

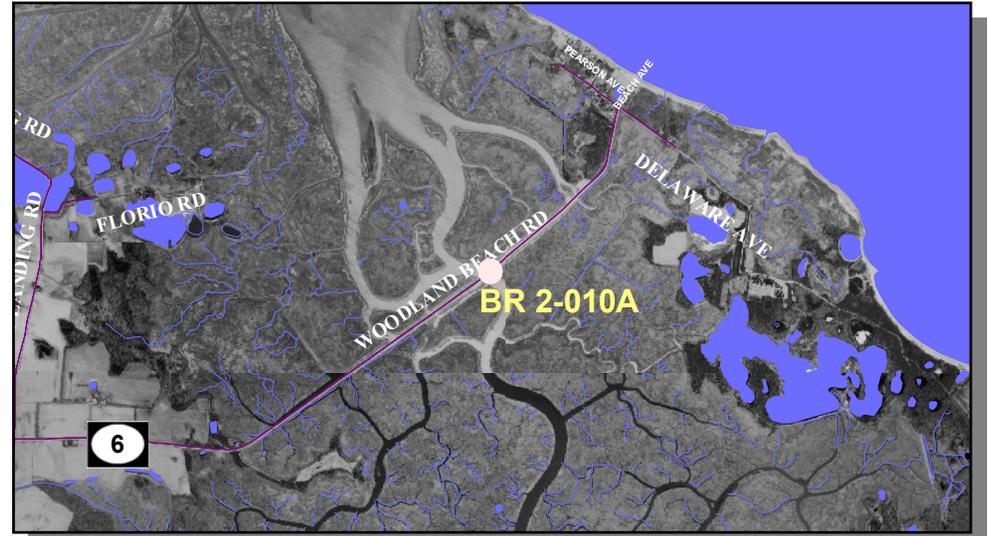
# *ROAD SYSTEM*

# *BRIDGES*

**BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH [Project No. 22-075-02]**

**PROJECT SCOPE/DESCRIPTION:** Bridge 2-010A provides the only access to Woodland Beach. Traffic will be maintained during the construction. Rehabilitation work will include replacement of the wearing surface; repair of the existing prestressed beam superstructure by epoxy injection; repair of the substructure through concrete patching, epoxy injection and member reconstruction; repair of the piles by jacketing; minor approach work; and safety improvements.

**PROJECT JUSTIFICATION:** The bridge is in need of repair to maintain and extend the life of this single access to this local town and is currently ranked 107<sup>th</sup> out of 1,399 on the department’s bridge deficiency list (via the bridge management program).



**County:** Kent  
**Municipality:**  
**Funding Program:** Road System – Bridges  
**Functional Category:** Preservation  
**Representative District:** 28  
**Senatorial District:** 14



***BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH (CONTINUED)***

***Bridge 2-010A***



**BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH (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 2-010A on SR 6 over Duck Creek, Woodland Beach		\$ 1,049.4						
Prior Years	State			\$ 209.9	\$ 209.9	\$ 154.6	\$ 55.3	\$ 0.0
	Federal			\$ 839.5	\$ 839.5	\$ 618.5	\$ 221.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 1,206.1	\$ 31.3	\$ 31.3	\$ 0.0	\$ 31.3	\$ 0.0
	Federal			\$ 125.4	\$ 124.7	\$ 0.0	\$ 124.7	\$ 0.7
	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			\$ 241.2	\$ 241.2			\$ 0.0
	Federal			\$ 964.9	\$ 964.2			\$ 0.7
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,049.4	\$ 1,206.1	\$ 1,206.1	\$ 1,205.4	\$ 773.1	\$ 432.3	\$ 0.7

**BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH (CONTINUED)****PROJECT TIMELINE INFORMATION**

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
22-075-02	<b>BR 2-010A over Duck Creek, Woodland Beach</b>	PE	80% FHWA	\$ 102.0	\$ 102.0	\$ 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	80% FHWA	1,104.1	947.4	156.7	0.0	0.0	0.0	0.0
	Total All Funds			\$ 1,206.1	\$ 1,049.4	\$ 156.7	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

**BR 2-022A ON SR 14, NORTHWEST FRONT STREET OVER MULLET RUN [Project No. 23-072-01]**

**PROJECT SCOPE/DESCRIPTION:** Bridge 2-022A currently runs under SR 14 and a large portion of an adjacent property. The current project includes pouring a new structural slab over the existing slab to carry vehicular load. The new slab will extend approximately 20 feet onto private property. An agreement will be made with the property owner to purchase at least the footprint of the entire bridge.

**PROJECT JUSTIFICATION:** This bridge has structural spalls that are compromising the safety of the bridge. The bridge is currently ranked 147<sup>th</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).

<b>County:</b>	Kent
<b>Municipality:</b>	Milford
<b>Funding Program:</b>	Road System – Bridges
<b>Functional Category:</b>	Preservation
<b>Representative District:</b>	33
<b>Senatorial District:</b>	16, 18



**BR 2-022A ON SR 14, NORTHWEST FRONT STREET OVER MULLET RUN (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 2-022A on SR 14, Northwest Front Street over Mullet Run		\$ 278.0						
Prior Years	State			\$ 58.0	\$ 58.0	\$ 16.7	\$ 41.3	\$ 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		\$ 278.0	\$ 220.0	\$ 215.0	\$ 0.0	\$ 215.0	\$ 5.0
	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				\$ 5.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 5.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008 Projected	State			\$ 0.0				\$ 5.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2009-2011 Projected	State			\$ 0.0				\$ 5.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 278.0	\$ 273.0			\$ 5.0
	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 278.0	\$ 278.0	\$ 278.0	\$ 273.0	\$ 16.7	\$ 256.3	\$ 5.0

**BR 2-022A ON SR 14, NORTHWEST FRONT STREET OVER MULLET RUN (CONTINUED)****PROJECT TIMELINE INFORMATION**

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
23-072-01	<b>BR 2-022A on SR 14, Northwest Front Street over Mullet Run</b>	PE	100% ST	\$ 52.0	\$ 52.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	6.0	6.0	0.0	0.0	0.0	0.0	0.0
		C	100% ST	220.0	0.0	220.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 278.0	\$ 58.0	\$ 220.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

**BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH [Project No. 24-072-01]**

**PROJECT SCOPE/DESCRIPTION:** The proposed work for Bridge 2-050B will consist of replacing the existing concrete structure with a precast concrete box culvert and wingwalls. Riprap will be placed at the inlet and outlet for scour protection. Steel beam guardrail will also be placed.

**PROJECT JUSTIFICATION:** The existing structure is a concrete box culvert in poor condition. Both the box culvert and the wingwalls have several areas of delaminations and spalling. The bridge is currently ranked 167<sup>th</sup> out of 1,399 on the department’s bridge deficiency list (via the bridge management program).



<b>County:</b>	Kent
<b>Municipality:</b>	
<b>Funding Program:</b>	Road System – Bridges
<b>Functional Category:</b>	Preservation
<b>Representative District:</b>	29
<b>Senatorial District:</b>	15



***BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH (CONTINUED)***

*Bridge 2-050B on SR 8 , Halltown Road*



*Underside of Bridge 2-050B*



**BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH (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 2-050B on SR 8, Halltown Road, over Tappahanna Ditch		\$ 635.0						
Prior Years	State			\$ 83.0	\$ 83.0	\$ 0.3	\$ 82.7	\$ 0.0
	Federal			\$ 66.4	\$ 66.4	\$ 1.4	\$ 65.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 701.4	\$ 110.4	\$ 110.4	\$ 0.0	\$ 110.4	\$ 0.0
	Federal			\$ 441.6	\$ 409.0	\$ 0.0	\$ 409.0	\$ 32.6
	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			\$ 193.4	\$ 193.4			\$ 0.0
	Federal			\$ 508.0	\$ 475.4			\$ 32.6
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 635.0	\$ 701.4	\$ 701.4	\$ 668.8	\$ 1.7	\$ 667.1	\$ 32.6

**BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH (CONTINUED)****PROJECT TIMELINE INFORMATION**

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
24-072-01	<b>BR 2-050B on SR 8, Halltown Road, over Tuppahanna Ditch</b>	PE	80% FHWA	\$ 83.0	\$ 83.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	66.4	66.4	0.0	0.0	0.0	0.0	0.0
		C	80% FHWA	552.0	0.0	552.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 701.4	\$ 149.4	\$ 552.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

**BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD [Project No. 23-072-02]**

**PROJECT SCOPE/DESCRIPTION:** The proposed work for each bridge will consist of replacing existing structures with a precast concrete rigid frame. Approaches for both bridges will be reconstructed with steel beam guardrail added. Riprap will be placed at the openings of each structure to provide protection from the effects of scour.

This project will be completed by maintenance forces.

**PROJECT JUSTIFICATION:** The existing bridges are corrugated steel pipes in poor condition. The corrosion at the waterline present in each structure will only worsen and needs to be fixed. These bridges currently rank 402<sup>nd</sup> and 404<sup>th</sup>, respectively, out of 1,399 on the department’s bridge deficiency list (via the bridge management program).



<b>County:</b>	Kent
<b>Municipality:</b>	
<b>Funding Program:</b>	Road System – Bridges
<b>Functional Category:</b>	Preservation
<b>Representative District:</b>	30
<b>Senatorial District:</b>	16

