



RSTP Project Profile – Candidate Project # 1

1. **Project Sponsor(s):** Roanoke County
2. **Proposed Implementing Agency:** Virginia Department of Transportation
3. **Project Description and Attached Aerial Showing Proposed Improvement Location:**
In June, 2013, the Commonwealth Transportation Board allocated \$1,608,244 of Regional Surface Transportation Program (RSTP) funds to UPC 99542, Route 81 – Exit 140 Park and Ride Facility Expansion. Since that time, the Virginia Department of Transportation (VDOT) has hired consulting engineers, designed plans, and scheduled a design public hearing on October 16, 2014. The design public hearing brochure is attached for reference. For background information on the facility, including previous designs and estimates, please refer to the FY2014 RSTP Park & Ride application, which is attached for reference.

As preliminary engineering has progressed, VDOT and its consultant have expanded the scope of the project and adjusted the previous designs to include the following:

1. **Increase project scope from 117 proposed parking spaces to 236 spaces**
2. **Add right of way phase**
3. **Relocate the Dooley-Blankenship cemetery**
4. **Adjust the I-81 limited access right of way along Route 311**
5. **Relocate the two entrances to better serve Smart Way bus and to enhance sight distance**
6. **Adjust design and parking layout to mitigate impacts to neighboring homes**
7. **Install two bus shelters instead of one**
8. **Add sidewalks along Route 311, connecting from the facility to the southbound I-81 ramp**
9. **Utilize permeable pavement to achieve water quality standards**

These items have increased the estimated project cost to \$2,650,000.

The purpose of this RSTP application is to fund the deficit of \$1,041,756.

RSTP funds are ideal to support the reconstruction of the Exit 140 Park & Ride. The project qualifies for the Regional Surface Transportation Program under the following categories:

Transportation Demand Management Projects

- Park and Ride Lots are specifically listed as projects that qualify for RSTP funds.

Transit Projects

- Two Bus Shelters are included to enhance existing Smart Way bus service.

Pedestrian and/or Bicycle Improvements

- Sidewalk is proposed along Route 311, connecting from the facility to the southbound I-81 ramp, eventually connecting to the City of Salem sidewalk network on the east side of I-81.
- Bicycle Racks are included in the reconstruction plan.
- Route 311, Thompson Memorial Drive in Roanoke County is listed on the Priority List of bicycle routes - Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update.
- Route 311, Thompson Memorial Drive in the City of Salem is listed on the Vision List of bicycle



routes - Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update.

- Gish Branch Greenway, priority level 3, would terminate generally along Route 311, south of Interstate 81 - Update to the Roanoke Valley Conceptual Greenway Plan – 2007.

4. Detailed Scope of Work, proposed Schedule and Relation to Other Projects or Project Phases, Project Status and Other Funding Sources:

Detailed Scope of Work

- a. Scoping/Preliminary Design Phase (completed)
- b. Detailed Design Phase (underway)
- c. Right of Way Phase
- d. Final Design Phase
- e. Advertisement For Construction
- f. Construction

UPC 99542 Anticipated Schedule

Design Public Hearing – October 2014

Right of Way – Early 2015

Advertise for Construction – Early 2016

Relation to Other Projects or Project Phases, Project Status and Other Funding Sources

- Project was awarded \$1,608,244 RSTP funding in FY 2014.
- VDOT installed jersey wall barriers along section of Edgewood Road in 2013 to help mitigate headlight impacts to neighbors.
- VDOT Regional Traffic Operations administered the WR&A study in 2009.
- VDOT maintenance funds were used to stabilize and surface treat the expansion area.
- Roanoke County staff designed preliminary and detailed reconstruction plans, and conceptual screen fence plans to minimize light and noise impacts.
- VDOT and Roanoke County staff continue to involve neighbors in the project. As an interim measure to reduce headlight impacts to a nearby home, VDOT installed jersey wall barriers on the northwest side of the facility.

5. Functional Classification: N/A

6. Existing Traffic Volume and Level of Service with Improvement: N/A

7. Existing Volume/Capacity: Approximately 112 sub-standard spaces

8. Future Traffic Volume or Projected Ridership with Service Implementation: N/A

9. Future Volume/Capacity and Level of Service: 236 spaces (227 car/truck and 9 motorcycle)



10. Estimated Project Cost by Phase:

Activity Phase	Cost
Preliminary Engineering	\$320,000
Right-of-Way	\$180,000
Construction	\$2,150,000
Total Cost	\$2,650,000

For more budget details, please see the following attachment:

- a. VDOT Design Public Hearing brochure, October 16, 2014
- b. VDOT Preliminary Cost Estimate, September 2014

11. RSTP Candidate Project Rating Factors

1. Regional Project Consideration

Reconstruction of the Exit 140 Park & Ride is an ideal candidate for RSTP funds. Roanoke County and VDOT would partner as sponsoring and implementing agency, respectively. All eligible recipients of RSTP funds in the Roanoke Valley Area would benefit from the project. This includes all local governments in the Roanoke Valley Area Metropolitan Planning Organization, Greater Roanoke Transit Company, Unified Human Services Transportation Systems, Inc, Virginia Department of Transportation, Virginia Department of Rail and Public Transportation, and the planning and programming efforts of the Roanoke Valley Area Metropolitan Planning Organization and the Roanoke Valley Alleghany Regional Commission. In addition, travelers on the Federal, State and Local highway systems use the facility. Citizens from around the Roanoke Valley and beyond would benefit from the reconstructed facility.

2. Support the Economic Vitality of the Metropolitan Area

The project adds capacity to the Interstate, Primary and Secondary system of highways by removing up to 236 vehicles at any time that the lot is filled. The project serves Interstate 81 which is one of the most important transportation corridors in the Commonwealth of Virginia. The reconstructed Park & Ride would serve as a model for future Park & Ride facilities to be considered during expansion of Interstate 81.

3. Increase the Safety and Security of the Transportation System

The project reduces up to 236 drivers on the Interstate, Primary and Secondary highways at any given time. Passengers in car-pool vehicles or busses have the option to direct their attention away from driving to other tasks.

4. Increase the Accessibility and Mobility Options Available to People and/or Freight

The project would enhance multiple modes of transportation. Two bus shelters with bicycle racks would be added to better serve the Smart Way bus service. Handicap parking would be relocated adjacent to the bus shelter. Pedestrians could use the proposed sidewalk along Route 311. Bicyclists could ride to and from the facility and have a safe and secure location to lock a bicycle. Employees commuting to and from area businesses have more options for transportation.

5. Protect and Enhance the Environment, Promote Energy Conservation, and Improve Quality of Life

The project reduces motor fuel consumption by removing vehicles from the highway system. Stormwater quantity and quality would be evaluated and managed. Landscaping would provide screening and aesthetic benefits. Park & Ride facilities improve the quality of life for all citizens of the Roanoke Valley.



6. Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and/or Freight

Park & Ride facilities fit all of these criteria. Please refer to Section D above for additional qualifications.

7. Promote Efficient System Management and Operation

Park & Ride lots help achieve Transportation Demand Management goals and objectives in the RVAMPO Constrained Long Range Transportation Plan 2035.

8. Emphasize the Preservation of Existing Transportation System

The project preserves the existing Park & Ride facility, replaces deteriorating or sub-standard pavement, and expands the facility. The new design would improve vehicular circulation, define parking spaces, and improve existing Smart Way bus service.

9. Cost/Benefit Consideration

Project Cost Estimate	\$2,650,000
Number of Parking Spaces	236
<hr/>	
Request/# Spaces	\$11,229

10. Projects included in previous plans that had a public input process associated with the plan:

RVAMPO Constrained Long Range Transportation Plan 2035: Vision List. The CLRTP lists Park & Ride lots as an important component of Transportation Demand Management. Exit 140 Park & Ride Expansion is on the Vision List as a Transportation Demand Management project.

Ride Solutions Park-and-Ride Study, Inventory, Use and Need – 2009 Update: The study identifies the Exit 140 Park & Ride as exceeding capacity, and recommends expansion of the facility.

Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update: Route 311, Thompson Memorial Drive is listed as a Priority bicycle route in Roanoke County, and a Vision bicycle route in the City of Salem.

Update to the Roanoke Valley Conceptual Greenway Plan – 2007: Gish Branch Greenway, priority level 3, would terminate generally along Route 311, south of Interstate 81.

Attachments:

1. VDOT Design Public Hearing brochure, October 16, 2014
2. VDOT Preliminary Cost Estimate, September 2014
3. WR&A / VDOT Draft Dimensional Layout, September 2014
4. Roanoke County Board of Supervisors Resolution 092314-4.f requesting the RVAMPO to fund a list of RSTP projects for fiscal year 2016-2021
5. FY2014 RSTP Application, Exit 140 Park & Ride
 - a. Roanoke County Preliminary Engineering Plans
 - b. Roanoke County Preliminary Cost Estimate

PROJECT DESCRIPTION

The current park and ride facility at exit 140 was initially constructed in Late 1970s. The lot was then expanded using temporary pavement in 2010.

