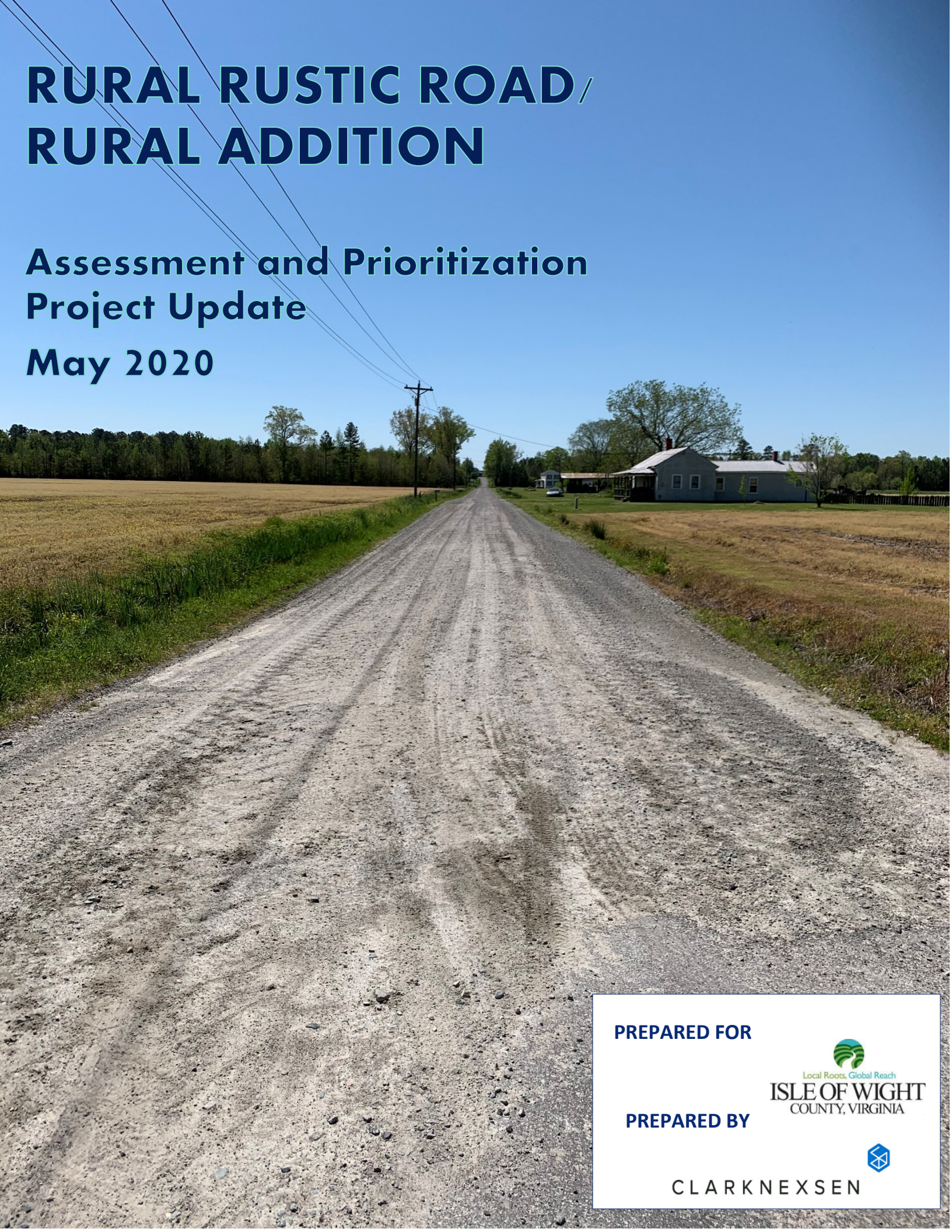


RURAL RUSTIC ROAD/ RURAL ADDITION

Assessment and Prioritization
Project Update

May 2020



PREPARED FOR



Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA

PREPARED BY



CLARKNEXSEN



RURAL RUSTIC ROADS

Tings Road

Rattlesnake Trail

Morgart's Beach Road (West)

Woody Acres Way

Blair's Creek Way

Strawberry Plains Road



Assessment and Prioritization Project

RURAL RUSTIC ROAD PROJECT

Road Name

Tings Road

Location

West of US 258 between Windsor and Smithfield

State Rte No.

SR 647

From To

SR 637 (Central Hill Rd)
SR 620 (Foursquare Rd)

Project Length

2.1 Miles

Turnaround

N/A

Residences Served

5



Design Considerations

Existing Road is in good condition. Tie to existing pavement at SR 637 and SR 620

Exist. Width

16'-22'

Safety Considerations

N/A

Drainage Considerations

Roadway has existing culverts. Ditch requires reestablishment in several locations

Environmental Considerations

Stream crossing @ 1.4 miles north of SR 637 with existing culvert

Estimated Project Costs

\$1,033,275



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
TINGS ROAD - APPROXIMATELY 2.1 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 45,000.00	\$ 45,000.00
Earthwork	LS	1	\$ 30,000.00	\$ 30,000.00
Aggregate Base Material, No 21B	TON	9400	\$ 40.00	\$ 376,000.00
Blotted Seal Coat, Type D	SY	25600	\$ 10.00	\$ 256,000.00
PE-1, TYPE I, Crusher Run Material	TON	40	\$ 60.00	\$ 2,400.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Erosion and Sediment Control Measures	LS	1	\$ 12,000.00	\$ 12,000.00
Maintenance of Traffic	LS	1	\$ 12,000.00	\$ 12,000.00
SUBTOTAL				\$ 736,500.00
Contingency (20%)				\$ 147,300.00
Engineering				\$ 20,000
Pavement Testing				\$ 4,000.00
CEI Costs (10%)				\$ 73,650.00
Project Administration (5%)				\$ 36,825.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 1,033,275.00