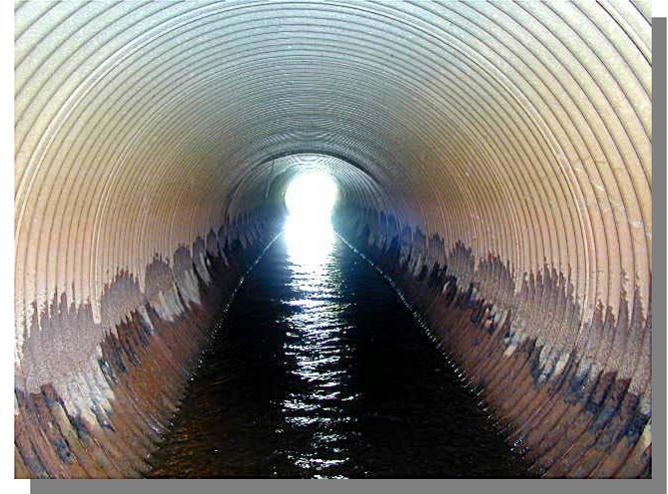


***BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD (CONTINUED)***

***Bridge 2-113B***



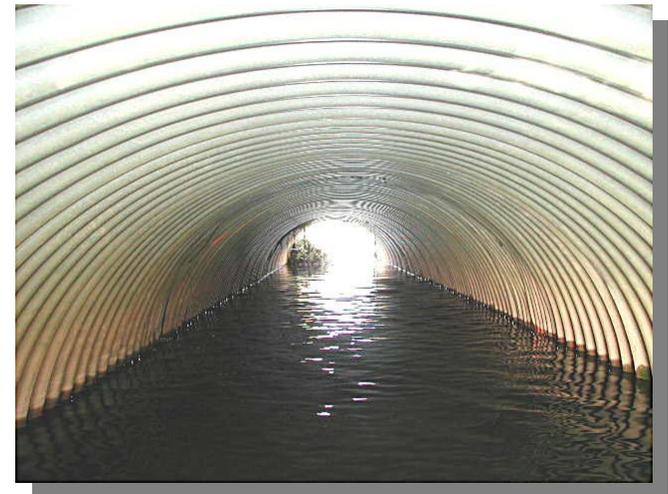
***Underside of Bridge 2-113B***



***Bridge 2-113C***



***Underside of Bridge 2-113C***



**BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH 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
BR 2-113B and BR 2-113C on K113, Cattail Branch Road		\$ 1,040.0						
Prior Years	State			\$ 26.2	\$ 26.2	\$ 9.4	\$ 16.8	\$ 0.0
	Federal			\$ 104.8	\$ 104.8	\$ 37.6	\$ 67.2	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 281.0	\$ 150.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 150.0
	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							
	Federal							
	Other							
FY 2007 Projected	State							
	Federal							
	Other							
FY 2008 Projected	State							
	Federal							
	Other							
FY 2009-2011 Projected	State							
	Federal							
	Other							
Total Projected	State			\$ 176.2	\$ 26.2			\$ 150.0
	Federal			\$ 104.8	\$ 104.8			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,040.0	\$ 281.0	\$ 281.0	\$ 131.0	\$ 47.0	\$ 84.0	\$ 150.0

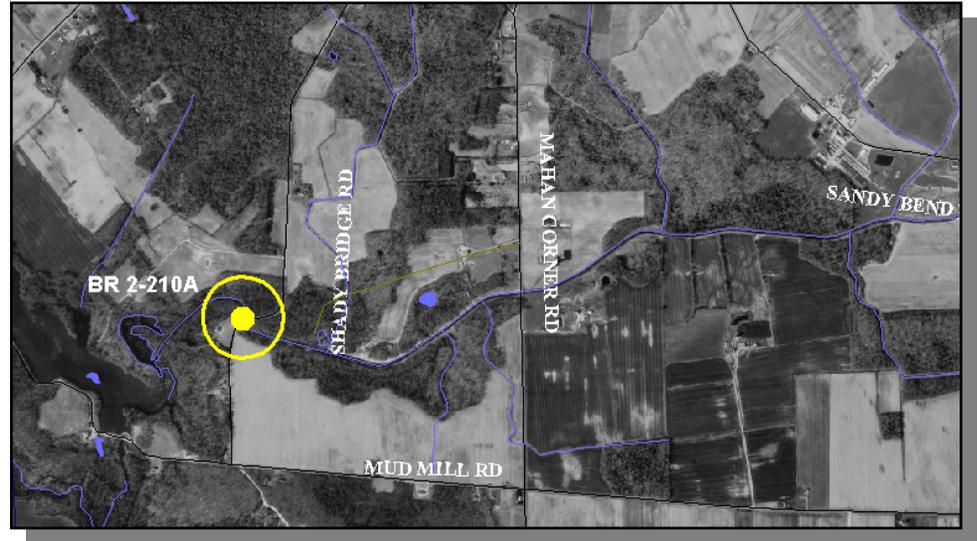
**BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD (CONTINUED)****PROJECT TIMELINE INFORMATION**

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
23-072-02	<b>BR 2-113B and BR 2-113C on K113, Cattail Branch Road</b>	PE	80% FHWA	\$ 131.0	\$ 131.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	80% FHWA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		C	80% FHWA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Maintenance	C	100% ST	150.0	0.0	150.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 281.0	\$ 131.0	\$ 150.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

***BR 2-210A ON K210, SHADY BRIDGE ROAD OVER SHADES BRANCH, SOUTH OF MARYDEL [Project No. 21-072-01]***

**PROJECT SCOPE/DESCRIPTION:** This project will involve the replacement of the existing steel girder/timber deck bridge on K210, Shady Bridge Road with a prestressed concrete bridge with pile-supported abutments, protected by riprap. Work may include re-alignment of the approaches. Each approach will have guardrail placed in front of the abutments to a similar extent as exists now.