The primary purpose of this project is to expand the existing park and ride lot to meet future demands. The original park and ride facility was approximately 350' by 86' (1.05 acres) and was expanded to 545' by 86' (1.28 acres). The proposed expansion will increase facility size to 722' by 118' (1.94 acres). The project includes replacing existing pavement; expanding parking limits to increase capacity; and utilizing permeable pavement to achieve water quality standards. Sidewalk, lighting, two bus shelters, bike racks, informational kiosk, motorcycle parking spaces, and additional handicap accommodations will be provided.

The proposed entrances for the new facility are located at points that provide increased sight distance for improved safety when entering and exiting the facility.

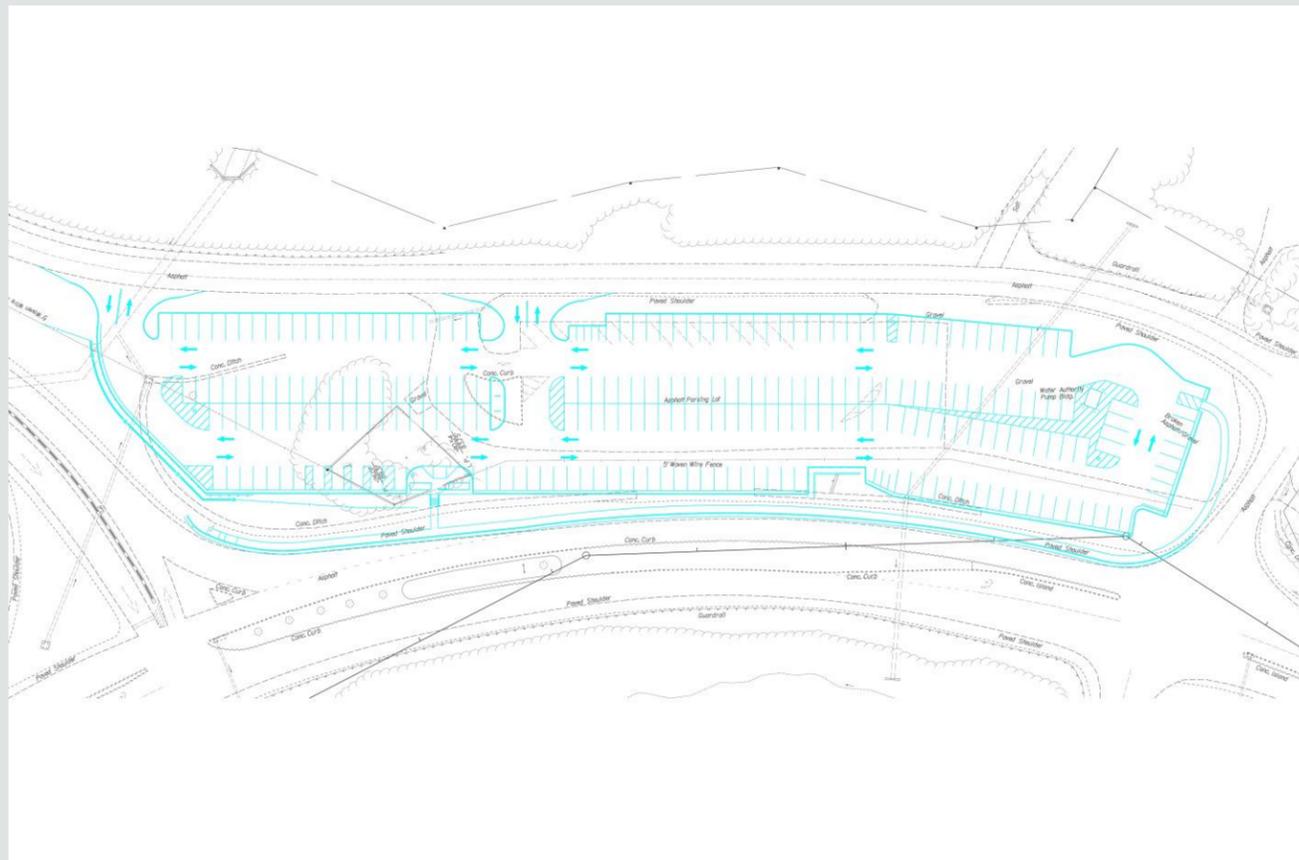
The design of this project is in compliance with the

Stormwater Management Act, stormwater regulations and the annual stormwater management standards and specifications approved by the Virginia Department of Conservation and Recreation. The construction of this project will conform to the nationwide best management practices, VDOT specifications and special provisions, and the Virginia Department of Soil and Water conservation regulations. Also, during construction, every reasonable effort will be made to protect the environment with respect to dust and erosion control. Access to all properties will be maintained during construction.

Potential impacts to the flood plains will be evaluated and addressed on this project.

Existing park & ride capacity: 112 vehicles+/-.
Proposed park & ride capacity: 236 vehicles (227 car/truck plus 9 motorcycle).

Project Graphic



Estimated Project Cost

Preliminary Engineering:
\$320,000

Right of Way / Utility Relocation:
\$180,000

Construction:
\$2,150,000

Total Cost:
\$2,650,000

This estimate of probable cost is subject to change. The project is not currently fully funded and will be financed using state and federal funds.

Environmental Review

VDOT's Salem District Environmental Office has performed environmental reviews and coordination to obtain information about environmental resources in the project vicinity; to provide natural and historic resource agencies an opportunity to review and comment on the project during its development; and to identify opportunities for avoidance, minimization and mitigation of potential environmental impacts.

A National Environmental Policy Act (NEPA) document in the form of a Programmatic Categorical Exclusion has been developed in cooperation with the Federal Highway Administration and in accordance with federal guidelines for this project. The NEPA document includes information from various technical reviews including those related to natural resources, water quality, threatened and endangered species, air quality, noise, etc. In compliance with the National Historic Preservation Act, Section 106 and 36 CFR Part 800, information concerning the potential effects of the proposed project on properties listed in or eligible for listing in the National Register of Historic Places is also provided in the environmental documentation.

The project will continue to be coordinated with the appropriate federal, state, and local agencies as part of environmental review and approval processes required throughout project development and construction. All required environmental clearances and permits will be obtained prior to commencement of construction. Strict compliance with all environmental conditions and commitments resulting from regulatory approvals, and implementation of VDOT's specifications and standard best management practices will protect the environment during construction.

The NEPA document and the results of other environmental studies are available at today's meeting. Representatives from VDOT's Environmental Section are available to discuss this information and to answer questions.

Anticipated Schedule

Design Public Hearing – October 2014

Right of Way – Early 2015

Advertise for Construction – Early 2016

Civil Rights

VDOT ensures nondiscrimination and equal employment in all programs and activities in accordance with Title VI and Title VII of the Civil Rights Act of 1964. If you need more information in regards to your civil rights on this project or special assistance for persons with disabilities or limited English proficiency, contact the project manager listed on the back of this brochure.

Right of Way

The construction of the park and ride at exit 140 along Interstate 81 will not displace any families, businesses or non-profit organizations, however; the Dooley-Blankenship Cemetery will be relocated as part of the project.

As we finalize this project, additional easements for utility relocation may be required beyond the proposed right of way shown on the public hearing plans. The property owners will be informed of the exact location of the easements during the right of way acquisition process and prior to construction.

Information about right of way acquisition is discussed in VDOT's brochure entitled, "Right of Way and Utilities: a Guide for Property Owners and Tenants." Copies of this booklet are available from a VDOT right of way agent.

After this hearing, information regarding right of way may be obtained from the right of way contact listed on the back of this brochure.

Get Involved

Ten days after this public hearing, on October 26, 2014, the public comment period will close. VDOT will review and evaluate any information received as a result of this hearing. After the hearing, the project information and the hearing summary will be available for review at VDOT's Salem District Office located at 731 Harrison Avenue, Salem, VA 24153.

After all comments have been addressed, the information received as a result of the hearing will be presented to VDOT's Chief Engineer or designee for consideration.

Written comments can be mailed to the Virginia Department of Transportation, Mr. John Bisnett, Project Manager, PO Box 3071, Salem, VA, 24153 no later than October 26, 2014.

Comments can also be submitted in writing to saleminfo@vdot.virginia.gov. Please reference "I-81 Exit 140 Park and Ride Facility Expansion" in the subject heading.

Information must be received by VDOT within 10 calendar days of today's meeting in order to be included in the design public hearing record.

Contact Information

Primary Contact: John Bisnett	Project Manager	P.O. Box 3071 Salem, VA 24153	540-375-0125
Jason Bond	Communications	P.O. Box 3071 Salem, VA 24153	540-387-5493
Lori Snider	Right of Way	P.O. Box 3071 Salem, VA 24153	540-387-5366



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Design Public Hearing

Interstate 81 Exit 140 Park and Ride Facility Expansion (Roanoke County)

Thursday, October 16, 2014, 5-7 p.m.
VDOT – Salem District Auditorium
731 Harrison Avenue
Salem, VA 24153

Public Meeting

Welcome to the Virginia Department of Transportation's (VDOT) design public hearing on proposed expansion of the Park and Ride facility located at the Interstate 81 interchange at exit 140 (Salem).

