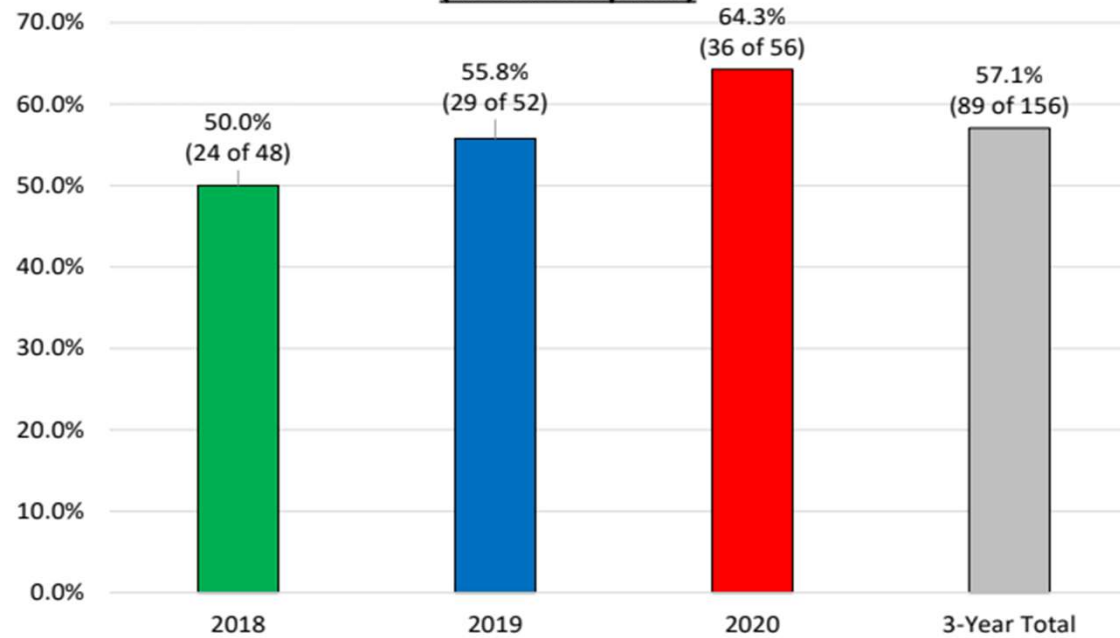


# Culpeper District Welcome

**John Lynch, P.E.**  
***Culpeper District Engineer***



**Victims not Wearing a Seatbelt  
(When an option)**

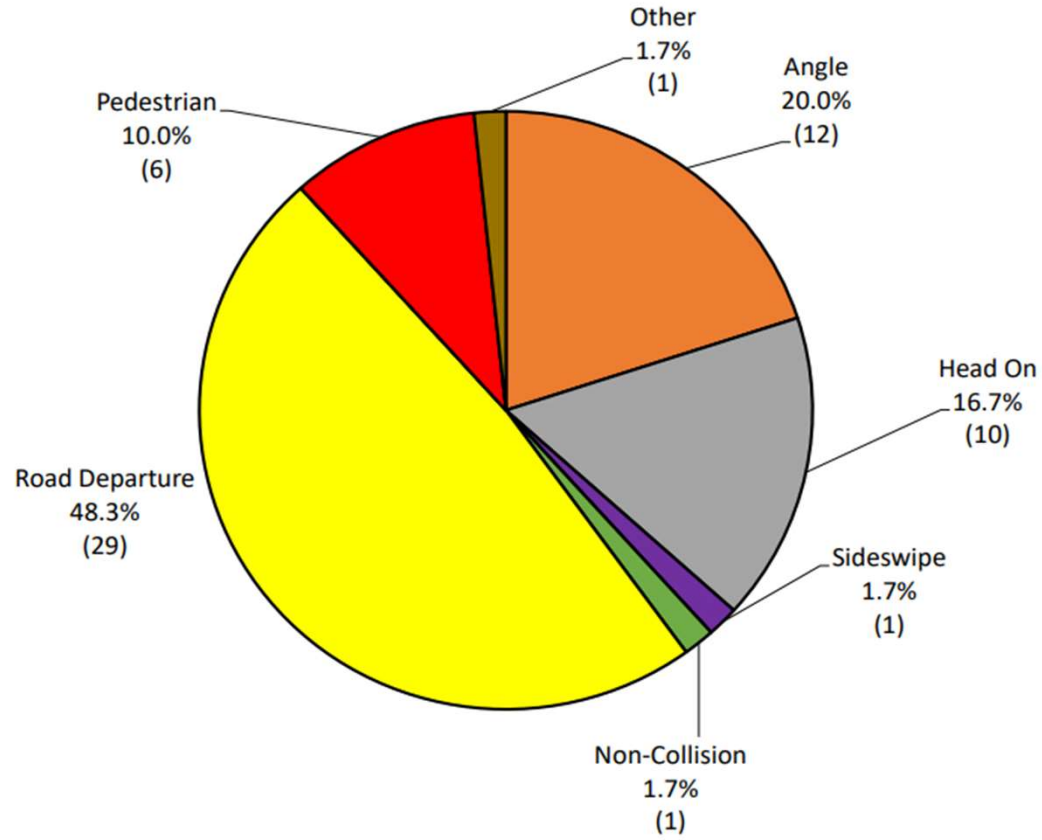


11

**Unbelted fatalities show troubling rise**

**Fatal Crashes per Crash Type**

**Year 2020 (60)**

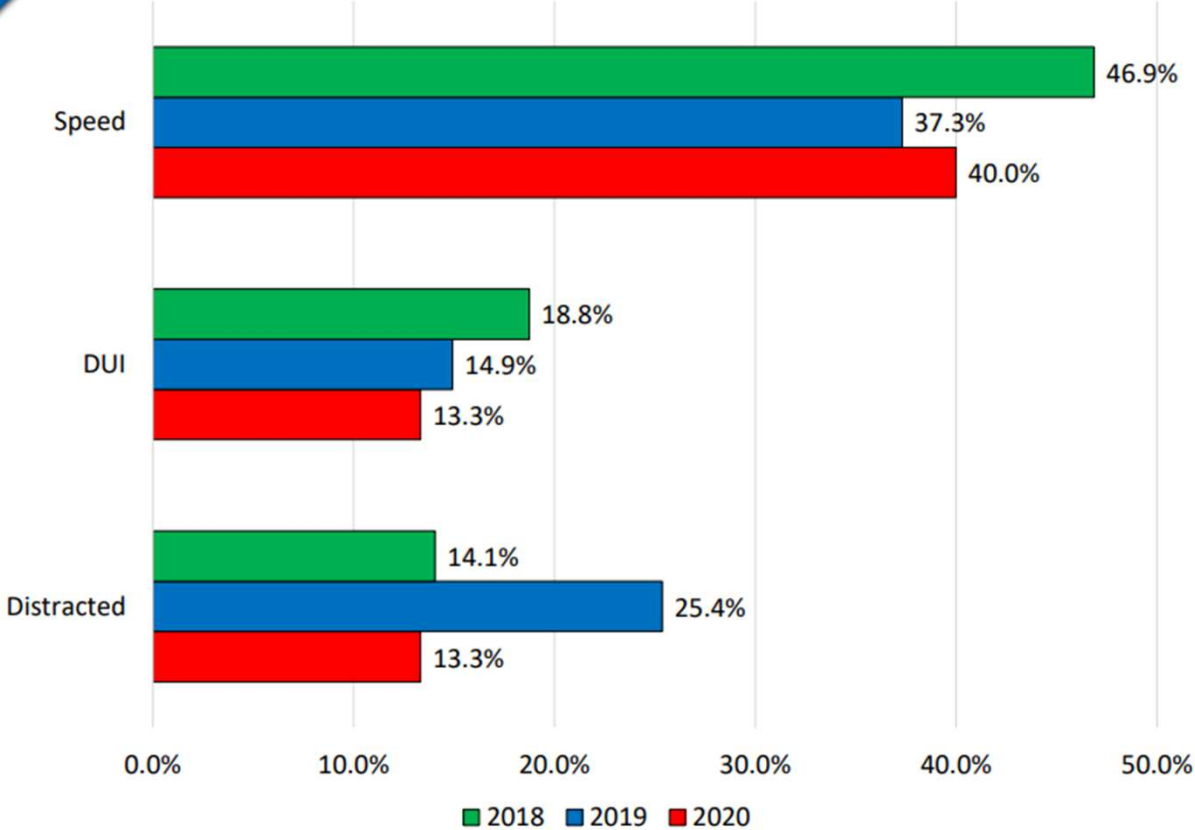


7

# SAFETY



**Contributing Factors to Fatal Crashes  
(Percentage of All Fatal Crashes)**



## ***CULPEPER DISTRICT DELIVERS!***

- **First SMART SCALE project completed in Va: Roundabout at U.S. 15 / Route 53, Palmyra**
- **Route 29 Solutions: 8 projects, \$254 million, completed in 3 years**
- **Warrenton Interchange project: \$27 million, completed ahead of schedule**
- **Albemarle Co. Design-Build bundle: 6 projects, \$28.5 million, currently under construction**

# Culpeper Project Development

**Greg Cooley, P.E.**

***District Project Development Engineer***

*Gregory.Cooley@VDOT.Virginia.gov*

**CULPEPER DISTRICT  
PROJECT DEVELOPMENT**

**Project Development Section Heads**

<b>Location and Design Engineer</b>	<b>Mike Jacobs, PE</b>
<b>Environmental Manager</b>	<b>Rick Crofford</b>
<b>Structure &amp; Bridge Engineer</b>	<b>Teresa Gothard, PE</b>
<b>District Traffic Engineer</b>	<b>Troy Austin, PE</b>
<b>Local Assistance</b>	<b>Tom FitzPatrick, PE</b>

## **CULPEPER DISTRICT PROJECT DEVELOPMENT**

### **FY2020 PE Performance** July 2019 – June 2020

<b>Measure</b>	<b>FY20 Target</b>	<b>FY20 Results</b>
<b>VDOT Advertisement OT</b>	<b>70%</b>	<b>90%</b>
<b>VDOT Advertisement OB</b>	<b>74%</b>	<b>60%</b>
<b>LAP Advertisement OT</b>	<b>70%</b>	<b>36%</b>
<b>LAP Advertisement OB</b>	<b>74%</b>	<b>63%</b>