* An 18' wide paved section was assumed for estimating pavement costs for this project. A 20' wide section was used to estimate aggregate base material, which would include both the pavement sections and shoulders. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface



Assessment and Prioritization Project

RURAL RUSTIC ROAD PROJECT

Road Name	Rattlesnake Trail	Location	Northeast of Ivor
State Rte No.	SR 646	Project Length	2.1 Miles
From To	SR 637 (Jones Town Dr) SR 622 (Ramsey Rd)	Residences Served	11
Turnaround	N/A		



Design Considerations	Existing Road is in good condition. Ditches require reestablishment in several locations Tie to existing pavement at SR 637 and at SR 622 and to existing gravel roadway continuing on Rattlesnake Trail, west of SR 622	Exist. Width	13'-18'
Safety Considerations	N/A		
Drainage Considerations	Ditch requires reestablishment in several locations. Existing culverts along project with two major culvert crossings at low point in project limits. Erosion concerns within ditches due to steep longitudinal slopes along project.		
Environmental Considerations	Cemetery adjacent to the roadway. Two stream crossings with exiting culvers at low point in the road		

Estimated Project Costs

\$989,130



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
RATTLESNAKE TRAIL - APPROXIMATELY 2.1 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 35,000.00	\$ 35,000.00
Aggregate Base Material, No 21B	TON	8900	\$ 40.00	\$ 356,000.00
Blotted Seal Coat, Type D	SY	24100	\$ 10.00	\$ 241,000.00
PE-1, TYPE I, Crusher Run Material	TON	70	\$ 60.00	\$ 4,200.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Replace Existing Driveway Culvert (15")	EA	3	\$2,500	\$ 7,500.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Erosion and Sediment Control Measures	LS	1	\$ 12,000.00	\$ 12,000.00
Maintenance of Traffic	LS	1	\$ 15,000.00	\$ 15,000.00
SUBTOTAL				\$ 703,800.00
Contingency (20%)				\$ 140,760.00
Engineering				\$ 20,000.00
Pavement Testing				\$ 4,000.00
CEI Costs (10%)				\$ 70,380.00
Project Administration (5%)				\$ 35,190.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 989,130.00

*A 17' wide paved section was assumed for estimating pavement costs for this project. A 19' wide section was used to estimate aggregate base material, which would include both the pavement sections and shoulders. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface.



Assessment and Prioritization Project

RURAL RUSTIC ROAD PROJECT

Road Name	Morgart's Beach Rd (West)	Location	Smithfield
State Rte No.	SR 673	Project Length	1.3 Miles
From To	SR 674 (Blounts Corner Rd) SR 10 (Old Stage Hwy)	Residences Served	12
Turnaround	N/A		



Design Considerations	Existing Road is in good condition with consistent ditches along project. Tie to existing pavement at SR 10 and SR 674. Tie to Morgart's Beach Rd (East) project.	Exist. Width	16'-18'
Safety Considerations	N/A		
Drainage Considerations	Existing culvert pipes with outfalls along project. Consistent roadside ditches. Long stretch of roadside ditch with no outfall. Ditch reestablishment required in multiple locations.		
Environmental Considerations	Small pool of standing water adjacent to roadway which appears to be a potential wetland area		
Estimated Project Costs	\$727,175		



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
MOGARTS BEACH RD (WEST) - APPROXIMATELY 1.3 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 40,000.00	\$ 40,000.00
Earthwork	LS	1	\$ 35,000.00	\$ 35,000.00
Aggregate Base Material, No 21B	TON	5800	\$ 40.00	\$ 232,000.00
Blotted Seal Coat, Type D	SY	15800	\$ 10.00	\$ 158,000.00
PE-1, TYPE I, Crusher Run Material	TON	40	\$ 60.00	\$ 2,400.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Erosion and Sediment Control Measures	LS	1	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	LS	1	\$ 30,000.00	\$ 30,000.00
SUBTOTAL				\$ 510,500.00
Contingency (20%)				\$ 102,100.00
Engineering				\$ 20,000
Pavement Testing				\$ 3,000.00
CEI Costs (10%)				\$ 51,050.00
Project Administration (5%)				\$ 25,525.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 727,175.00

* An 18' wide paved section was assumed for estimating pavement costs for this project. A 20' wide section was used to estimate aggregate base material, which would include both the pavement sections and shoulders. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface



Assessment and Prioritization Project

RURAL RUSTIC ROAD PROJECT

Road Name	Woody Acres Way	Location	West of Smithfield
State Rte No.	SR 699	Project Length	0.6 Miles
From	SR 679 (Bethel Church Ln) SR 713 (Blairs Creek Way)	Residences Served	1 (Plus Residences along Blairs Creek Way)
To			
Turnaround	N/A		



Design Considerations	Existing Road is in good condition and has sufficient width. Extra shoulder width can be provided. Tie to existing pavement at SR 679, existing gravel road at project end, and to the Blairs Creek Way project.	Exist. Width	23'-26'
Safety Considerations	Guardrail required at bend in road due to severe drop off (>7.5') within clear zone		
Drainage Considerations	Minimal drainage improvements required. Existing ditches, culverts and drainage pipes identified in the field.		
Environmental Considerations	Stream crossing with existing culvert within project limits		
Estimated Project Costs	\$ 439,220		