This design public hearing is being held to provide an opportunity for any person, acting on his/her own behalf or representing a group or governing agency, to give the department comments and/or suggestions on the proposed project.

VDOT strives to ensure that all members of the community have the opportunity to participate in

public decisions on transportation projects and programs affecting them.

VDOT representatives are present to discuss the project and answer your questions.

A comment sheet is included in the handouts for this meeting, and your input is encouraged. All oral and written comments received on this project will be included in a transcript for review by VDOT personnel, citizens and other interested parties.

Project Overview



Existing I-81 Exit 140 Park & Ride
(Imagery courtesy of Bing Maps)

Anticipated Cost – \$2,650,000

Purpose – Expand the existing Park and Ride facility to increase capacity

From – Intersection of Route 1128 and Route 1150

To – 0.17 Miles West of Intersection of Route 1128 and Route 1150

Improvements –

- Increase existing parking spaces from 112 to 236
- Utilize permeable pavement to achieve water quality standards
- Install two bus shelters, bike racks, informational kiosk and handicap parking
- Install additional lighting
- Sidewalks

PCN	DESCRIPTION	STATE PROJECT NUMBER FEDERAL PROJECT NUMBER	DETAIL Last Gen	SOURCE BBP
00099542M01	RTE. 81 - EXIT 140 PARK 'N RIDE FACILITY EXPANSION	0081-080-S04, M501 STP-081-2(291)	Y 09/04/14	P

E22-PPDECCA
DATE PRINTED : 09/04/14

VIRGINIA DEPARTMENT OF TRANSPORTATION
DETAIL COST ESTIMATE

PRIME PROJECT LEVEL

OVERSIGHT ROUTE COUNTY SECTION
(NFO) NA 080 S04

PRIME PROJECT NUMBER : C00099542M01

STATE NUMBER : 0081-080-S04, M501

FEDERAL PROJECT NUMBER : STP-081-2(291)

TOTAL LENGTH (PROJECTS): MILES ==> 0.17000

LENGTH EXCLUDING BRIDGES : MILES ==> 0.17000

DISTRICT:SALEM

CITY/COUNTIES : 080 ROANOKE

PCN	STATE PROJECT#	CITY/ ROUTE CO	SECT	TYPE	PROJ TOTAL	CONST ENGR	CONTR REQMNT/ CONTINGENCIES	TOTAL
00099542M01	0081-080-S04, M501	(NFO) NA 080	S04	M501	1691136.96	287493.28	84556.84	2063187.09
ESTIMATE TOTALS					1691136.96	287493.28	84556.84	2063187.09

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL COST ESTIMATE

PCN
 00099542M01
 PMS#
 00099542

OVERSIGHT
 (NFO)

ROUTE
 NA

COUNTY
 080

SECTION
 S04

TYPE
 M501

STATE PROJECT
 0081-080-S04, M501

09/04/14 PAGE: 4
 R SECONDARY

CATEGORY: 0100 REGULAR BID ITEMS

FEDERAL STRUCTURE ID:

FHWA TYPE CODE : 23 23-TRANSIT
 ACTIVITY CODE : 631 631 CONTRACT CONSTR - REGULAR - FED
 CONSTRUCTION CLASS:

OF SPANS :
 BRIDGE LENGTH : FT CAT LENGTH : 0.170000 MI
 BRIDGE WIDTH : FT CAT WIDTH : 134.5000 FT

MARG CODE	ITEM CODE	SPEC	ITEMS OF WORK	UNIT	QUANTITY	UNIT PRICE	AMOUNT
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DRAINAGE ITEMS

1	00525	302 504	CONCRETE CLASS A3 MISC.	CY	1.300	763.18000	992.13
E 1	00598	302	NS UNDERDRAIN PERFORATED 6" PVC UNDERDRAIN	LF	4850.000	15.00000	72,750.00
1	00700	302	POST INSTALLATION INSPECTION	LF	743.000	6.99000	5,193.57
1	01186	302	STORM SEWER PIPE 18"	LF	626.000	56.60516	35,434.83
1	01246	302	STORM SEWER PIPE 24"	LF	117.000	75.95000	8,886.15
1	06750	302	DROP INLET DI-2B,L=10'	EA	3.000	5256.10000	15,768.30
1	06820	302	DROP INLET DI-3B,L=10'	EA	2.000	4322.14000	8,644.28
1	07506	302	DROP INLET DI-5	EA	1.000	4054.18000	4,054.18

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL COST ESTIMATE

PCN
 00099542M01
 PMS#
 00099542

OVERSIGHT
 (NFO)

ROUTE
 NA

COUNTY
 080

SECTION
 S04

TYPE
 M501

STATE PROJECT
 0081-080-S04, M501

09/04/14 PAGE: 5
 R SECONDARY

CATEGORY: 0100 REGULAR BID ITEMS

FEDERAL STRUCTURE ID:

FHWA TYPE CODE : 23 23-TRANSIT # OF SPANS : BRIDGE ID :
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 CONSTRUCTION CLASS: BRIDGE WIDTH : FT CAT WIDTH : 134.5000 FT

 MARG ITEM SPEC ITEMS OF WORK UNIT QUANTITY UNIT AMOUNT
 CODE CODE PRICE

DRAINAGE ITEMS

MARG CODE	ITEM CODE	SPEC	ITEMS OF WORK	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	09056	302	MANHOLE MH-1 OR 2	LF	10.000	463.32401	4,633.24
1	09057	302	FRAME & COVER MH-1	EA	2.000	430.28004	860.56
1	09185	502	PAVED DITCH PG-2A	SY	85.000	89.93002	7,644.05

SUBTOTAL 164,861.29

PAVEMENT ITEMS

1	10128	308 309	AGGR. BASE MATL. TY. I NO. 21B	TON	715.000	27.51656	19,674.34
E 1	10250	308 309 ATTD	NS AGGR. MATERIAL NO. 2	TON	15290.000	30.00000	458,700.00
E 1	10250	308 309 ATTD	NS AGGR. MATERIAL NO. 57 STONE	TON	376.000	33.00000	12,408.00
E 1	10496		NS PAVEMENT POROUS ASPHALT MATERIAL	SF	71016.000	3.68000	261,338.88

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL COST ESTIMATE

PCN
 00099542M01
 PMS#
 00099542

OVERSIGHT
 (NFO)

ROUTE
 NA

COUNTY
 080

SECTION
 S04

TYPE
 M501

STATE PROJECT
 0081-080-S04, M501

CATEGORY: 0100 REGULAR BID ITEMS

FEDERAL STRUCTURE ID:

FHWA TYPE CODE : 23 23-TRANSIT
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A 1	10635	315	ASPHALT CONCRETE TY. SM-9.5A	TON	127.000	176.88779	22,464.75
A 1	10642	315	ASPHALT CONCRETE TY. BM-25.0A	TON	351.000	154.25067	54,141.99
E 1	11070	315	NS SAW-CUT ASPH CONC FULL DEPTH	LF	956.000	4.00000	3,824.00
SUBTOTAL							832,551.96

INCIDENTAL ITEMS

1	12020	502	STD. CURB CG-2	LF	824.000	21.04204	17,338.64
1	12022	502	RADIAL CURB CG-2	LF	288.000	24.93467	7,181.18
1	12600	502	STD. COMB. CURB & GUTTER CG-6	LF	727.000	24.16331	17,566.73
1	12610	502	RAD. COMB. CURB & GUTTER CG-6	LF	77.000	61.00609	4,697.47

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(NFO)

ROUTE
NA

COUNTY
080

SECTION
S04

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09/04/14 PAGE: 7
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INCIDENTAL ITEMS

1	12700	502	STD. COMB. CURB & GUTTER CG-7	LF	575.000	19.20736	11,044.23
1	12710	502	RAD. COMB. CURB & GUTTER CG-7	LF	156.000	28.24729	4,406.58
1	13108	ATTD	CG-12 DETECTABLE WARNING SURFACESY		5.000	229.23000	1,146.15
1	13220	504	HYDR. CEMENT CONC. SIDEWALK 4"	SY	559.000	60.31783	33,717.67
1	13320	505	GUARDRAIL GR-2	LF	128.000	21.43379	2,743.53
1	13331	505	RAD. GUARDRAIL GR-2	LF	68.000	22.52244	1,531.53
1	13530	506	RETAINING WALL RW-3	CY	30.000	549.79000	16,493.70

SUBTOTAL

117,867.41

MAINTENANCE SCHEDULE ITEMS

VIRGINIA DEPARTMENT OF TRANSPORTATION
DETAIL COST ESTIMATE

PCN
00099542M01
PPMS#
00099542

OVERSIGHT
(NFO)

ROUTE
NA

COUNTY
080

SECTION
S04

TYPE
M501

STATE PROJECT
0081-080-S04, M501

09/04/14 PAGE: 8
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MAINTENANCE SCHEDULE ITEMS