## **CULPEPER DISTRICT PROJECT DEVELOPMENT**

### **FY2021 PE Performance** July 2020 – June 2021

<b>Measure</b>	<b>FY21 Target</b>	<b>FY21 Results</b>
<b>VDOT Advertisement OT</b>	<b>70%</b>	<b>100%</b>
<b>VDOT Advertisement OB</b>	<b>74%</b>	<b>84%</b>
<b>LAP Advertisement OT</b>	<b>70%</b>	<b>52%</b>
<b>LAP Advertisement OB</b>	<b>74%</b>	<b>52%</b>



## Round 4

- **36 Applications**
- **Focused on better quality projects**



## Round 4

Albemarle / Charlottesville	Fifth Street Hub and Trails	\$ 9,841,290
Charlottesville	W Main Streetscape Ph 3 - 8th St NW to Roosevelt Brown Ave	\$ 10,874,697
Charlottesville	Ridge Street Safety Improvement	\$ 8,738,020
Charlottesville	Preston Ave. & Grady Ave Intersection Improvements	\$ 7,743,498
Charlottesville	Emmet Street Multimodal Phase 2	\$ 20,465,490



## Round 4

Fauquier	I66 WB, Exit 28 Ramps & Route 17 Intersection, Roundabout	\$ 8,907,188
Fauquier	I66 EB, Exit 28 Ramps & Route 17 Intersection, RCUT Redesign	\$ 7,549,147
Fauquier	Roundabout at Route 55 and Route 709	\$ 10,335,189
Fauquier	Route 17 and Covington's Corner Road R-CUT	\$ 7,815,164
Fluvanna	Troy Road (631) and Route 250 Roundabout	\$ 9,232,964
Gordonsville	Route 231 / High Street (Gordonsville) Roundabout	\$ 7,762,449



**SMART  
SCALE**

*Funding the Right  
Transportation Projects  
in Virginia*

## Round 4

Albemarle / Charlottesville	Hydraulic Road and US 29	\$ 24,030,488
Albemarle	US 29 and Fontaine Avenue Interchange Improvements	\$ 12,374,620
Albemarle	Old Lynchburg Rd/5th St Extended Intersection Improvements	\$ 7,263,075
Albemarle	Rio Road E & John Warner Parkway Roundabout	\$ 10,126,306
Albemarle	Route 250 East Corridor Improvements	\$ 5,939,563
Albemarle	Rt 20/Rt 53 Intersection Improvements	\$ 9,536,258
Albemarle	I-64 Exit 107 Park and Ride Lot	\$ 3,380,941
Albemarle	US 29 Shared Use Path from Carrsbrook to Seminole Lane	\$ 3,524,115

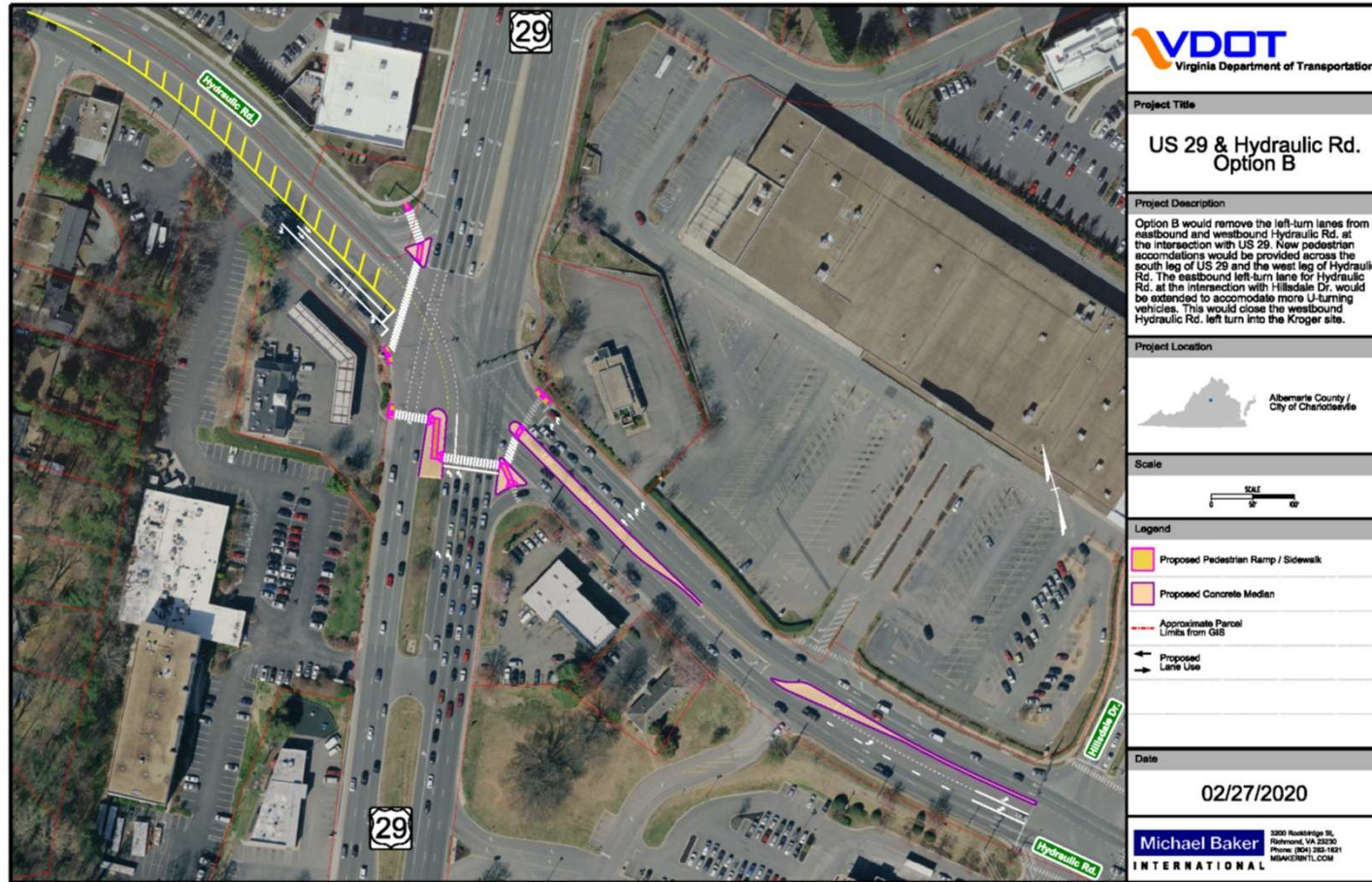
# US 29 / Hydraulic Rd.

