0        | \$ 3,507.0       | \$ 3,507.0    | \$ 3,406.9               | \$ 159.4                | \$ 3,247.5                          | \$ 100.1                |

**BR 1- 806, BR 1-807, AND BR 1-808 ON I-495 OVER US 13 (CONTINUED)****PROJECT TIMELINE INFORMATION**

| Project # | Description   | Phase | Funding Schedule | Current Estimate | Prior Years | FY 2005    | FY 2006 | FY 2007 | FY 2008 | FY 2009 -2011 |
|-----------|---|-------|------------------|------------------|-------------|------------|---------|---------|---------|---------------|
| 22-071-05 | <b>BR 1-806, BR 1-807, and BR 1-808 on I-495 over US 13</b> | PE    | 90% FHWA         | \$ 307.0         | \$ 307.0    | \$ 0.0     | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |
|           |   | C     | 80% FHWA         | 3,200.0          | 0.0         | 3,200.0    | 0.0     | 0.0     | 0.0     | 0.0           |
|           |   |       |                  |                  |             |            |         |         |         |               |
|           | Total All Funds   |       |                  | \$ 3,507.0       | \$ 307.0    | \$ 3,200.0 | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |

***BR 1-813 ON I-495 OVER CHRISTINA RIVER [Project No. 94-074-11]***

**PROJECT SCOPE/DESCRIPTION:** This project will remove the existing vinyl topcoat paint and replace with a new top coat, as well as reset the bearings (on one pier) and provide seismic retrofit. This project was advertised for construction bids in November 2003.

**PROJECT JUSTIFICATION:** The 1970's vintage paint includes an inorganic zinc system with a vinyl overcoat. The undercoat does not need to be replaced, but the vinyl overcoat does need to be replaced to preserve the integrity of the bridge. This bridge currently ranks 207<sup>th</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).

|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            | Wilmington            |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Preservation          |
| <b>Representative District:</b> | 16                    |
| <b>Senatorial District:</b>     | 2                     |



***Bridge 1-813***



**BR 1-813 ON I-495 OVER CHRISTINA RIVER (CONTINUED)****PROJECT FUNDING INFORMATION**

| Project                                | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|--|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| BR 1-813 on I-495 over Christina River |              | \$ 16,055.7       |                  |               |                          |                         |                                     |                         |
| Prior Years                            | State        |                   |                  | \$ 2,352.2    | \$ 2,352.2               | \$ 948.0                | \$ 1,404.2                          | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 15,219.0   | \$ 14,259.6              | \$ 2,466.8              | \$ 11,792.8                         | \$ 959.4                |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005                                | State        |                   | \$ 17,571.2      | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 959.4                |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request                        | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2007 Projected                      | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2008 Projected                      | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2009-2011 Projected                 | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| Total Projected                        | State        |                   |                  | \$ 2,352.2    | \$ 2,352.2               |                         |                                     | \$ 0.0                  |
|  | Federal      |                   |                  | \$ 15,219.0   | \$ 14,259.6              |                         |                                     | \$ 959.4                |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds                        |              | \$ 16,055.7       | \$ 17,571.2      | \$ 17,571.2   | \$ 16,611.8              | \$ 3,414.8              | \$ 13,197.0                         | \$ 0.0                  |