1	14502	ATTD	REINFORCING STEEL	LB	70.000	2.06000	144.20
SUBTOTAL							144.20

PROTECTIVE ITEMS

1	22501	507	FENCE FE-W1	LF	180.000	6.88000	1,238.40
1	22541	507	LINE BRACE UNIT FE-W1,FE-W2	EA	5.000	208.96000	1,044.80
1	22581	507	CORNER BRACE UNIT FE-W1,FE-W2	EA	5.000	213.91000	1,069.55
1	22643	507	FENCE FE-CL	LF	134.000	16.29000	2,182.86
1	24160	512	CONSTRUCTION SIGNS	SF	200.000	17.39000	3,478.00
E 1	24265	ATTD	NS MAINTENANCE OF TRAFFIC MAINTENANCE OF TRAFFIC	LS	1.000	75000.00000	75,000.00

VIRGINIA DEPARTMENT OF TRANSPORTATION
DETAIL COST ESTIMATE

PCN
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PPMS#
00099542

OVERSIGHT
(NFO)

ROUTE
NA

COUNTY
080

SECTION
S04

TYPE
M501

STATE PROJECT
0081-080-S04, M501

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	1 24410	508	DEMOLITION OF PAVEMENT	SY	4663.000	5.58000	26,019.54
E 1	24952	ATTD	BICYCLE RACK (INGROUND MOUNT)	EA	2.000	500.00000	1,000.00
	1 25000	504	HANDRAIL HR-1	LF	16.000	89.70000	1,435.20
SUBTOTAL							112,468.35

EROSION CONTROL

	1 27102	603	REGULAR SEED	LB	152.000	14.29000	2,172.08
	1 27103	603	OVERSEEDING	LB	95.000	6.91000	656.45
	1 27215	603	FERTILIZER(15-30-15)	TON	1.000	1394.93000	1,394.93
	1 27250	603	LIME	TON	4.000	248.40000	993.60

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL COST ESTIMATE

PCN
 00099542M01
 PPMS#
 00099542

OVERSIGHT
 (NFO)

ROUTE
 NA

COUNTY
 080

SECTION
 S04

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STATE PROJECT
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EROSION CONTROL

1	27505	303	TEMP. SILT FENCE	LF	1900.000	2.65000	5,035.00
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SUBTOTAL							10,252.06
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PLANTING ITEMS

E 1	28810	605	MULCHING	UNIT	7.000	60.00000	420.00
E 1	35264	605	INKBERRY 3'	EA	20.000	100.00000	2,000.00
E 1	38925	PLAN	NS TRASH RECEPTACLE TRASH RECEPTACLE	EA	2.000	500.00000	1,000.00
E 1	38935		NS COMMUTER INSTALL BUS SHELTER	EA	2.000	1000.00000	2,000.00
E 1	38935		NS COMMUTER KIOSK	EA	1.000	1000.00000	1,000.00
1	38950		NS LANDSCAPE BOLLARD	EA	8.000	800.00000	6,400.00

SUBTOTAL

12,820.00

TRAFFIC & SAFETY ITEMS

1	50108	701	SIGN PANEL	SF	130.000	31.65743	4,115.47
1	50430	700	SIGN POST STP-1, 2"	LF	80.000	19.54000	1,563.20
1	50490	700	CONCRETE FOUNDATION STP-1	EA	8.000	289.32000	2,314.56
1	54032	704	TY.B CL.I PAVE. LINE MARK. 4"	LF	6560.000	0.96721	6,344.90
1	54042	704	TY.B CL.I PAVE. LINE MARK. 24"	LF	35.000	17.54896	614.21
1	54300	704	PAVE.MESS.MARK.ELONG.ARROW SIN	EA	22.000	181.07687	3,983.69
E 1	54402	704	NS PAVE. MESSAGE MARKING INT'L. SYMBOL OF ACCESS. PRKG SPACE MRKG	EA	8.000	225.00000	1,800.00
E 1	59003	700 705	NS LIGHTING LIGHTING	LS	1.000	75000.00000	75,000.00
E 1	59050		NS COMMUNICATION EQUIP. CAMERA	EA	3.000	5000.00000	15,000.00

SUBTOTAL

110,736.03

NET TOTAL

1,691,136.96

5.00000 % FOR CONTINGENCIES

84,556.84

TOTAL

1,775,693.80

1 80.00 % AF01 FEDERAL PARTICIPATION
 1 20.00 % S400-STATE CONSTRUCTION FUNDS

1,420,555.04
 355,138.76

17.0000 % FOR ENGINEERING

287,493.28

1 80.00 % AF01 FEDERAL PARTICIPATION
 1 20.00 % S400-STATE CONSTRUCTION FUNDS

229,994.62
 57,498.65

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL COST ESTIMATE

09/04/14
 PAGE NO. 1

ESTIMATE NUMBER : C00099542M01 PCN : 00099542M01 PROJECT NO. : 0081-080-S04, M501 CONTRACT ID :
 PCN : 00099542M01 RTE. 81 - EXIT 140 PARK 'N RIDE FACILITY EXPANSION

CATEGORY : 0100 REGULAR BID ITEMS
 FUNDING SOURCE(S) AND PARTICIPATION : AF01 AF01 FEDERAL PARTICIPATION 80.00 %
 S400 S400-STATE CONSTRUCTION FUNDS 20.00 %

CONSTRUCTION TYPE : 23 23-TRANSIT
 WORK CLASSIFICATION : 631 631 CONTRACT CONSTR - REGULAR - FED CAT LENGTH : 0.1700 MILES
 CONSTRUCTION CLASS : CAT WIDTH : 134.5000 FEET

LINE NO.	ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITY	ITEM UNIT	UNIT PRICE	AMOUNT
0010	00100	MOBILIZATION	1.000	LUMP	109,101.76000	109,101.76
0020	00102	CONSTRUCTION SURVEYING (MIN.-PLAN)	1.000	LUMP	15,663.71000	15,663.71
0030	00106	NS MONITORING MONITORING OBSERVATION WELL	2.000	EA	500.00000	1,000.00
0040	00120	REGULAR EXCAVATION	8,484.000	CY	19.48000	165,268.32
0050	00140	BORROW EXCAVATION	1,992.000	CY	12.13000	24,162.96
0060	00355	GEOTEXTILE (SUBGRADE STABILIZATION)	9,353.000	SY	1.52239	14,238.91
0070	00525	CONCRETE CLASS A3 MISC.	1.300	CY	763.18000	992.13
0080	00598	NS UNDERDRAIN UNDERDRAIN PERFORATED 6" PVC UNDERDRAIN	4,850.000	LF	15.00000	72,750.00
0090	00700	POST INSTALLATION INSPECTION	743.000	LF	6.99000	5,193.57
0100	01186	STORM SEWER PIPE 18"	626.000	LF	56.60516	35,434.83
0110	01246	STORM SEWER PIPE 24"	117.000	LF	75.95000	8,886.15
0120	06750	DROP INLET DI-2B,L=10'	3.000	EA	5,256.10000	15,768.30
0130	06820	DROP INLET DI-3B,L=10'	2.000	EA	4,322.14000	8,644.28
0140	07506	DROP INLET DI-5	1.000	EA	4,054.18000	4,054.18
0150	09056	MANHOLE MH-1 OR 2	10.000	LF	463.32401	4,633.24
0160	09057	FRAME & COVER MH-1	2.000	EA	430.28004	860.56
0170	09185	PAVED DITCH PG-2A	85.000	SY	89.93002	7,644.05
0180	10128	AGGR. BASE MATL. TY. I NO. 21B	715.000	TON	27.51656	19,674.34
0190	10250	NS AGGR. MATERIAL AGGR. MATERIAL NO. 2 308 309	15,290.000	TON	30.00000	458,700.00
0200	10250	NS AGGR. MATERIAL AGGR. MATERIAL NO. 57 STONE 308 309	376.000	TON	33.00000	12,408.00
0210	10496	NS PAVEMENT PAVEMENT POROUS ASPHALT MATERIAL	71,016.000	SF	3.68000	261,338.88
0220	10635	ASPHALT CONCRETE TY. SM-9.5A	127.000	TON	176.88779	22,464.75
0230	10642	ASPHALT CONCRETE TY. BM-25.0A	351.000	TON	154.25067	54,141.99
0240	11070	NS SAW-CUT ASPH CONC SAW-CUT ASPH CONC FULL DEPTH	956.000	LF	4.00000	3,824.00
0250	12020	STD. CURB CG-2	824.000	LF	21.04204	17,338.64
0260	12022	RADIAL CURB CG-2	288.000	LF	24.93467	7,181.18
0270	12600	STD. COMB. CURB & GUTTER CG-6	727.000	LF	24.16331	17,566.73
0280	12610	RADIAL COMB. CURB & GUTTER CG-6	77.000	LF	61.00609	4,697.47
0290	12700	STD. COMB. CURB & GUTTER CG-7	575.000	LF	19.20736	11,044.23
0300	12710	RADIAL COMB. CURB & GUTTER CG-7	156.000	LF	28.24729	4,406.58
0310	13108	CG-12 DETECTABLE WARNING SURFACE	5.000	SY	229.23000	1,146.15
0320	13220	HYDRAULIC CEMENT CONC. SIDEWALK 4"	559.000	SY	60.31783	33,717.67