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
WOODY ACRES WAY - APPROXIMATELY 0.6 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 35,000.00	\$ 35,000.00
Aggregate Base Material, No 21B	TON	2700	\$ 40.00	\$ 108,000.00
Blotted Seal Coat, Type D	SY	7300	\$ 10.00	\$ 73,000.00
PE-1, TYPE I, Crusher Run Material	TON	10	\$ 60.00	\$ 600.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Install Guardrail and End Treatments	LS	1	\$ 30,000.00	\$ 30,000.00
Erosion and Sediment Control Measures	LS	1	\$ 7,500.00	\$ 7,500.00
Maintenance of Traffic	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 297,200.00
Contingency (20%)				\$ 59,440.00
Engineering				\$ 20,000
Pavement Testing				\$ 3,000.00
CEI Costs (10%)				\$ 29,720.00
Project Administration (5%)				\$ 14,860.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 439,220.00

* An 18' wide paved section was assumed for estimating pavement costs for this project. A 20' wide section was used to estimate aggregate base material, which would include both the pavement sections and shoulders. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface



Assessment and Prioritization Project

RURAL RUSTIC ROAD PROJECT

Road Name	Blairs Creek Way	Location	West of Smithfield
State Rte No.	SR 713	Project Length	0.5 Miles
From To	SR 699 (Woody Acres Way) Dead End	Residences Served	12
Turnaround	None existing, sufficient space at end to provide		



Design Considerations	Existing road is in good condition and has sufficient width. Extra shoulder width can be provided. Tie to the Woody Acres Way project.	Exist. Width	20'-24'
------------------------------	--	---------------------	---------

Safety Considerations	N/A
------------------------------	-----

Drainage Considerations	Existing roadside ditches and concrete culvert identified in the field.
--------------------------------	---

Environmental Considerations	N/A
-------------------------------------	-----

Estimated Project Costs	\$364,160
--------------------------------	------------------



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
BLAIRS CREEK WAY - APPROXIMATELY 0.5 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 35,000.00	\$ 35,000.00
Aggregate Base Material, No 21B	TON	2300	\$ 40.00	\$ 92,000.00
Blotted Seal Coat, Type D	SY	6100	\$ 10.00	\$ 61,000.00
PE-1, TYPE I, Crusher Run Material	TON	50	\$ 60.00	\$ 3,000.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Erosion and Sediment Control Measures	LS	1	\$ 7,500.00	\$ 7,500.00
Maintenance of Traffic	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 241,600.00
Contingency (20%)				\$ 48,320.00
Engineering				\$ 20,000
Pavement Testing				\$ 3,000.00
CEI Costs (10%)				\$ 24,160.00
Project Administration (5%)				\$ 12,080.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 364,160.00

* An 18' wide paved section was assumed for estimating pavement costs for this project. A 20' wide section was used to estimate aggregate base material, which would include both the pavement sections and shoulders. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface



Assessment and Prioritization Project

RURAL RUSTIC ROAD PROJECT

Road Name	Strawberry Plains Road	Location	Northeast of Ivor
State Rte No.	SR 681	Project Length	2.1 Miles
To	SR 620 (Broadwater Rd)	Residences Served	16* (Several new lots posted for sale)
From	Sr 637 (Racetrack Rd)		
Turnaround	N/A		



Design Considerations	Existing road is in good condition. Ditches require reestablishment in several locations. Tie to existing pavement at SR 620. Remove/replace failing paved intersection between Strawberry Plains Rd and SR 637.	Exist. Width	16' – 19'
Safety Considerations	Add advanced warning signs at bend in road due to abrupt curve and high speeds.		
Drainage Considerations	Driveway culverts required at multiple locations. Erosion issues are evident within existing roadside ditches.		
Environmental Considerations	Existing stream both running adjacent to road and stream crossing with existing culver within project limits		
Estimated Project Costs	\$1,215,715		



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
STRAWBERRY PLAINS ROAD - APPROXIMATELY 2.1 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 55,000.00	\$ 55,000.00
Earthwork	LS	1	\$ 50,000.00	\$ 50,000.00
Remove Existing Flexible Pavement	SY	1000	\$ 25.00	\$ 25,000.00
Aggregate Base Material, No 21B	TON	9800	\$ 40.00	\$ 392,000.00
Blotted Seal Coat, Type D	SY	26400	\$ 10.00	\$ 264,000.00
PE-1, TYPE I, Crusher Run Material	TON	80	\$ 60.00	\$ 4,800.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	4	\$ 1,000.00	\$ 4,000.00
Replace Existing Driveway Culvert (15")	EA	16	\$ 2,500.00	\$ 40,000.00
Erosion and Sediment Control Measures	LS	1	\$ 10,000.00	\$ 10,000.00
Maintenance of Traffic	LS	1	\$ 25,000.00	\$ 25,000.00
SUBTOTAL				\$ 870,900.00
Contingency (20%)				\$ 174,180.00
Engineering				\$ 20,000
Pavement Testing				\$ 5,000.00
CEI Costs (10%)				\$ 87,090.00
Project Administration (5%)				\$ 43,545.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 1,215,715.00