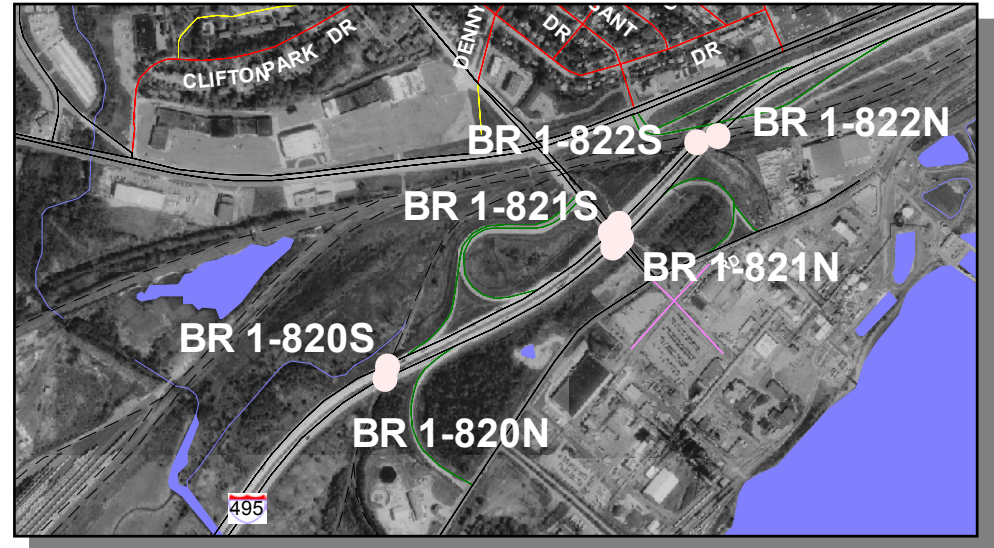
***BR 1-813 ON I-495 OVER CHRISTINA RIVER (CONTINUED)*****PROJECT TIMELINE INFORMATION**

| Project # | Description                                   | Phase | Funding Schedule | Current Estimate | Prior Years | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 -2011 |
|-----------|---|-------|------------------|------------------|-------------|---------|---------|---------|---------|---------------|
| 94-074-11 | <b>BR 1-813 on I-495 over Christina River</b> | PE    | 100% ST          | \$ 661.2         | \$ 661.2    | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |
|           |   | C     | 90% FHWA         | 16,910.0         | 16,910.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0           |
|           |   |       |                  |                  |             |         |         |         |         |               |
|           | Total All Funds                               |       |                  | \$ 17,571.2      | \$ 17,571.2 | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |

***BR 1-820N AND BR 1-820S ON I-495 OVER NORFOLK SOUTHERN, BR 1-821N AND BR 1-821S, AND BR 1-822N AND BR 1-822S ON I-495 OVER AMTRAK / NORFOLK SOUTHERN, EDGEMOOR [Project No. 22-074-11]***

**PROJECT SCOPE/DESCRIPTION:** In order to maintain the interstate system and prevent premature replacement of its bridges, work will be performed as follows: replace the expansion bearings; replace portions of the approach slabs and backwalls on the abutments; replace end diaphragms; replace the elastomeric joints; rehabilitate the substructure units by crack sealing and waterproofing the surface; repair structural steel; clean and paint the structural steel and upgrade the guardrail to current standards.

**PROJECT JUSTIFICATION:** Bridges 1-820N, 1-820S, 1-821N, 1-821S, 1-822N, and 1-822S are located in the Edgemoor area on the interstate system that is a critical asset for the state. These projects are grouped together because of their close proximity with each other. The bridges are in need of repair to maintain their serviceability and are currently ranked 117<sup>th</sup>, 237<sup>th</sup>, 26<sup>th</sup>, and 64<sup>th</sup>, respectively, out of 1,399 on the department's bridge deficiency list (via the bridge management program).



|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            |                       |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Preservation          |
| <b>Representative District:</b> | 6                     |
| <b>Senatorial District:</b>     | 2                     |



***BR 1-820N AND BR 1-820S ON I-495 OVER NORFOLK SOUTHERN, BR 1-821N AND BR 1-821S, AND BR 1-822N AND BR 1-822S ON I-495 OVER AMTRAK / NORFOLK SOUTHERN, EDGEMOOR (CONTINUED)***

***Bridge 1-821N***



***Bridge 1-821S***



**BR 1-820N AND BR 1-820S ON I-495 OVER NORFOLK SOUTHERN, BR 1-821N AND BR 1-821S, AND BR 1-822N AND BR 1-822S ON I-495 OVER AMTRAK / NORFOLK SOUTHERN, EDGEMOOR (CONTINUED)**