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL COST ESTIMATE

09/04/14
 PAGE NO. 2

ESTIMATE NUMBER : C00099542M01 PCN : 00099542M01 PROJECT NO. : 0081-080-S04, M501 CONTRACT ID :
 PCN : 00099542M01 RTE. 81 - EXIT 140 PARK 'N RIDE FACILITY EXPANSION

CATEGORY : 0100 REGULAR BID ITEMS

LINE NO.	ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITY	ITEM UNIT	UNIT PRICE	AMOUNT
0330	13320	GUARDRAIL GR-2	128.000	LF	21.43379	2,743.53
0340	13331	RAD. GUARDRAIL GR-2	68.000	LF	22.52244	1,531.53
0350	13530	RETAINING WALL RW-3	30.000	CY	549.79000	16,493.70
0360	14502	REINFORCING STEEL	70.000	LB	2.06000	144.20
0370	22501	FENCE FE-W1	180.000	LF	6.88000	1,238.40
0380	22541	LINE BRACE UNIT FE-W1,FE-W2	5.000	EA	208.96000	1,044.80
0390	22581	CORNER BRACE UNIT FE-W1,FE-W2	5.000	EA	213.91000	1,069.55
0400	22643	FENCE FE-CL	134.000	LF	16.29000	2,182.86
0410	24160	CONSTRUCTION SIGNS	200.000	SF	17.39000	3,478.00
0420	24265	NS MAINTENANCE OF TRAFFIC MAINTENANCE OF TRAFFIC MAINTENANCE OF TRAFFIC	1.000	LUMP	75,000.00000	75,000.00
0430	24410	DEMOLITION OF PAVEMENT	4,663.000	SY	5.58000	26,019.54
0440	24952	BICYCLE RACK (INGROUND MOUNT)	2.000	EA	500.00000	1,000.00
0450	25000	HANDRAIL HR-1	16.000	LF	89.70000	1,435.20
0460	27102	REGULAR SEED	152.000	LB	14.29000	2,172.08
0470	27103	OVERSEEDING	95.000	LB	6.91000	656.45
0480	27215	FERTILIZER(15-30-15)	1.000	TON	1,394.93000	1,394.93
0490	27250	LIME	4.000	TON	248.40000	993.60
0500	27505	TEMP. SILT FENCE	1,900.000	LF	2.65000	5,035.00
0510	28810	MULCHING	7.000	UNIT	60.00000	420.00
0520	35264	INKBERRY 3'	20.000	EA	100.00000	2,000.00
0530	38925	NS TRASH RECEPTACLE TRASH RECEPTACLE TRASH RECEPTACLE	2.000	EA	500.00000	1,000.00
0540	38935	NS COMMUTER COMMUTER INSTALL BUS SHELTER	2.000	EA	1,000.00000	2,000.00
0550	38935	NS COMMUTER COMMUTER KIOSK	1.000	EA	1,000.00000	1,000.00
0560	38950	NS LANDSCAPE LANDSCAPE BOLLARD	8.000	EA	800.00000	6,400.00
0570	50108	SIGN PANEL	130.000	SF	31.65743	4,115.47
0580	50430	SIGN POST STP-1 2"	80.000	LF	19.54000	1,563.20
0590	50490	CONCRETE FOUNDATION STP-1	8.000	EA	289.32000	2,314.56
0600	54032	TYPE B CLASS I PAVE. LINE MARKING 4"	6,560.000	LF	0.96721	6,344.90
0610	54042	TYPE B CLASS I PAVE. LINE MARKING 24"	35.000	LF	17.54896	614.21
0620	54300	PAVEMENT MESSAGE MARK. ELONGATED ARROW SINGLE	22.000	EA	181.07687	3,983.69
0630	54402	NS PAVE. MESSAGE MARKING PAVE. MESSAGE MARKING INT'L. SYMBOL OF ACCESS. PRKG SPACE MRKG	8.000	EA	225.00000	1,800.00
0640	59003	NS LIGHTING LIGHTING LIGHTING	1.000	LUMP	75,000.00000	75,000.00
0650	59050	NS COMMUNICATION EQUIP. COMMUNICATION EQUIP. CAMERA	3.000	EA	5,000.00000	15,000.00

 CATEGORY TOTAL \$ 1,691,136.96
 PROJECT TOTAL \$ 1,691,136.96
 ESTIMATE TOTAL \$ 1,691,136.96

VIRGINIA DEPARTMENT OF TRANSPORTATION
 DETAIL ESTIMATE FUNDING SUMMARY

09/04/14
 PAGE NO. 1

ESTIMATE NUMBER: C00099542M01

PROJECT CONTROL NO.	CATEGORY	COST	ENG. PERCENT ENG. AMOUNT	CONTGY. PCT AMOUNT	TOTAL AMOUNT	FUNDING SOURCE	FUNDING AMOUNT
00099542M01	0100 REGULAR BID ITEMS	\$ 1,691,136.96	\$ 17.00 287,493.28	\$ 5.00 84,556.84	\$ 2,063,187.09	AF01 S400	\$ 1,650,549.67 \$ 412,637.42
TOTAL FOR CATEGORY 0100							\$ 2,063,187.09
TOTAL FOR PROJECT 00099542M01							\$ 2,063,187.09
ESTIMATE TOTAL							\$ 2,063,187.09

VIRGINIA DEPARTMENT OF TRANSPORTATION
 FUNDING SUMMARY BY UNIT

09/04/14
 PAGE NO. 1

PROJECT CONTROL NUMBER : 00099542M01
 PROJECT NUMBER : 0081-080-S04, M501

UNIT	COST	ENGR.AMOUNT	CONTINGENCIES	TOTAL	FUNDING

FUND CLASS AF01 AF01 FEDERAL PARTICIPATION					
000	\$ 1,691,136.96	\$ 287,493.28	\$ 84,556.84	\$ 2,063,187.08	\$ 1,650,549.67
FUND CLASS AF01 TOTALS	\$ 1,691,136.96	\$ 287,493.28	\$ 84,556.84	\$ 287,493.28	\$ 1,650,549.67

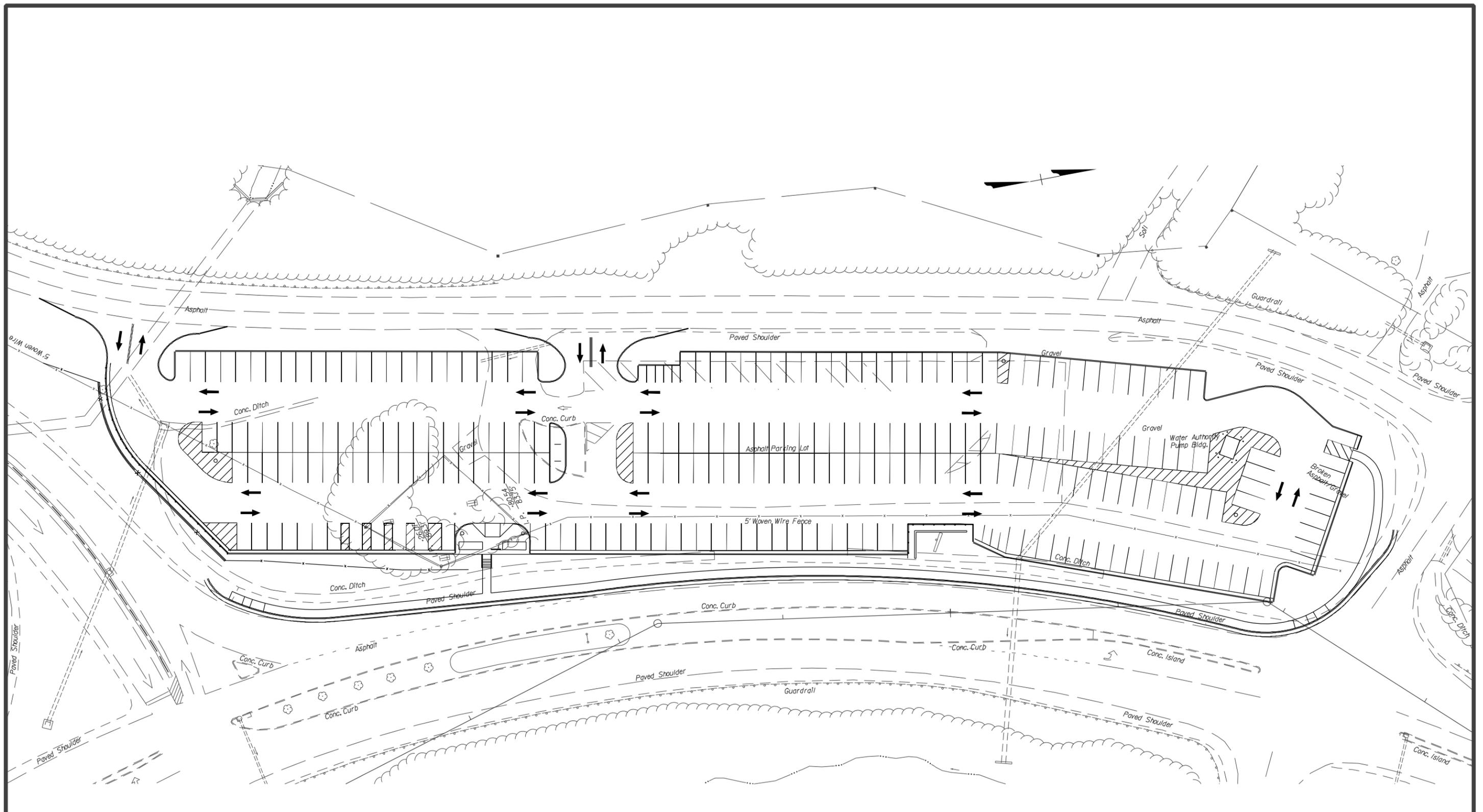
FUND CLASS S400 S400-STATE CONSTRUCTION FUNDS					
000	\$ 1,691,136.96	\$ 287,493.28	\$ 84,556.84	\$ 2,063,187.08	\$ 412,637.42
FUND CLASS S400 TOTALS	\$ 1,691,136.96	\$ 287,493.28	\$ 84,556.84	\$ 287,493.28	\$ 412,637.42
PROJECT TOTALS	\$ 1,691,136.96	\$ 287,493.28	\$ 84,556.84	\$ 2,063,187.09	\$ 2,063,187.09