**PROJECT JUSTIFICATION:** The bridge capacity is substandard, and it is functionally obsolete. This bridge is ranked 61<sup>st</sup> out of 1,399 on the department’s bridge deficiency list (via the bridge management program).



**County:** Kent  
**Municipality:**  
**Funding Program:** Road System – Bridges  
**Functional Category:** Preservation  
**Representative District:** 29  
**Senatorial District:** 15



***Bridge 2-210A on K210, Shady Bridge Road***



**BR 2-210A ON K210, SHADY BRIDGE ROAD OVER SHADES BRANCH, SOUTH OF MARYDEL (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 2-210A on K210, Shady Bridge Road over Shades Branch, South of Marydel		\$ 695.0						
Prior Years	State			\$ 329.4	\$ 329.4	\$ 293.5	\$ 35.9	\$ 0.0
	Federal			\$ 556.0	\$ 448.6	\$ 354.5	\$ 94.1	\$ 107.4
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 885.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 107.4
	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			\$ 329.4	\$ 329.4			\$ 0.0
	Federal			\$ 556.0	\$ 448.6			\$ 107.4
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 695.0	\$ 885.4	\$ 885.4	\$ 778.0	\$ 648.0	\$ 130.0	\$ 107.5

**BR 2-210A ON K210, SHADY BRIDGE ROAD OVER SHADES BRANCH, SOUTH OF MARYDEL (CONTINUED)****PROJECT TIMELINE INFORMATION**

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
21-072-01	<b>BR 2-210 on K210, Shady Bridge Road over Shades Branch, South of Marydel</b>	PE	100% ST	\$ 182.4	\$ 182.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	8.0	8.0	0.0	0.0	0.0	0.0	0.0
		C	80% FHWA	695.0	695.0	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 885.4	\$ 885.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

**BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH [Project No. 24-072-02]**

**PROJECT SCOPE/DESCRIPTION:** This project will involve the replacement of corrugated metal pipes with a precast concrete box culvert with a depressed invert, using the clear zone concept. Riprap will be placed at the culvert inlet and outlet for scour protection.

**PROJECT JUSTIFICATION:** The two eight-foot diameter corrugated metal pipes have experienced advanced corrosion at the waterline and are perforated at this location. This bridge is ranked 76<sup>th</sup> out of 1,399 on the department’s bridge deficiency list (via the bridge management program).

**County:** Kent  
**Municipality:** Melvin Crossroads  
**Funding Program:** Road System – Bridges  
**Functional Category:** Preservation  
**Representative District:** 30  
**Senatorial District:** 16



***BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH (CONTINUED)***

*Bridge 2-295A on K295, Pear Tree Lane, over Green Branch*



*Inside Bridge 2-295A*



**BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH (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 2-295A on K205, Pear Tree Lane, over Green Branch		\$ 532.0						
Prior Years	State			\$ 96.8	\$ 96.8	\$ 2.0	\$ 94.8	\$ 0.0
	Federal			\$ 59.2	\$ 59.2	\$ 7.8	\$ 51.4	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 606.0	\$ 90.0	\$ 8.0	\$ 0.0	\$ 8.0	\$ 82.0
	Federal			\$ 360.0	\$ 360.0	\$ 0.0	\$ 360.0	\$ 0.0
	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			\$ 186.8	\$ 104.8			\$ 82.0
	Federal			\$ 419.2	\$ 419.2			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 532.0	\$ 606.0	\$ 606.0	\$ 524.0	\$ 9.8	\$ 514.2	\$ 82.0

**BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH (CONTINUED)****PROJECT TIMELINE INFORMATION**

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
24-072-02	<b>BR 2-295A on K295, Pear Tree Lane, over Green Branch</b>	PE	100% ST	\$ 70.0	\$ 70.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	12.0	12.0	0.0	0.0	0.0	0.0	0.0
		C	80% FHWA	524.0	74.0	450.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 606.0	\$ 156.0	\$ 450.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0