**PROJECT FUNDING INFORMATION**

| Project  | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|--|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| BR 1-820N and BR 1-820S on I-495 over Norfolk Southern, BR 1-821N and BR 1-821S, and BR 1-822N and BR 1-822S on I-495 over Amtrak / Norfolk Southern, Edgemoor |              | \$ 7,717.0        |                  |               |                          |                         |                                     |                         |
| Prior Years  | State        |                   |                  | \$ 481.5      | \$ 463.3                 | \$ 26.6                 | \$ 436.7                            | \$ 18.2                 |
|  | Federal      |                   |                  | \$ 146.1      | \$ 146.1                 | \$ 106.3                | \$ 39.8                             | \$ 0.0                  |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005  | State        |                   | \$ 7,732.6       | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 18.2                 |
|  | Federal      |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request  | State        |                   |                  | \$ 1,421.0    |                          |                         |                                     | \$ 1,439.2              |
|  | Federal      |                   |                  | \$ 5,684.0    |                          |                         |                                     | \$ 5,684.0              |
|  | Other        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
| FY 2007 Projected  | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2008 Projected  | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2009-2011 Projected   | State        |                   |                  |               |                          |                         |                                     |                         |
|  | Federal      |                   |                  |               |                          |                         |                                     |                         |
|  | Other        |                   |                  |               |                          |                         |                                     |                         |
| Total Projected  | State        |                   |                  | \$ 1,902.5    | \$ 463.3                 |                         |                                     | \$ 1,439.2              |
|  | Federal      |                   |                  | \$ 5,830.1    | \$ 146.1                 |                         |                                     | \$ 5,684.0              |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds  |              | \$ 7,717.0        | \$ 7,732.6       | \$ 7,732.6    | \$ 609.5                 | \$ 132.9                | \$ 476.6                            | \$ 7,123.1              |

***BR 1-820N AND BR 1-820S ON I-495 OVER NORFOLK SOUTHERN, BR 1-821N AND BR 1-821S, AND BR 1-822N AND BR 1-822S ON I-495 OVER AMTRAK / NORFOLK SOUTHERN, EDGEMOOR (CONTINUED)***

**PROJECT TIMELINE INFORMATION**

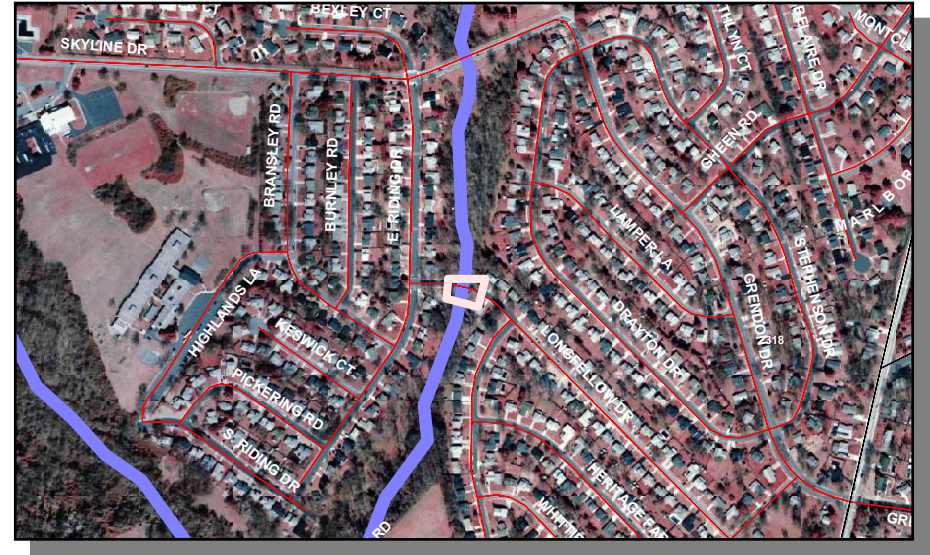
| Project # | Description  | Phase | Funding Schedule | Current Estimate | Prior Years | FY 2005 | FY 2006    | FY 2007 | FY 2008 | FY 2009 -2011 |
|-----------|--|-------|------------------|------------------|-------------|---------|------------|---------|---------|---------------|
| 22-074-11 | BR 1-820N and BR 1-820S on I-495 over Norfolk Southern, BR 1-821N and BR 1-821S, and BR 1-822N and BR 1-822S on I-495 over Amtrak / Norfolk Southern, Edgemoor | PE    | 80% FHWA         | \$ 182.6         | \$ 182.6    | \$ 0.0  | \$ 0.0     | \$ 0.0  | \$ 0.0  | \$ 0.0        |
|           |  | RW    | 100% ST          | 445.0            | 445.0       | 0.0     | 0.0        | 0.0     | 0.0     | 0.0           |
|           |  | C     | 80% FHWA         | 7,105.0          | 0.0         | 0.0     | 7,105.0    | 0.0     | 0.0     | 0.0           |
|           |  |       |                  |                  |             |         |            |         |         |               |
|           | Total All Funds  |       |                  | \$ 7,732.6       | \$ 627.6    | \$ 0.0  | \$ 7,105.0 | \$ 0.0  | \$ 0.0  | \$ 0.0        |