VIRGINIA DEPARTMENT OF TRANSPORTATION
 CATEGORY FUNDING SUMMARY BY FUND

09/04/14
 PAGE NO. 1

PROJECT CONTROL NUMBER : 00099542M01
 PROJECT NUMBER : 0081-080-S04, M501

CATEGORY			COST	ENGINEERING	CONTINGENCIES	TOTAL	FUNDING
FUND CLASS AF01 AF01 FEDERAL PARTICIPATION							
0100 REGULAR BID ITEMS			\$ 1,691,136.96	\$ 287,493.28	\$ 169,113.69	\$ 2,232,300.78	\$ 1,650,549.67
FUND CLASS AF01 TOTALS			\$ 1,691,136.96	\$ 287,493.28	\$ 169,113.69	\$ 2,232,300.78	\$ 1,650,549.67
FUND CLASS S400 S400-STATE CONSTRUCTION FUNDS							
0100 REGULAR BID ITEMS			\$ 1,691,136.96	\$ 287,493.28	\$ 169,113.69	\$ 2,232,300.78	\$ 412,637.42
FUND CLASS S400 TOTALS			\$ 1,691,136.96	\$ 287,493.28	\$ 169,113.69	\$ 2,232,300.78	\$ 412,637.42
PROJECT TOTALS			\$ 1,691,136.96	\$ 287,493.28	\$ 169,113.69	\$ 2,232,300.78	\$ 2,063,187.09



VDOT

Interstate 81 Exit 140 Park & Ride Facility Expansion
 Project 0081-080-S04, M501
 UPC 99542

Whitman, Reardon & Associates, LLP September 22, 2014

AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF ROANOKE COUNTY, VIRGINIA, HELD AT THE ROANOKE COUNTY ADMINISTRATION CENTER, ON TUESDAY, SEPTEMBER 23, 2014

RESOLUTION 092314-4.f REQUESTING THE ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION FUND A LIST OF PROJECTS FOR THE FISCAL YEAR 2016-2021 REGIONAL SURFACE TRANSPORTATION PROGRAM

WHEREAS, the Roanoke Valley Area Metropolitan Planning Organization reviews applications for funding through the Regional Surface Transportation Program and makes recommendations for project funding to the Commonwealth Transportation Board; and

WHEREAS, the Roanoke County Board of Supervisors reviewed a list of six (6) projects for Regional Surface Transportation Program funding at a work session on September 9, 2014; and

WHEREAS, the Roanoke County Board of Supervisors supports the list of six (6) projects for Regional Surface Transportation Program funding.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Roanoke County, Virginia requests the Roanoke Valley Area Metropolitan Planning Organization fund the following list of projects for the fiscal year 2016-2021 Regional Surface Transportation Program:

1. Plantation Road Project – Lila Drive Intersection
2. Plantation Road Project – Friendship / Carvin's Creek Bridge Replacement
3. Plantation Road Project – Friendship Lane Reconstruction
4. Plantation Road Project – Phase 2
5. Exit 140 Park and Ride

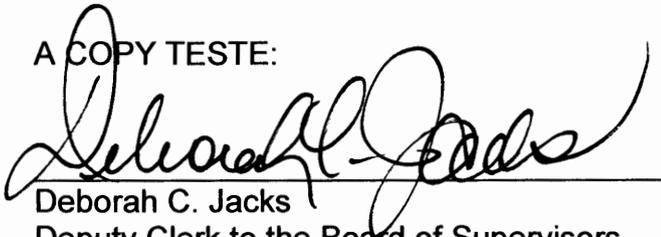
6. West Main Street Pedestrian Improvements – Phase 2

On motion of Supervisor McNamara to adopt the resolution, and carried by the following recorded vote:

AYES: Supervisors Moore, Bedrosian, Church, Peters, McNamara

NAYS: None

A COPY TESTE:



Deborah C. Jacks
Deputy Clerk to the Board of Supervisors

cc: David Holladay, Planning Administrator
Roanoke Valley Area Metropolitan Planning Organization



RSTP Project Profile – Candidate Project # 1

1. **Project Sponsor(s):** Roanoke County
2. **Proposed Implementing Agency:** Virginia Department of Transportation
3. **Project Description and Attached Aerial Showing Proposed Improvement Location:**

The Exit 140 Park & Ride was originally constructed in the 1970s, when exit 140 was added to Interstate Route 81. During this construction, Route 311, Thompson Memorial Drive was widened, and Route 1150, Edgebrook Road was realigned to intersect with Route 1182, Mountain Heights Drive. In the remaining right of way between Edgebrook Road and Thompson Memorial Drive, a Commuter Parking Lot was constructed in the Virginia Department of Transportation (VDOT) right of way.

The Park & Ride experienced steady, moderate use until around 2007-2008. With a combination of sharp increases in fuel prices and the growing popularity of the Smart Way bus service, the facility began to experience consistent capacity and overflow parking use. During this time, commuters parked along the shoulders of Edgebrook Road, grass areas along the edges of the parking lot, and a large grass area to the north of the parking lot. The large grass area quickly became denuded, with unauthorized entrances in various locations along Edgebrook Road and Mountain Heights Drive.

In late 2008, Roanoke County and VDOT began discussions for a solution to the overflow parking situation. County staff drew conceptual plans that would add parking spaces, and bring the entire facility up to current parking standards. About the same time, VDOT entered into a Limited Services Design Contract with Whitman, Requardt & Associates, LLP (WR&A), to review the facility, recommend improvements, and develop preliminary cost estimates. The WR&A study was completed in February, 2009, and is attached as a reference document with this application. In late 2009, VDOT stabilized and surface treated the denuded overflow area. VDOT also installed wheel stops along the perimeter, to discourage unauthorized entrance from Mountain Heights Drive and Edgebrook Road.

Aerial photographs attached to this application show a “before and after” picture of the situation. In the 2006 aerial, the original Park & Ride showed moderate use and some impacts to inside and outside turn radius areas around the southern entrance. In the 2008 aerial, the northern grass area is almost totally denuded from overflow parking, as well as the eastern edge of the Park & Ride, and the shoulders of Edgebrook Road. In 2011, aerial photography shows the surface-treated overflow area, and gravel shoulder added to the impacted radii on the southern side. Accompanying photographs taken by County staff in October, 2008 show the denuded overflow parking area. Photographs from April, 2013 show the current condition of the facility, including sub-standard parking spaces, and deterioration of the pavement.

In 2010, VDOT applied unsuccessfully for Federal Highway Administration funds to reconstruct the Park & Ride. In 2011, VDOT created UPC 99542, using the estimates from the WR&A study, making the facility eligible for Federal funds. VDOT Project Detail sheets are attached as reference. As recently as October, 2012, Roanoke County and VDOT have worked together to develop solutions to unintended impacts from the Park & Ride expansion area. Headlights pointed directly into neighbors’ homes, noise, and trash have become commonplace. The plans that Roanoke County staff and WR&A designed would help alleviate these issues, with redirected parking angles, landscape screening, security lighting, and additional trash receptacles.

The Exit 140 Park & Ride needs to be reconstructed to current engineering standards. Designs call for an additional expansion area on the western side, and redesigned main parking lot and eastern area. A bus shelter



with bicycle rack(s) would be placed in the middle of the facility, near where the Smart Way bus would exit to Edgebrook Road. Additional lights and trash receptacles would be installed. In addition, landscaping would be installed to screen the eastern expansion area, as well as enhance stormwater quality and aesthetics. Once reconstructed, this Park & Ride would be a truly multi-modal facility. It would serve the entire Roanoke Valley for years to come, as well as be a model for future Park & Ride facilities along Interstate 81, and around the region.