## Option B – Concept

- No lefts from Hydraulic Road
- Pedestrian crossings are included

**Estimated Cost**  
**\$1.0 – 1.2 Mil.**

*This estimated cost does not include improvements to other intersections.*



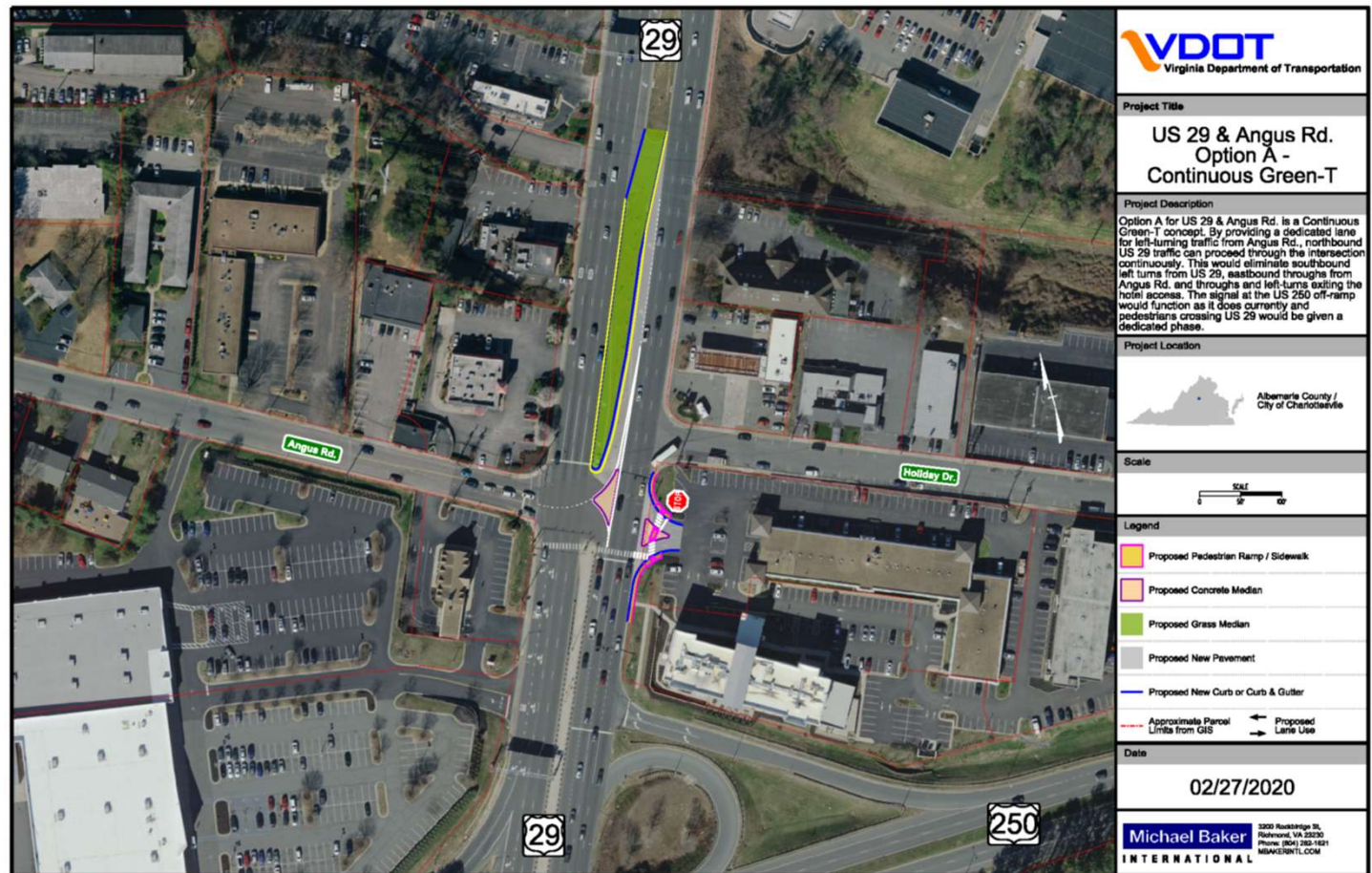
# US 29 & Angus Rd.