***LONGFELLOW DRIVE OVER BALL RUN, CULVERT REPLACEMENT [Project No. 24-071-01]***

**PROJECT SCOPE/DESCRIPTION:** The existing dual pipe culvert collapsed making the area impassable. The road was closed to traffic, but has reopened. The failed pipes were replaced with a precast concrete box and wing walls. Riprap was placed in the stream for scour protection and the catch basins replaced to tie into the roadway approach and sidewalks.

**PROJECT JUSTIFICATION:** The existing corrugated metal pipe arches failed during a summer storm. This bridge, although not on the official bridge inventory, is on a suburban street thus the department's responsibility. This work was completed on an emergency contract by the end of September 2003.



|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            |                       |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Preservation          |
| <b>Representative District:</b> | 21                    |
| <b>Senatorial District:</b>     | 9                     |



**LONGFELLOW DRIVE OVER BALL RUN, CULVERT REPLACEMENT (CONTINUED)****PROJECT FUNDING INFORMATION**

| Project   | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|---|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| Longfellow Drive over Ball Run, Culvert Replacement |              | \$ 372.6          |                  |               |                          |                         |                                     |                         |
| Prior Years   | State        |                   |                  | \$ 372.6      | \$ 372.6                 | \$ 176.2                | \$ 196.4                            | \$ 0.0                  |
|   | Federal      |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
|   | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005   | State        |                   | \$ 372.6         | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
|   | Federal      |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
|   | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request                                     | State        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
|   | Federal      |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
|   | Other        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
| FY 2007 Projected                                   | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2008 Projected                                   | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| FY 2009-2011 Projected                              | State        |                   |                  |               |                          |                         |                                     |                         |
|   | Federal      |                   |                  |               |                          |                         |                                     |                         |
|   | Other        |                   |                  |               |                          |                         |                                     |                         |
| Total Projected                                     | State        |                   |                  | \$ 372.6      | \$ 372.6                 |                         |                                     | \$ 0.0                  |
|   | Federal      |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
|   | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds                                     |              | \$ 372.6          | \$ 372.6         | \$ 372.6      | \$ 372.6                 | \$ 176.2                | \$ 196.4                            | \$ 0.0                  |