*A 17' wide paved section was assumed for estimating pavement costs for this project. A 19' wide section was used to estimate aggregate base material, which would include both the pavement sections and shoulders. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface



RURAL ADDITION ROADS

Gayle Way

Booker T Drive

Haynes Lane

Easy Street

Dodge Lane

Orchard Lane/Peachtree Lane



Assessment and Prioritization Project

RURAL ADDITION ROAD PROJECT

Road Name	Gayle Way	Location	Carrollton
From To	End of Paved SR 693 (Gayle Way) Dead End	Project Length	0.4 Miles
Turnaround	No existing and limited space to accommodate	Easement Width	50'
		Residences Served	10



Design Considerations	Tie to existing pavement on SR 693 and existing gravel roadway on Brewers Farm Lane. Widening of Gayle way required to meet current VDOT standards. Proposed widening would impact adjacent properties.	Exist. Width	12'
Safety Considerations	N/A		
Drainage Considerations	No existing roadside ditches, existing culvert crossing. Drainage improvements required with proposed widening		
Environmental Considerations	N/A		
Estimated Project Costs	\$ 403,335		



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
GAYLE WAY - APPROXIMATELY 0.4 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 50,000.00	\$ 50,000.00
Aggregate Base Material, No 21B	TON	1800	\$ 40.00	\$ 72,000.00
Blotted Seal Coat, Type D	SY	4900	\$ 10.00	\$ 49,000.00
PE-1, TYPE I, Crusher Run Material	TON	50	\$ 60.00	\$ 3,000.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Install Driveway Culvert (15")	EA	10	\$ 2,500.00	\$ 25,000.00
Erosion and Sediment Control Measures	LS	1	\$ 20,000.00	\$ 20,000.00
Maintenance of Traffic	LS	1	\$ 20,000.00	\$ 20,000.00
SUBTOTAL				\$ 272,100.00
Contingency (20%)				\$ 54,420.00
Engineering				\$ 20,000.00
Pavement Testing				\$ 1,000.00
CEI Costs (10%)				\$ 27,210.00
Project Administration (5%)				\$ 13,605.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 403,335.00

* Opinion of Probable Costs assumes a minimum allowable paved width of 18'. Further coordination with VDOT is required to determine if existing paved width is acceptable. Costs shown above include minimal widening from the existing paved width to the required 18' width. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface.



Assessment and Prioritization Project

RURAL ADDITION ROAD PROJECT

Road Name	Booker T Drive	Location	Carrollton
From To	US 258 (Brewers Neck Blvd) Dead End	Project Length	0.1 Miles
Turnaround	No existing and limited space to accommodate	Easement Width	50'
		Residences Served	3



Design Considerations	Existing roadway is paved and in good condition. Minor roadway widening required to meet VDOT standards.	Exist. Width	14' (Paved)
Safety Considerations	N/A		
Drainage Considerations	Existing driveway pipes, culvert pipes and roadside ditches identified in the field. Modifications required based on widening requirements		
Environmental Considerations	N/A		

Estimated Project Costs **\$ 196,895**



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
BOOKER T. DRIVE -APPROXIMATELY 0.1 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 40,000.00	\$ 40,000.00
Earthwork	LS	1	\$ 35,000.00	\$ 35,000.00
Aggregate Base Material, No 21B	TON	200	\$ 40.00	\$ 8,000.00
Blotted Seal Coat, Type D	SY	300	\$ 10.00	\$ 3,000.00
PE-1, TYPE I, Crusher Run Material	TON	60	\$ 60.00	\$ 3,600.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Install Driveway Culvert (15")	EA	3	\$2,500.00	\$ 7,500.00
Erosion and Sediment Control Measures	LS	1	\$ 7,500.00	\$ 7,500.00
Maintenance of Traffic	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 117,700.00
Contingency (20%)				\$ 23,540.00
Engineering				\$ 20,000
Pavement Testing				\$ 3,000.00
CEI Costs (10%)				\$ 11,770.00
Project Administration (5%)				\$ 5,885.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 196,895.00

* Opinion of Probable Costs assumes a minimum allowable paved width of 18'. Further coordination with VDOT is required to determine if existing paved width is acceptable. Costs shown above include minimal widening from the existing paved width to the required 18' width. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface.



Assessment and Prioritization Project

RURAL ADDITION ROAD PROJECT

Road Name	Haynes Lane	Location	Carrollton
From To	SR 665 (Smiths Neck Rd) Dead End	Project Length	0.4 Miles
Turnaround	None existing and limited space without R/W dedication	Easement Width	50'
		Residences Served	15



Design Considerations	Tie to existing pavement on SR 665 and existing gravel section on Titus Cove Landing. Widening required to meet current VDOT standards. Proposed widening would impact adjacent properties and require extensive grading and removal of vegetation.	Exist. Width	11'-14'
------------------------------	---	---------------------	---------

Safety Considerations	N/A
------------------------------	-----

Drainage Considerations	Existing ditches and culverts identified in the field. Modifications required based on widening requirements.
--------------------------------	---

Environmental Considerations	Required widening could potentially impact existing stream to the south of Haynes Lane at existing stream crossing.
-------------------------------------	---

Estimated Project Costs	\$ 404,145
--------------------------------	-------------------