## Option A – Concept

- Continuous Green – T
- Improved signal timing
- Maintains current pedestrian crossing

**Estimated Cost**  
**\$1.2 – \$1.4 Mil.**

*This estimated cost does not include improvements to other intersections.*

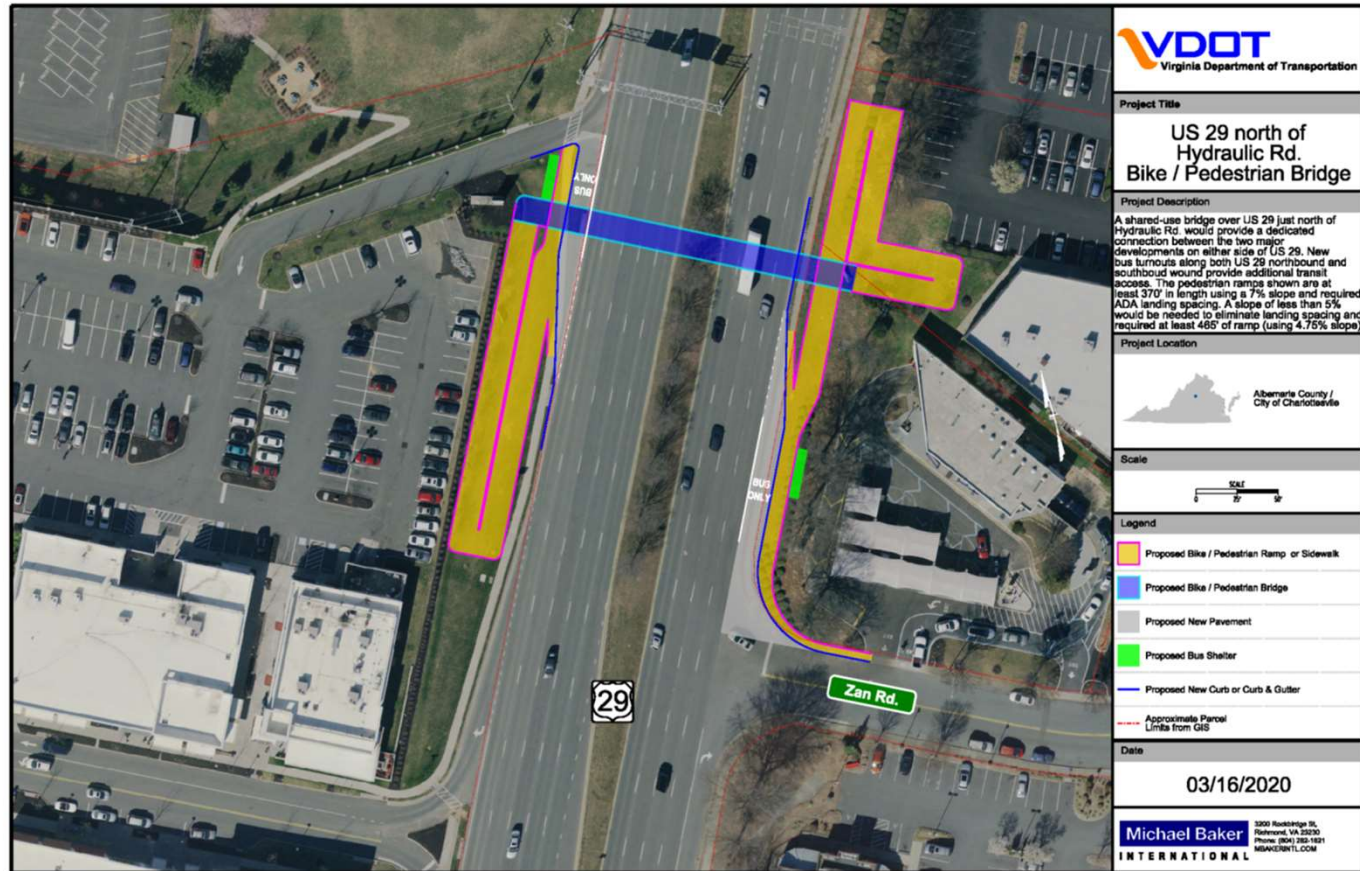


# Zan Road Bicycle and Pedestrian Concept

- Bicycle and Pedestrian only grade separation
- Significantly less cost and impact
- Flexible configuration
- Transit stops with pull offs on both sides of Route 29

**Estimated Cost**  
**\$9 – \$12 Mil.**

This estimated cost does not include improvements to other intersections.