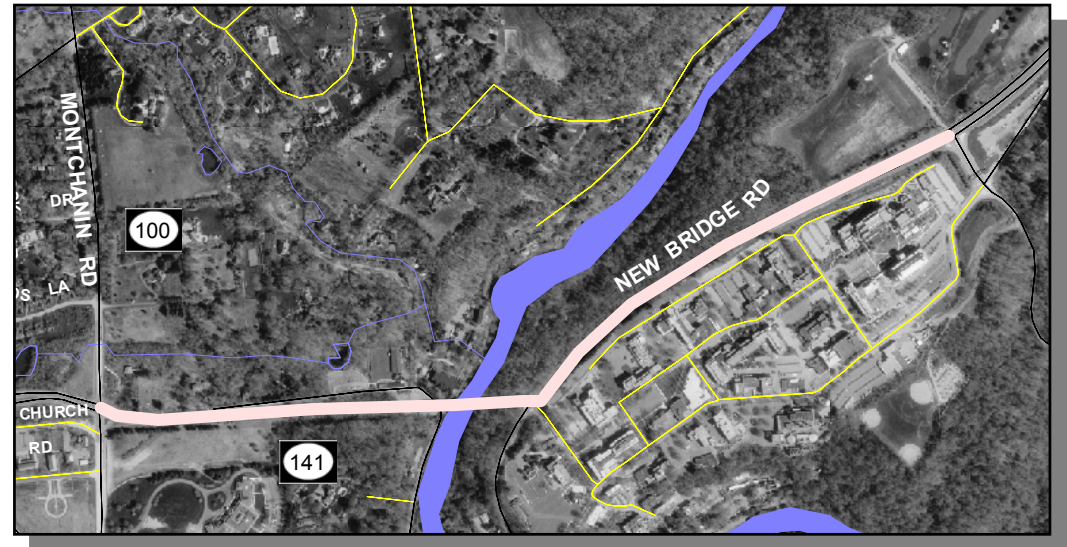
***LONGFELLOW DRIVE OVER BALL RUN, CULVERT REPLACEMENT (CONTINUED)*****PROJECT TIMELINE INFORMATION**

| Project # | Description  | Phase | Funding Schedule | Current Estimate | Prior Years | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 -2011 |
|-----------|--|-------|------------------|------------------|-------------|---------|---------|---------|---------|---------------|
| 24-071-01 | <b>Longfellow Drive over Ball Run, Culvert Replacement</b> | PE    | 100% ST          | \$ 58.0          | \$ 58.0     | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |
|           |  | PE, C | 100% ST          | 6.0              | 6.0         | 0.0     | 0.0     | 0.0     | 0.0     | 0.0           |
|           |  | C     | 100% ST          | 308.6            | 308.6       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0           |
|           |  |       |                  |                  |             |         |         |         |         |               |
|           | Total All Funds  |       |                  | \$ 372.6         | \$ 372.6    | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0  | \$ 0.0        |

***TYLER MC CONNELL BRIDGE, SR141, MONTCHANNIN ROAD TO ALAPOCAS ROAD [Project No. 93-106-01]***

**PROJECT SCOPE/DESCRIPTION:** This section of SR141, New Bridge Road from SR100, Montchannin Road includes the Tyler McConnell Bridge (TMB). SR141, New Bridge Road is a four-lane collector-distributor type roadway from I-95 to US202 except for the TMB two-lane crossing of the Brandywine Valley. SR141, New Bridge Road is a controlled access roadway from I-95 to SR 2, while the section from SR 2 to US202 is a limited access roadway, with a number of at-grade intersections.

As part of the department's public outreach effort, a Working Group was established to assist in the development of multi-modal solutions to the existing congestion at the TMB, while minimizing impacts on the many environmental and historic resources of this area. Hagley Museum, part of the Eleutherian Mills National Historic Landmark District, and adjacent to the existing bridge, is an area of special significance. Also, the TMB is eligible for the National Register of Historic Sites as Delaware's largest pre-1957 continuous steel girder bridge, and an early example of hammerhead piers in the US.



The Working Group submitted recommendations to Secretary Hayward in February 2002 that included short-term and mid/long-term solutions. Short-term improvements included: Enhanced Transit Service/Supportive Infrastructure (scheduled for FY 2005 implementation); Travel Demand Management (TDM) Measures (ongoing Transportation Management Agency Delaware initiatives), Intelligent Transportation Systems (installed), improvements at the SR100/SR141 intersection (under construction), and operational improvements at the SR141/Rising Sun Lane intersection (completed). Mid/long-term improvements consisted of a new two-lane bridge similar in type and at the same elevation as the existing TMB. Pedestrian and bicycle paths and landscaping will be provided.