Regional Surface Transportation Program (RSTP) funds are ideal to support the reconstruction of the Exit 140 Park & Ride. The project qualifies for the Regional Surface Transportation Program under the following categories:

Transportation Demand Management Projects

- Park and Ride Lots are specifically listed as projects that qualify for RSTP funds.

Transit Projects

- Bus Shelter is included to enhance existing Smart Way bus service.

Pedestrian and/or Bicycle Improvements

- Bicycle Rack(s) included in the reconstruction plan
- Route 311, Thompson Memorial Drive in Roanoke County is listed on the Priority List of bicycle routes - Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update
- Route 311, Thompson Memorial Drive in the City of Salem is listed on the Vision List of bicycle routes - Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update
- Gish Branch Greenway, priority level 3, would terminate generally along Route 311, south of Interstate 81 - Update to the Roanoke Valley Conceptual Greenway Plan – 2007

4. Detailed Scope of Work, proposed Schedule and Relation to Other Projects or Project Phases, Project Status and Other Funding Sources:

Detailed Scope of Work

- Scoping/Preliminary Design Phase (completed)
- Detailed Design Phase (underway)
- Final Design Phase
- Advertisement For Construction
- Construction

UPC 99542 Programming Schedule

- Dates are preliminary estimates
- Construction start date could be accelerated to 2014-2015 with RSTP award

	Preliminary Engineering	Construction
Start	11/30/2012	09/12/2017
End	09/12/2017	12/03/2018

Relation to Other Projects or Project Phases, Project Status and Other Funding Sources

- Project has no funding at this time.



- VDOT Regional Traffic Operations administered the WR&A study in 2009.
- VDOT maintenance funds were used to stabilize and surface treat the expansion area.
- Roanoke County staff designed preliminary and detailed reconstruction plans, and conceptual screen fence plans to minimize light and noise impacts.

5. **Functional Classification:** N/A

6. **Existing Traffic Volume and Level of Service with Improvement:** N/A

7. **Existing Volume/Capacity:** Approximately 100 sub-standard spaces

8. **Future Traffic Volume or Projected Ridership with Service Implementation:** N/A

9. **Future Volume/Capacity and Level of Service:** 117 spaces

10. **Estimated Project Cost by Phase:**

Activity Phase	Cost
Preliminary Engineering	\$160,824.39
Right-of-Way	\$0
Construction	\$1,447,419.46
Total Cost	\$1,608,243.85

For more budget details, please see the following attachments:

- a. WR&A study entitled “Interstate 81, Exit 140 Park & Ride Facility for Salem District Maintenance Division”
- b. UPC 99542, VDOT Project Detail Sheet – preliminary estimates based on the WR&A study
- c. Roanoke County project cost estimate, includes the following costs not included in the WR&A estimate:
 - Stormwater quantity and quality measures
 - Bus shelter
 - Bicycle rack(s)
 - Landscaping
 - Lighting
 - Trash receptacles

11. **RSTP Candidate Project Rating Factors**

a. **Regional Project Consideration**

Reconstruction of the Exit 140 Park & Ride is an ideal candidate for RSTP funds. Roanoke County and VDOT would partner as sponsoring and implementing agency, respectively. All eligible recipients of RSTP funds in the Roanoke Valley Area would benefit from the project. This includes all local governments in the Roanoke Valley Area Metropolitan Planning Organization, Greater Roanoke Transit Company, Unified Human Services Transportation Systems, Inc, Virginia Department of Transportation, Virginia Department of Rail and Public Transportation, and the planning and programming efforts of the Roanoke Valley Area Metropolitan Planning Organization and the Roanoke Valley Alleghany Regional Commission. In addition, travelers on the Federal, State and Local highway systems use the facility. Citizens from around the Roanoke Valley and beyond would benefit from the reconstructed facility.



b. Support the Economic Vitality of the Metropolitan Area

The project adds capacity to the Interstate, Primary and Secondary system of highways by removing 100+ vehicles at any time that the lot is filled. The project serves Interstate 81 which is one of the most important transportation corridors in the Commonwealth of Virginia. The reconstructed Park & Ride would serve as a model for future Park & Ride facilities to be considered during expansion of Interstate 81.

c. Increase the Safety and Security of the Transportation System

The project reduces 100+ drivers on the Interstate, Primary and Secondary highways at any given time. Passengers in car-pool vehicles or busses have the option to direct their attention away from driving to other tasks.

d. Increase the Accessibility and Mobility Options Available to People and/or Freight

The project would enhance multiple modes of transportation. A bus shelter with bicycle rack(s) would be added to better serve the Smart Way bus service. Handicap parking would be relocated adjacent to the bus shelter. Bicyclists could ride to and from the facility and have a safe and secure location to lock a bicycle. Employees commuting to and from area businesses have more options for transportation.

e. Protect and Enhance the Environment, Promote Energy Conservation, and Improve Quality of Life

The project reduces motor fuel consumption by removing vehicles from the highway system. Stormwater quantity and quality would be evaluated and managed. Landscaping would provide screening and aesthetic benefits. Park & Ride facilities improve the quality of life for all citizens of the Roanoke Valley.

f. Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and/or Freight

Park & Ride facilities fit all of these criteria. Please refer to Section D above for additional qualifications.

g. Promote Efficient System Management and Operation

Park & Ride lots help achieve Transportation Demand Management goals and objectives in the RVAMPO Constrained Long Range Transportation Plan 2035.

h. Emphasize the Preservation of Existing Transportation System

The project preserves the existing Park & Ride facility, replaces deteriorating or sub-standard pavement, and expands the facility. The new design would improve vehicular circulation, define parking spaces, and improve existing Smart Way bus service.

i. Cost/Benefit Consideration

RSTP Request	\$1,608,243.85
Number of Parking Spaces	117
<u>Request/# Spaces</u>	<u>\$13,745.67</u>

j. Projects included in previous plans that had a public input process associated with the plan:

RVAMPO Constrained Long Range Transportation Plan 2035: Vision List. The CL RTP lists Park & Ride lots as an important component of Transportation Demand Management. Exit 140 Park & Ride Expansion is on the Vision List as a Transportation Demand Management project.

Ride Solutions Park-and-Ride Study, Inventory, Use and Need – 2009 Update: The study identifies the Exit 140 Park & Ride as exceeding capacity, and recommends expansion of the facility.



Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update: Route 311, Thompson Memorial Drive is listed as a Priority bicycle route in Roanoke County, and a Vision bicycle route in the City of Salem.
Update to the Roanoke Valley Conceptual Greenway Plan – 2007: Gish Branch Greenway, priority level 3, would terminate generally along Route 311, south of Interstate 81.

Attachments:

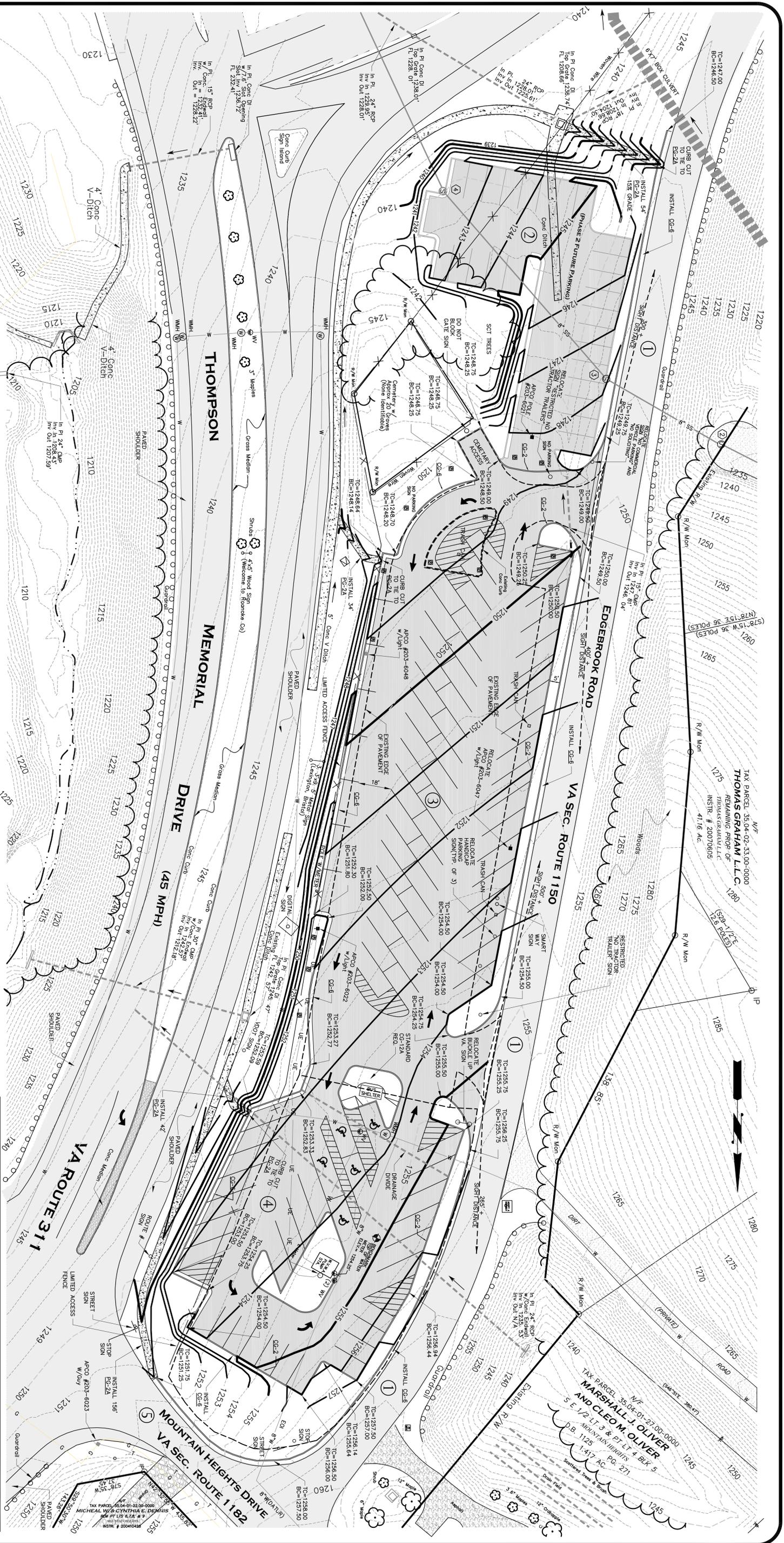
1. Aerial Photographs – 2006, 2008, 2011
2. Ground Level Photographs – 2008, 2013
3. Roanoke County Preliminary Engineering Plans
4. Roanoke County Preliminary Cost Estimate
5. WR&A Study “Interstate 81 Exit 140 Park & Ride Facility for Salem District Maintenance Division”
6. VDOT Project Detail Sheet, UPC 99542

**Interstate 81, Exit 140 Park Ride Facility
Fiscal Year 2014 Regional Surface Transportation Program**

SPEC	ITEM	QUANTITIES	UNIT	UNIT PRICE	EXTENDED COST
1	Engineering / Surveying	1	LS	\$ 12,000.00	\$ 12,000.00
2	Mobilization (10%)	1	LS	\$ 108,836.90	\$ 108,836.90
3	Traffic Control	1	LS	\$ 10,000.00	\$ 10,000.00
4	Signage	1	LS	\$ 5,000.00	\$ 5,000.00
5	Landscaping	1	LS	\$ 41,385.00	\$ 41,385.00
6	E & S Control Items	1	LS	\$ 55,680.00	\$ 55,680.00
7	Demolition of Pavement	5416	SY	\$ 6.00	\$ 32,496.00
8	Demolition of Curb & Gutter	125	LF	\$ 6.00	\$ 750.00
9	Borrow Excavation	2,100	CY	\$ 13.00	\$ 27,300.00
10	2" Asph. Conc. Typ. SM-9.5A	715	TON	\$ 137.00	\$ 97,955.00
11	4" Asph. Conc. Typ. BM-25	1497	TON	\$ 153.00	\$ 229,041.00
12	8" Aggr. Base Matl. Typ. 1 No. 21B	2866	TON	\$ 54.00	\$ 154,764.00
13	Std. Curb CG-2	1460	LF	\$ 30.00	\$ 43,800.00
14	Std. Comb. Curb & Gutter CG-6	1470	LF	\$ 42.00	\$ 61,740.00
15	Type A Pavement Line Marking 4"	4040	LF	\$ 0.25	\$ 1,010.00
16	Pavement Mess Mark Elong Arrow	9	EA	\$ 120.00	\$ 1,080.00
17	Parking Stops	35	EA	\$ 125.00	\$ 4,375.00

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18	AEP Pole Relocations	3	EA	\$ 3,500.00	\$ 10,500.00
19	Lighting Pole LP-2	10	EA	\$ 1,995.00	\$ 19,950.00
20	Luminaire 150 Watt H.P.S.	10	EA	\$ 605.00	\$ 6,050.00
21	Concrete Foundation LF-1	10	EA	\$ 1,150.00	\$ 11,500.00
22	Lighting Conduit	1500	LF	\$ 30.00	\$ 45,000.00
23	Control Center CCW-1	1	EA	\$ 9,975.00	\$ 9,975.00
24	Bus Shelter	1	EA	\$ 9,500.00	\$ 9,500.00
25	Concrete Pad	1	EA	\$ 2,376.00	\$ 2,376.00
26	Waste Receptacles	4	EA	\$ 858.00	\$ 3,432.00
27	Bike Rack	1	EA	\$ 398.00	\$ 398.00
28	Filterra	2	EA	\$ 19,200.00	\$ 38,400.00
29	Manhole MH-1	2	EA	\$ 2,500.00	\$ 5,000.00
30	36" CMP	600	LF	\$ 72.00	\$ 43,200.00
31	Paved Ditch PG-2A	153	LF	\$ 240.00	\$ 36,720.00
32	Grass Swale	8500	SF	\$ 1.20	\$ 10,200.00
33	21-B Stone	1208	TON	\$ 54.00	\$ 65,232.00
34	Excavation (Cut)	760	CY	\$ 6.00	\$ 4,560.00
	Sub-Total Spec # 3-34				\$ 1,088,369.00
	Sub-Total Spec # 1-34				\$1,209,205.90
	Construction, Engineering & Incidentals	28%			\$338,577.65
	Contingency	5%			\$60,460.30
	TOTAL:				\$ 1,608,243.85



EXISTING SANITARY SEWER SCHEDULE

1-2 Pipe PVC In Fl 1228.04 Inv Out 1227.30	3-4 Pipe In Fl 1226.35 Inv Out 1225.61
2-3 Pipe In Fl 1227.14 Inv Out 1226.54	4-5 Pipe In Fl 1225.47 Inv Out 1220.37
SMH Top Rim 1233.50 FL 1227.20	SMH Top Rim 1239.76 FL 1223.97
SMH Rim 1232.70 FL 1228.10	SMH Rim 1248.06 FL 1226.43
SMH Rim 1229.64 FL 1220.34	

OVERLAND DRAINAGE ZONES

- 1 ZONE 1 (EDGE BROOK ROAD) 9,612 S.F.
- 2 ZONE 2 (PHASE 2 FUTURE PARKING) 10,268 S.F.
- 3 ZONE 3 (PHASE 1 PARKING SURFACE) 33,593 S.F.
- 4 ZONE 4 (PHASE 1 PARKING SURFACE) 15,530 S.F.
- 5 ZONE 5 (MOUNTAIN HEIGHTS DRIVE) 1782 S.F.

LEGEND

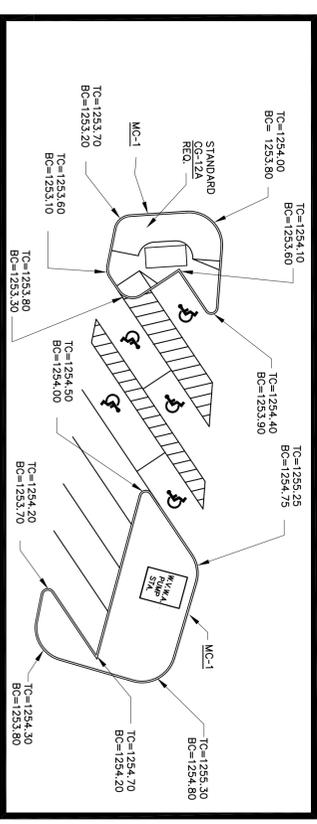


PLAN

SCALE: 1"=25'

EXISTING PARKING	PROPOSED PARKING	FUTURE PARKING
55 SPACES	87 SPACES	25 SPACES
3 HANDICAP	5 HANDICAP	2 HANDICAP
58 10'x14'	92 10'x14'	25 10'x14'

EXISTING PAVEMENT (ROAD)	PROPOSED PAVEMENT (PARKING)
EXISTING PAVEMENT (PARKING LOT)	PROPOSED PAVEMENT (PHASE 1 PARKING) 49,123 S.F.
PAVEMENT (2009 EXPANSION TO PARKING LOT)	28,057 S.F.
PAVEMENT (FUTURE PARKING)	20,743 S.F.
	48,800 S.F.



DEPARTMENT OF
COMMUNITY
DEVELOPMENT

NO.	REVISIONS	DATE
1		
2		
3		
4		
5		
6		

**ROANOKE COUNTY
PARK AND RIDE 1-81**

DATE:	3/2/2009
SCALE:	1" = 25'
DRAWING BY:	BVE
DESIGNED BY:	BVE
APPROVED BY:	VDDT



PLAN

SHEET
4
OF
8