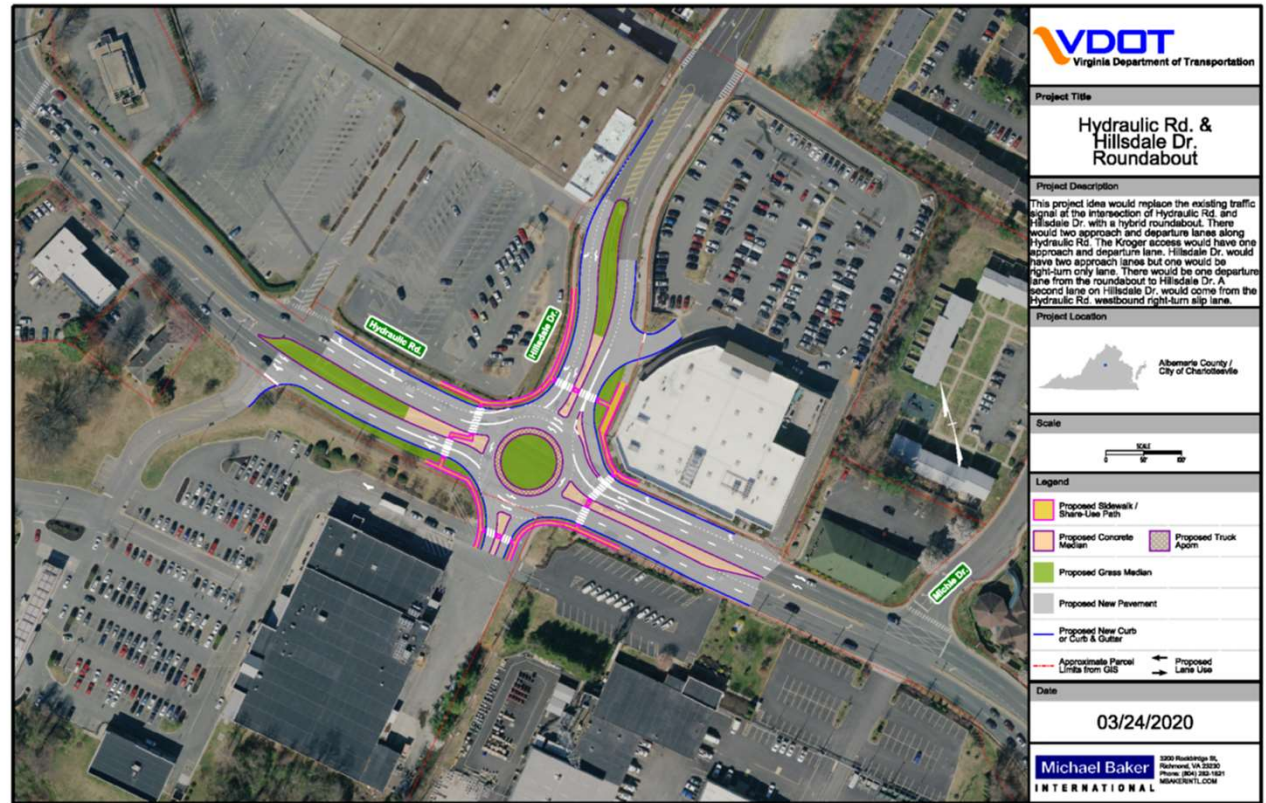


# Hydraulic Rd./Hillsdale Dr. Roundabout

Converts existing  
Signalized Intersection to a  
Roundabout

Estimated Cost  
\$7.0 – \$9.0 Mil.

*This estimated cost does not include  
improvements to other intersections.*



# Hydraulic Rd. Access Improvements

## Access Improvement at Brandywine Dr. and Michie Dr.

Right In/Left In and right out at both Brandywine Dr. and Michie Dr. (Left out would turn right and U-turn at the roundabout)

**Estimated Cost  
\$800,000 – \$1.0 Mil.**

*This estimated cost does not include improvements to other intersections.*



# Culpeper Construction

**Greg Cooley, P.E.**  
***District Construction Engineer***  
*Gregory.Cooley@VDOT.Virginia.gov*

**CULPEPER DISTRICT  
PROJECT DELIVERY**

**Construction Section Heads**

**Northern Region ACE  
Southern Region ACE  
ACE (Design-Build/LAP)  
District Materials Engineer  
District Contracts Manager**

**Satish Airi, PE  
Joel Kauppila, PE  
Will Stowe, PE  
Haroon Shami, PE  
Michael Coffey, VCO**

**CULPEPER DISTRICT  
PROJECT DELIVERY**

**2021 Construction Program**

**FY 2021:**

**26 Projects to be delivered in 2021**

**Total Value: \$61.5 Million**

**CULPEPER DISTRICT  
PROJECT DELIVERY**

**FY2020 CN Performance**  
July 2019 – June 2020

Measure	FY20 Target	FY20 Results
On-Time (all projects)	77%	92%
On-Budget (all projects)	85%	96%
Environmental Compl.	100%	100%
CQIP	91%	96%

## **CULPEPER DISTRICT PROJECT DELIVERY**

### **FY2021 CN Performance** July 2020 – June 2021

<b>Measure</b>	<b>FY21 Target</b>	<b>FY21 Results</b>
<b>On-Time (all projects)</b>	<b>77%</b>	<b>91%</b>
<b>On-Budget (all projects)</b>	<b>85%</b>	<b>95%</b>
<b>Environmental Compl.</b>	<b>100%</b>	<b>100%</b>
<b>CQIP</b>	<b>91%</b>	<b>98%</b>