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
HAYNES LANE - APPROXIMATELY 0.4 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 55,000.00	\$ 55,000.00
Aggregate Base Material, No 21B	TON	1800	\$ 40.00	\$ 72,000.00
Blotted Seal Coat, Type D	SY	4900	\$ 10.00	\$ 49,000.00
PE-1, TYPE I, Crusher Run Material	TON	60	\$ 60.00	\$ 3,600.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Install Driveway Culvert (15")	EA	12	\$ 2,500.00	\$ 30,000.00
Erosion and Sediment Control Measures	LS	1	\$ 15,000.00	\$ 15,000.00
Maintenance of Traffic	LS	1	\$ 15,000.00	\$ 15,000.00
SUBTOTAL				\$ 272,700.00
Contingency (20%)				\$ 54,540.00
Engineering				\$ 20,000
Pavement Testing				\$ 1,000.00
CEI Costs (10%)				\$ 27,270.00
Project Administration (5%)				\$ 13,635.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 404,145.00

* Opinion of Probable Costs assumes a minimum allowable paved width of 18'. Further coordination with VDOT is required to determine if paved width can be reduced. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface. This Opinion of Probable Costs does not include potential environmental mitigation costs due to impacts to existing wetland areas.



Assessment and Prioritization Project

RURAL ADDITION ROAD PROJECT

Road Name	Easy Street	Location	West of Smithfield
From To	SR 680 (Magnet Dr) Dead End	Project Length	0.15 Miles
Turnaround	No existing and limited space without R/W dedication	Easement Width	50'
		Residences Served	7



Design Considerations	Existing pavement is in poor condition. Project shall include removal and replacement of pavement, but no widening shall be required given existing roadway width.	Exist. Width	20'-22' (PAVED)
Safety Considerations	N/A		
Drainage Considerations	Existing ditches and culverts identified in the field.		
Environmental Considerations	N/A		
Estimated Project Costs	\$ 248,375		



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
EASY STREET - APPROXIMATELY 0.15 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 20,000.00	\$ 20,000.00
Earthwork	LS	1	\$ 20,000.00	\$ 20,000.00
Remove Exist. Flexible Pavement	SY	2000	\$ 20.00	\$ 40,000.00
Aggregate Base Material, No 21B	TON	700	\$ 40.00	\$ 28,000.00
Blotted Seal Coat, Type D	SY	1900	\$ 10.00	\$ 19,000.00
PE-1, TYPE I, Crusher Run Material	TON	40	\$ 60.00	\$ 2,400.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Erosion and Sediment Control Measures	LS	1	\$ 15,000.00	\$ 15,000.00
Maintenance of Traffic	LS	1	\$ 15,000.00	\$ 15,000.00
SUBTOTAL				\$ 162,500.00
Contingency (20%)				\$ 32,500.00
Engineering				\$ 20,000.00
Pavement Testing				\$ 1,000.00
CEI Costs (10%)				\$ 16,250.00
Project Administration (5%)				\$ 8,125.00
VDOT				\$ 8,000.00
TOTAL PRICE THIS PROJECT				\$ 248,375.00

*Opinion of Probable Costs assumes a minimum allowable paved width of 18'. Further coordination with VDOT is required to determine if paved width can be reduced. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface. Any savings in the proposed pavement section allowed by VDOT based on existing stone depth would decrease the estimated construction costs.



Assessment and Prioritization Project

RURAL ADDITION ROAD PROJECT

Road Name	Dodge Lane	Location	North of Zuni
From To	SR 649 (Tomlin Hill Dr) Dead End	Project Length	0.5 Miles
Turnaround	No existing and limited space without R/W dedication	Easement Width	50'
		Residences Served	6



Design Considerations

Tie to existing pavement on SR 649 and existing gravel section on Haven Ln. Widening required to meet current VDOT standards and would impact adjacent properties and require extensive grading and removal of existing vegetation and trees. Existing roadway in poor condition.

Exist. Width

9'-11'

Safety Considerations

Poor sight distance on horizontal curves due to existing vegetation and trees.

Drainage Considerations

Existing driveway pipes, ditches and culverts identified in the field. Modifications required based on widening requirements.

Environmental Considerations

N/A

Estimated Project Costs

\$ 511,220



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
DODGE LANE - APPROXIMATELY 0.5 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 50,000.00	\$ 50,000.00
Aggregate Base Material, No 21B	TON	2300	\$ 40.00	\$ 92,000.00
Blotted Seal Coat, Type D	SY	6100	\$ 10.00	\$ 61,000.00
PE-1, TYPE I, Crusher Run Material	TON	60	\$ 60.00	\$ 3,600.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Install Driveway Culvert (15")	EA	7	\$ 2,500.00	\$ 17,500.00
Erosion and Sediment Control Measures	LS	1	\$ 20,000.00	\$ 20,000.00
Maintenance of Traffic	LS	1	\$ 20,000.00	\$ 20,000.00
SUBTOTAL				\$ 337,200.00
Contingency (20%)				\$ 67,440.00
Engineering				\$ 40,000
Pavement Testing				\$ 1,000.00
CEI Costs (10%)				\$ 33,720.00
Project Administration (5%)				\$ 16,860.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 511,220.00

*Opinion of Probable Costs assumes a minimum allowable paved width of 18'. Further coordination with VDOT is required to determine if paved width can be reduced. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface.