Since the Working Group's recommendation, Secretary Hayward has raised a concern that initial planning efforts focused solely on protecting the existing TMB and did not adequately consider context sensitive bridge design options that would minimize impact on the more significant National Historic Landmark, the Hagley Museum. The Department has developed additional alternatives that attempt to achieve this goal. A complete assessment of the impacts and effects of the various alternatives is currently underway and will be provided in the appropriate environmental documents, which will be presented to the public at a Workshop in 2004.

It is anticipated that Secretary Hayward will appoint an oversight committee of technical transportation experts, who along with others, will provide comments on annual monitoring data. The Secretary will determine when to proceed with implementation of the project.

**PROJECT JUSTIFICATION:** SR141 provides critical access to major employment centers in the corridor, including DuPont and AstraZeneca, among others. Current levels of significant congestion at the bridge are projected to worsen. The existing two-lane crossing of the Brandywine Valley (TMB) will continue to act as a pinch point in the SR141 corridor unless two additional lanes are provided to match the remainder of SR141.

***TYLER MC CONNELL BRIDGE, SR141, MONTCHANNIN ROAD TO ALAPOCAS ROAD (CONTINUED)***

**DuPont Road, Brandon Lane to New Castle County Police Substation [Project No. 23-106-06]**

**PROJECT SCOPE/DESCRIPTION:** Recommended improvements for this project include: Increasing the radius of the curve accommodating a 25 mile per hour design speed and adequate super-elevation; posting the speed of the curve at 20 mile per hour, to insure safety under all conditions; installing raised pavement markers on the centerline of the road; replacing guardrail where necessary to meet roadside grading criteria; providing adequate pavement width for turning movements; improving roadway profile for sight distance, super-elevation and design speed; improving drainage from the curve to the existing outfall near the New Castle County (NCC) Police Substation; extending the sidewalk on the southeast side from Westover Hills to the NCC Police Substation and installing new street lighting around the curve.

**PROJECT JUSTIFICATION:** Traffic counts continue to increase because of its location and use as a cut through between Kennett Pike and Lancaster Pike. Accidents occur during wet or icy conditions because of the substandard conditions.

|                                 |                       |
|---------------------------------|-----------------------|
| <b>County:</b>                  | New Castle            |
| <b>Municipality:</b>            |                       |
| <b>Funding Program:</b>         | Road System – Bridges |
| <b>Functional Category:</b>     | Expansion             |
| <b>Representative District:</b> | 4                     |
| <b>Senatorial District:</b>     | 4                     |





**TYLER MC CONNELL BRIDGE, SR141, MONTCHANNIN ROAD TO ALAPOCAS ROAD (CONTINUED)****PROJECT FUNDING INFORMATION**

| Project  | Funding Type | Original Estimate | Current Estimate | Authorization | Committed as of 12/31/04 | Expended as of 12/31/04 | Committed Unexpended as of 12/31/04 | Authorization Available |
|--|--------------|-------------------|------------------|---------------|--------------------------|-------------------------|-------------------------------------|-------------------------|
| Tyler McConnell Bridge, SR 141, Montchanin Road to Alapocas Road |              | \$ 52,795.4       |                  |               |                          |                         |                                     |                         |
| Prior Years  | State        |                   |                  | \$ 15,659.8   | \$ 13,076.2              | \$ 6,158.5              | \$ 6,917.7                          | \$ 2,583.6              |
|  | Federal      |                   |                  | \$ 481.9      | \$ 310.4                 | \$ 310.4                | \$ 0.0                              | \$ 171.5                |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2005  | State        |                   | \$ 59,626.1      | \$ 351.8      | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 2,935.4              |
|  | Federal      |                   |                  | \$ 1,300.9    | \$ 1,472.4               | \$ 746.3                | \$ 726.1                            | \$ 0.0                  |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   | \$ 0.0                  | \$ 0.0                              | \$ 0.0                  |
| FY 2006 Request  | State        |                   |                  | \$ 11,535.0   |                          |                         |                                     | \$ 14,470.4             |
|  | Federal      |                   |                  | \$ 1,200.0    |                          |                         |                                     | \$ 1,200.0              |
|  | Other        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
| FY 2007 Projected  | State        |                   |                  | \$ 27,296.7   |                          |                         |                                     | \$ 41,767.1             |
|  | Federal      |                   |                  | \$ 800.0      |                          |                         |                                     | \$ 2,000.0              |
|  | Other        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
| FY 2008 Projected  | State        |                   |                  | \$ 200.0      |                          |                         |                                     | \$ 41,967.1             |
|  | Federal      |                   |                  | \$ 800.0      |                          |                         |                                     | \$ 2,800.0              |
|  | Other        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
| FY 2009-2011 Projected   | State        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 41,967.1             |
|  | Federal      |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 2,800.0              |
|  | Other        |                   |                  | \$ 0.0        |                          |                         |                                     | \$ 0.0                  |
| Total Projected  | State        |                   |                  | \$ 55,043.3   | \$ 13,076.2              |                         |                                     | \$ 41,967.1             |
|  | Federal      |                   |                  | \$ 4,582.8    | \$ 1,782.8               |                         |                                     | \$ 2,800.0              |
|  | Other        |                   |                  | \$ 0.0        | \$ 0.0                   |                         |                                     | \$ 0.0                  |
| Total All Funds  |              | \$ 52,795.4       | \$ 59,626.1      | \$ 59,626.1   | \$ 14,859.0              | \$ 7,215.2              | \$ 7,643.8                          | \$ 44,767.1             |