## 2021 Upcoming Advertisements

Anticipated Ad	UPC	Estimate
April 21 Rte. 250/522 roundabout (Rich. District)	107081	\$2,100,000
May 2021 Rte. 29/662 J-Turn Shelby HSIP	109587	\$1,540,000
August 2021 Rep. str. 6056 Piney Creek	109600	\$1,000,000
August 2021 Superstructure replacement 6261	111776	\$2,258,000
September 2021 SGR-Replace bridge 6053	111777	\$1,970,000
November 2021 Rogues Rd reconstruction	104300	\$2,610,000
Novembver 2021 Rte. 29 Vint Hill Phase 2	111728	\$2,434,000
November 2021 Rte. 33/29 Ruckersville SS17	109519	\$4,500,000
December 2021 Route 250/240/680 roundabout	111729	\$2,600,000
December 2021 Warr. Broadview access mgmt SS18	111647	\$2,300,000
December 2021 Warr. Frost Ave. Intersection imp. SS18	111648	\$2,740,000
January 2022 Whiting Rd RR crossing	71962	\$1,208,000
January 2022 New Rte. 670 connector road SS18	111650	\$3,820,000
February 2022 Rte. 600/618 intersection improvement	111739	\$1,125,000
March 2022 Rep str. 792 North Fork Hardware River	111378	\$4,000,000
April 2022 Replace bridge over Morey Creek	111779	\$2,500,000
April 2022 Replace str.1024 Lickinghole Creek	110001	\$1,200,000
July 2022 Rte. 707 Bridge replacement	107447	\$600,000
July 2022 Rte. 601 curve realignment SS18	111742	\$700,000



## **CULPEPER DISTRICT PROJECT DELIVERY**

### **Current Consulting Services**

#### **District Wide CEI Services**

- 1 - Alpha Corp. (Expires April 2021)**
- 2 - WR&A (3<sup>rd</sup> Term Starts May 2021)**

#### **Upcoming Consultant CEI Opportunity**

- 1. Status Ad (Replacing Alpha)**
- 2. Early 2022 (Replacing WR&A)**

## ***CULPEPER DISTRICT PROJECT DELIVERY***

### **Focus for 2021:**

- **Safety**
- **Environmental Compliance**
- **Constructability Reviews**
- **Post-Construction Reviews**

# CULPEPER DISTRICT LOCAL ASSISTANCE PROGRAM

**Tom FitzPatrick, PE, Program Manager**  
*Thomas.Fitzpatrick@VDOT.Virginia.gov*



February 25, 2021

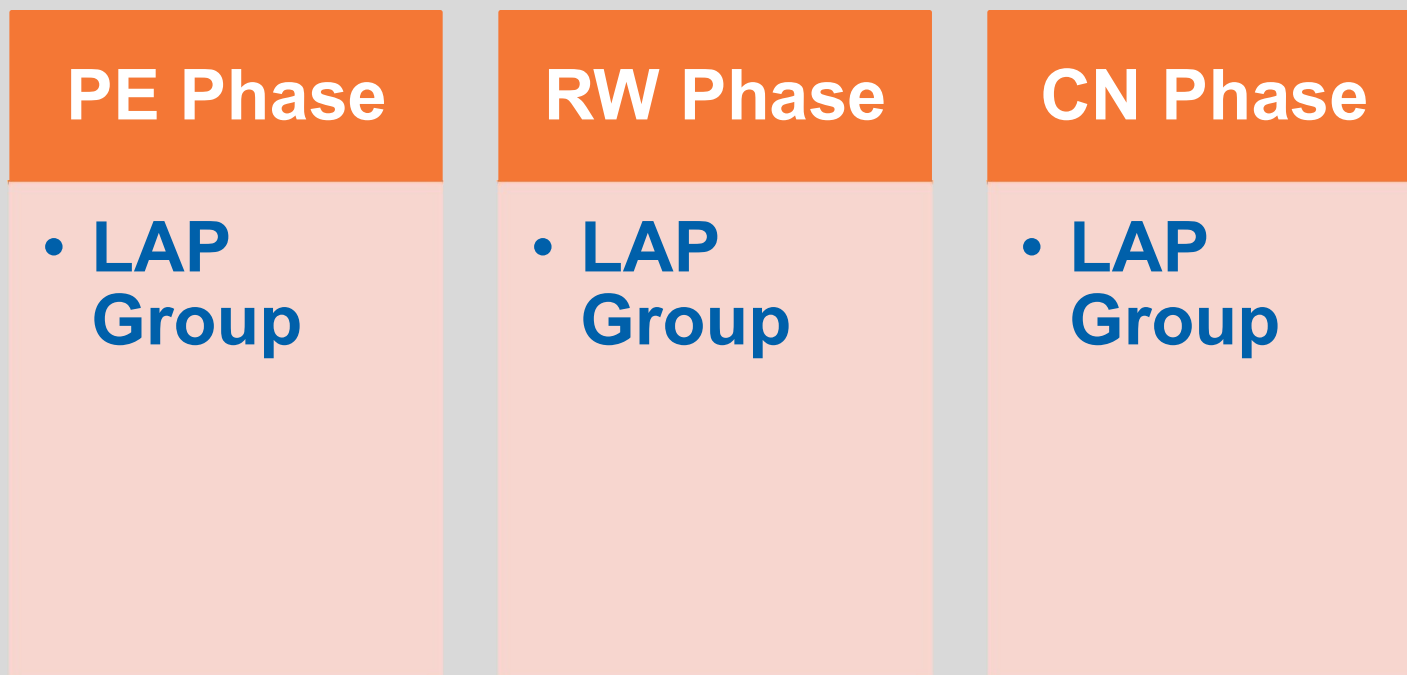
# **CULPEPER DISTRICT LOCAL ASSISTANCE**

## **LAP Program Goals**

- **Foster a partnership with localities through decentralization of responsibility for project development & delivery.**
- **Deliver quality projects that meet the locality's expectations.**
- **Deliver projects that are on time and on budget.**