Assessment and Prioritization Project

RURAL ADDITION ROAD PROJECT

Road Name	Orchard Lane/Peachtree Lane	Location	East of Carrollton
From To	Laurelwood Drive Dead End	Project Length	0.3 Miles
Turnaround	No existing and limited space without R/W dedication	Easement Width	50'
		Residences Served	10



Design Considerations	Tie to existing pavement Widening required to meet current VDOT standards. Proposed widening could be accomplished with little impact to properties along Orchard Lane and Peachtree Lane.	Exist. Width	16'-18' (Orchard) 12'-13' (Peachtree)
Safety Considerations	N/A		
Drainage Considerations	Existing ditches and culverts identified in the field. Modifications to existing drainage infrastructure required with proposed roadway widening.		
Environmental Considerations	N/A		

Estimated Project Costs \$ 304,785



Assessment and Prioritization Project

OPINION OF PROBABLE CONSTRUCTION COST				
ORCHARD LANE/PEACHTREE LANE - APPROXIMATELY 0.5 MILES				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 30,000.00	\$ 30,000.00
Earthwork	LS	1	\$ 30,000.00	\$ 30,000.00
Aggregate Base Material, No 21B	TON	1400	\$ 40.00	\$ 56,000.00
Blotted Seal Coat, Type D	SY	3700	\$ 10.00	\$ 37,000.00
PE-1, TYPE I, Crusher Run Material	TON	50	\$ 60.00	\$ 3,000.00
Aggregate Material, No 3	TON	20	\$ 55.00	\$ 1,100.00
Install Ground Mounted Sign	EA	2	\$ 1,000.00	\$ 2,000.00
Erosion and Sediment Control Measures	LS	1	\$ 20,000.00	\$ 20,000.00
Maintenance of Traffic	LS	1	\$ 20,000.00	\$ 20,000.00
SUBTOTAL				\$ 199,100.00
Contingency (20%)				\$ 39,820.00
Engineering				\$ 20,000
Pavement Testing				\$ 1,000.00
CEI Costs (10%)				\$ 19,910.00
Project Administration (5%)				\$ 9,955.00
VDOT				\$ 15,000.00
TOTAL PRICE THIS PROJECT				\$ 304,785.00

*Opinion of Probable Costs assumes a minimum allowable paved width of 18'. Further coordination with VDOT is required to determine if paved width can be reduced. The pavement section was assumed to be equivalent to the pavement section provided by VDOT on previous Rural Rustic Road jobs: 6" of Aggregate Base 21A or 21B and a Blotted Seal Coat surface.



Project Prioritization

Project Name	Estimated Project Costs	Project Points
EASY STREET	\$248,375.00	70
BLAIRS CREEK WAY	\$364,160.00	67
STRAWBERRY PLAINS ROAD	\$1,215,715.00	65
MORGART'S BEACH (WEST)	\$727,175.00	62
RATTLESNAKE TRAIL	\$989,130.00	55
WOODY ACRES WAY	\$439,220.00	51
ORCHARD LN/PEACHTREE LN	\$304,785.00	50
HAYNES LANE	\$404,145.00	49
DODGE LANE	\$511,220.00	45
BOOKER T DRIVE	\$196,895.00	43
GAYLE WAY	\$403,335.00	42
TINGS ROAD	\$1,033,275.00	40

5/1/2020

Project Costs Comparison

Project Name	Estimated Project Costs 2/2016	Project Points 2/2016	Estimated Project Costs 5/2020	Project Points 5/2020	Project Cost Increase
EASY STREET	\$180,300.00	70	\$248,375.00	70	\$68,075.00
BLAIRS CREEK ROAD	\$266,300.00	67	\$364,160.00	67	\$97,860.00
STRAWBERRY PLAINS ROAD	\$976,900.00	65	\$1,215,715.00	65	\$238,815.00
MORGART'S BEACH (EAST)	\$512,500.00	63	COMPLETED	N/A	
MORGART'S BEACH (WEST)	\$586,500.00	62	\$727,175.00	62	\$140,675.00
RATTLESNAKE TRAIL	\$878,500.00	55	\$989,130.00	55	\$110,630.00
WOODY ACRES WAY	\$347,000.00	51	\$439,220.00	N/A	
MOKETE TRAIL	\$173,500.00	50	INELIGIBLE	N/A	
ORCHARD LN/PEACHTREE LN	\$232,200.00	50	\$304,785.00	50	\$72,585.00
HAYNES LANE	\$355,700.00	49	\$404,145.00	49	\$48,445.00
MAYNARD'S STORE ROAD	\$304,400.00	45	INELIGIBLE	N/A	
DODGE LANE	\$390,300.00	45	\$511,220.00	45	\$120,920.00
MEADOW DRIVE	\$439,000.00	44	INELIGIBLE	N/A	
BOOKER T DRIVE	\$160,700.00	43	\$196,895.00	43	\$36,195.00
GAYLE WAY	\$339,000.00	42	\$403,335.00	42	\$64,335.00
SANDY POINT LANE	\$328,400.00	42	INELIGIBLE	N/A	
TINGS ROAD	\$911,100.00	40	\$1,033,275.00	40	\$122,175.00



Projects Completed

Rural Rustic Roads

Fiscal Year	Project Name	UPC#	Total Cost	Completion Date
10	Muddy Cross	4139	\$380,000.00	2010
12	Poorhouse Road	4707	\$88,533.81	8/14/2013
12	Pope Swamp	8321	\$379,381.39	8/14/2013
12	Halltown Road	1976	\$285,441.20	8/14/2013
12	Ballard Road	9163	\$325,335.30	8/14/2013
12	White House Road	97013	\$149,623.87	8/14/2013
13	Country Way	103052	\$144,566.65	11/18/2015
13	Twin Hill Lane	103054	\$92,714.80	11/18/2015
13	Holly Point Way	103055	\$175,973.78	11/18/2015
18	Mogarts Beach Road (East)	104086	\$365,054.38	1/30/2018