**TYLER MC CONNELL BRIDGE, SR141, MONTCHANNIN ROAD TO ALAPOCAS ROAD (CONTINUED)****PROJECT TIMELINE INFORMATION**

| Project # | Description   | Phase  | Funding Schedule | Current Estimate | Prior Years | FY 2005    | FY 2006     | FY 2007     | FY 2008    | FY 2009 -2011 |
|-----------|---|--------|------------------|------------------|-------------|------------|-------------|-------------|------------|---------------|
|           | <b>Tyler McConnell Bridge, SR141, Montchanin Road to Alapocas Road</b>  |        |                  |                  |             |            |             |             |            |               |
| 93-106-01 | Tyler McConnell Bridge  | PD     | 100% ST          | \$ 3,375.0       | \$ 3,375.0  | \$ 0.0     | \$ 0.0      | \$ 0.0      | \$ 0.0     | \$ 0.0        |
|           |   | PE, RW | 100% ST          | 19,931.0         | 8,931.0     | 0.0        | 11,000.0    | 0.0         | 0.0        | 0.0           |
|           |   | C      | 100% ST          | 29,000.0         | 1,903.3     | 0.0        | 0.0         | 27,096.7    | 0.0        | 0.0           |
|           |   |        |                  |                  |             |            |             |             |            |               |
| 23-106-06 | DuPont Road, Brandon Lane to NCC Police Station (Including Concrete Patching, Streetscape Improvements, and Roadway Improvements from Bridge to Presidential Drive and Paving from Greenhill Avenue to Bridge | PE     | 100% ST          | 125.0            | 125.0       | 0.0        | 0.0         | 0.0         | 0.0        | 0.0           |
|           |   | RW     | 100% ST          | 126.6            | 100.0       | 26.6       | 0.0         | 0.0         | 0.0        | 0.0           |
|           |   | C      | 100% ST          | 1,340.0          | 1,105.0     | 0.0        | 235.0       | 0.0         | 0.0        | 0.0           |
|           |   | C      | 80% FHWA         | 1,354.4          | 602.4       | 752.0      | 0.0         | 0.0         | 0.0        | 0.0           |
|           |   |        |                  |                  |             |            |             |             |            |               |
|           | Transit Improvements, SR141 Corridor  | PRO    | 80% FTA          | 4,374.1          | 0.0         | 874.1      | 1,500.0     | 1,000.0     | 1,000.0    | 0.0           |
|           |   |        |                  |                  |             |            |             |             |            |               |
|           | Total All Funds   |        |                  | \$ 59,626.1      | \$ 16,141.7 | \$ 1,652.7 | \$ 12,735.0 | \$ 28,096.7 | \$ 1,000.0 | \$ 0.0        |