Rural Addition Roads

Fiscal Year	Project Name	UPC#	Total Cost	Completion Date
10	Lawrence Drive		\$266,000.00	2010
13	Poplar Drive	103056	\$88,533.81	8/14/2013
12	Yellow Rock Lane	103057	\$171,815.61	8/14/2013

Memorandum



CLARK NEXSEN
4525 Main Street, Suite 1400
Virginia Beach, VA 23462
P: 757.455.5800
F: 757.455.5638

Project: Rural Rustic and Rural Additions Roads Update

Date: 5/1/2020

Comm #: 7442-F

Subject: Update to the June 2015 Rural Rustic Road/Rural Addition Assessment and Prioritization Project

Clark Nexsen was scoped by Isle of Wight County to assist in updating the 2015 Rural Rustic Road/Rural Addition Assessment and Prioritization Project Report previously prepared by Kimley-Horn. The scope of services for the update included:

- **Reviewing and updating cost estimates**
- **Reviewing and updating previously established project rankings**
- **Incorporating a list of recently completed projects and associated costs (List provided by Owner)**
**While not included in the scope of services, each project was reviewed in the field to confirm existing conditions and current residents served by the road.*

The prioritization tool and scoring criteria previously established by Kimley-Horn were not modified but were used in the review and update of the project rankings. The Kimley-Horn memorandum dated November 2, 2015 provides a brief description of the scoring criteria and is attached for reference. Also attached is correspondence from the Virginia Department of Transportation (VDOT) dated September 20, 2016 providing their determination of eligibility for five of the rural addition candidate projects. Based on the VDOT review, the following projects were determined to be ineligible and have been removed from the updated project report:

Sandy Point Lane
Meadow Drive
Mokete Trail

Maynard's Store Road was also deemed ineligible based on minimum number of residents served (less than 3).

Tings Road remains in the report, but based on VDOT's review, additional plat research will be required in order to make a final determination of eligibility. Each remaining project was reevaluated and scored. The final recommended ranking is attached and is also provided at the end of the updated report.

Attachment 1: Kimley-Horn memorandum dated November 2, 2015

Attachment 2: VDOT correspondence dated September 20, 2016

Attachment 3: Recommended project prioritization



MEMORANDUM

Subject: Rural Rustic Road and Rural Addition Assessment and Prioritization Project

Date: November 2, 2015

The Engineering Division of Isle of Wight County recently completed the *Rural Rustic Road and Rural Addition Assessment and Prioritization Project*. The purpose of the project was to develop a tool to objectively rank and prioritize roadways in the County for inclusion in the Rural Rustic Road and Rural Addition programs using multiple design criteria. The planning level, prioritization tool was developed in Microsoft Excel and was initially tested on the eight Rural Rustic Road projects and nine Rural Addition projects currently on the County's project list.

The prioritization tool was created to develop a numeric score for each project based on eleven different evaluation criteria, with the maximum possible score being 100. The following is a list of each of the evaluation criteria, a brief description of the criteria, and the total amount of points for each criterion:

- **Project Cost/Household (Possible points from 1-30):** This criterion is the ratio of the total estimated cost of the proposed improvements to the number of households directly impacted by the project. The lower the project costs and the greater the number households adjacent to the project, the higher the score and the greater amount of points assigned. This criterion has been assigned the largest amount of total possible points a project can receive (30 points) because it objectively identifies two metrics critical to prioritizing these types of roadway projects. The criterion has been broken out into ranges of cost per household and points are assigned between 1
- **Existing Roadway Width (Possible points 0 or 5):** This criterion evaluates the existing roadway widths against the current design standards. Where the existing roadway width meets or exceeds current design standards, the projects are assigned the maximum number of points (5). Projects that do not meet current design standards receive a score of 0. Projects that meet current design standards for project width are more likely to be considered for implementation and acceptance by VDOT.
- **Traffic Volumes (Possible points from 0 to 10):** Current traffic counts will be required for each project, whether they are calculated using HCM formulas, based off of VDOT provided traffic counts, or actual traffic counts collected in the field. The prioritization tool includes ranges of traffic volumes and points are provided from 0 to 10 based on where a potential project falls within the traffic volume ranges. Projects with higher traffic volumes are assigned more points since they serve a larger amount of residents within the County.

- **Public or Private Road (Possible points 0 or 5):** Projects are awarded points based on whether the project is a public roadway (5 points) (Rural Rustic Road) or private roadway (0 points) (Rural Addition).
- **Right-of-Way Acquisition (Possible points from 0 to 15):** This criterion assigns 15 points to projects where right-of-way acquisition is not required and a 50' right-of-way exists. A project is awarded 10 points if no right-of-way acquisition is required but the existing right-of-way is less than the minimum 50' in width. This often applies to projects with prescriptive right-of-way. A project is assigned zero points for this criterion if right-of-way acquisition is required. This is because right-of-way acquisition is typically an added expense to projects and oftentimes negatively impacts a project schedule. In addition, VDOT's policy is to not accept a roadway into their Secondary Road system without a minimum 50' right-of-way.
- **Utility Relocation Impacts (Possible points from 0 to 10):** This criterion includes evaluating if existing utilities will need to be relocated as part of the proposed improvements. Projects with no impacts to existing utilities will be assigned 10 points. Projects with minor impacts receive 2 points and projects with major impacts receive 0 points. Utility relocations increase project costs and extend project schedules and oftentimes projects that require utility relocations also require additional right-of-way or easements.
- **Drainage and Stormwater Management Improvements (Possible points 0 to 5):** This criterion evaluates the need for minor or major drainage improvements as part of the proposed project improvements. Projects requiring minor or no drainage improvements are assigned 5 points. Projects requiring major drainage improvements such as inlets, pipes, and cross culverts are assigned 0 points. Major drainage improvements often require specific hydraulic studies and increase project costs and complexities.
- **Proposed Improvements Address Current Safety Issue (Possible points 0 or 5):** If a proposed project addresses an existing safety issue, that project is awarded points for this criterion (5 points). Examples of safety improvements for the traveling public include adding or updating guardrail, additional roadway signage, and roadside clearing for improved sight distances. Projects that don't address current safety issues are still important but are not awarded points under this criterion.
- **Environmental Concerns (Possible points from 0 to 5):** Depending on types of funding, each roadway project will be required to comply with either state or federal environmental compliance standards. Once environmental due diligence is performed, if no environmental issues are brought forth, a No-Permit Required letter is typically issued. Projects that receive a No-Permit required letter are assigned 5 points for this criterion. Projects where environmental due diligence is performed and additional environmental documentation or even mitigation and compensation is required are assigned zero points for this criterion.
- **Professional Investment (Possible points 0 to 5):** Projects are assigned 5 points if input or investment has been provided by either public or private stakeholders. Professional

Investment is measured in both time and money dedicated to project related items such as survey information, geotechnical information, funding assistance, or right-of-way dedications. These efforts reduce the project risk for the County to administer the project and provide increased confidence to the County regarding the proposed project. If no professional investment has been provided, a project does not receive any points for this criterion.

Each individual project is given a score based on these evaluation criteria. Projects are then ranked and prioritized based on total results.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1700 North Main Street
SUFFOLK, VIRGINIA 23434

Charles A. Kilpatrick, P.E.
Commissioner

September 20, 2016

Jamie Oliver
Transportation Project Manager
Isle of Wight County
P.O. Box 80
Isle of Wight, VA 23397

RE: Rural Additions Assessment
Gayle Way, Sandy Point Lane, Meadow Drive, Mokete Trail, Tings Road
Isle of Wight County

The Residency has completed its review of the Rural Additions Assessment dated June 2015. Rural Additions to the Secondary System of State Highways will be considered when requested by resolution of the Board of Supervisors in accordance with the Code of Virginia §33.2-335. The proposed road addition must have been recorded on a plat as right of way dedicated to public use or otherwise opened to public use for a minimum of 20 years, and provide sufficient public service by way of serving a minimum of three families per mile to warrant the expenditure of highway funds for maintenance and improvement. A minimum public right of way of 40' is required to have been established, or not less than 30' in extenuating situations as determined by the Commissioner of Highways. The resolution of the Board shall specifically guarantee the necessary right of way and drainage easements needed for the proposed additions. Additionally, no speculative interests are to exist, or if it is determined that they do exist, the speculative owners must contribute to the funding of the road improvement on a pro rata percentage. We have reviewed the following projects:

UPC 104807 - Sandy Point Lane – The project appears to be ineligible for rural addition. Sandy Point Lane was recorded as a private road in 1985, which does not meet the minimum requirement of 20 years of recorded public dedication and use.

UPC 104808 - Gayle Way – The project appears to be eligible for rural addition. The older plat that establishes the original right of way must be included for review. All property plats that

front the proposed extension of Gayle way must also be included in the package. One of the submitted subdivision plats was in the correct vicinity; however other submitted plats are for the corner of Gayle Way and New Town Haven Lane and for Mallard Cove Lane.

UPC 107354 - Tings Road – There were no plats provided in the package in order to make a determination of its eligibility.

UPC 107355 - Meadow Drive - The project appears to be ineligible for rural addition. Meadow Drive was recorded as a private road in 1977, which does not meet the minimum requirement of 20 years of recorded public dedication and use.

UPC 107356 - Mokete Trail – The project appears to be ineligible for rural addition. According to the plat recorded in 1984, there is no dedicated right of way, as there is just an easement for ingress/egress. Additionally, there is also a private roadway note on the plat indicating it will not be accepted into the State system until it is brought up to standards. Therefore, it does not meet the minimum requirement of 20 years of recorded public dedication and use.

If you have any questions, please contact me at (757) 346-3078 or Tommy.Catlett@vdot.virginia.gov.

Sincerely,

Tommy Catlett, P.E.
Area Land Use Engineer
Virginia Department of Transportation
Franklin Residency

ATTACHMENT 3

Project Name	Estimated Project Costs	Project Points
EASY STREET	\$248,375.00	70
BLAIRS CREEK WAY	\$364,160.00	67
STRAWBERRY PLAINS ROAD	\$1,215,715.00	65
MORGART'S BEACH (WEST)	\$727,175.00	62
RATTLESNAKE TRAIL	\$989,130.00	55
WOODY ACRES WAY	\$439,220.00	51
ORCHARD LN/PEACHTREE LN	\$304,785.00	50
HAYNES LANE	\$404,145.00	49
DODGE LANE	\$511,220.00	45
BOOKER T DRIVE	\$196,895.00	43
GAYLE WAY	\$403,335.00	42
TINGS ROAD	\$1,033,275.00	40

5/1/2020