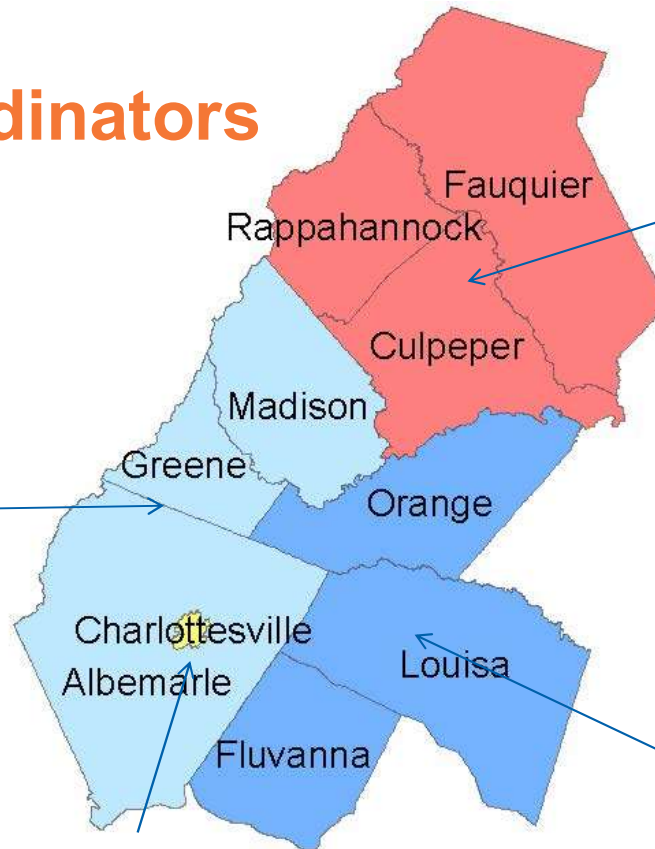
## **LAP Project Progression**



# CULPEPER DISTRICT LOCAL ASSISTANCE

## Culpeper LAP Coordinators

**Charlottesville Residency  
Counties & Towns  
Tom FitzPatrick**



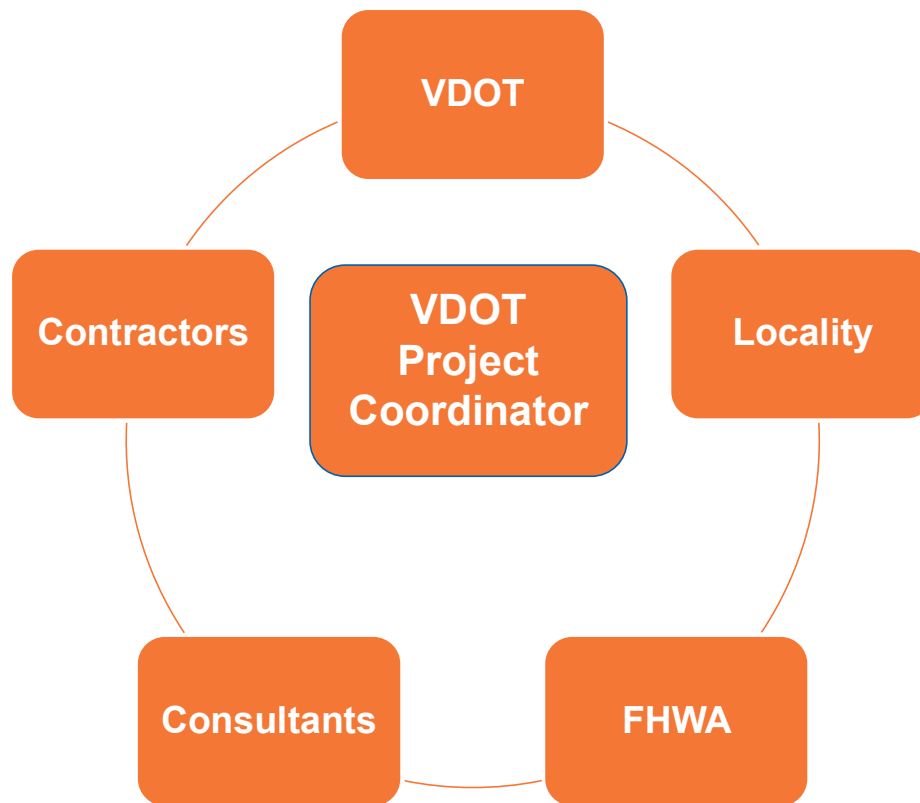
**Warrenton Residency  
Localities  
John Price**

**Louisa Residency Localities  
Tom FitzPatrick**

**City of Charlottesville (UCI)  
Michael Barnes**

**CULPEPER DISTRICT  
LOCAL ASSISTANCE**

## Key Team Members for LAP Projects



## ***CULPEPER DISTRICT LOCAL ASSISTANCE***

### **Types of LAP Projects**

- **Streetscape Projects**
- **New Roadways & Roadway Improvements**
- **Sidewalks & Shared Use Paths**
- **Paving Projects**
- **Bridge Projects**
- **Roundabout Construction**
- **Rail Crossing Upgrades**
- **Transportation Facility Renovations (e.g. freight depots)**



**CULPEPER DISTRICT  
LOCAL ASSISTANCE**

**Funding Sources for LAP Projects**

**Federal**

- **SMART SCALE**
- **Transportation Alternative**
- **Highway Safety Improvement Program**
- **State of Good Repair (Primary Extension & Local Bridges)**

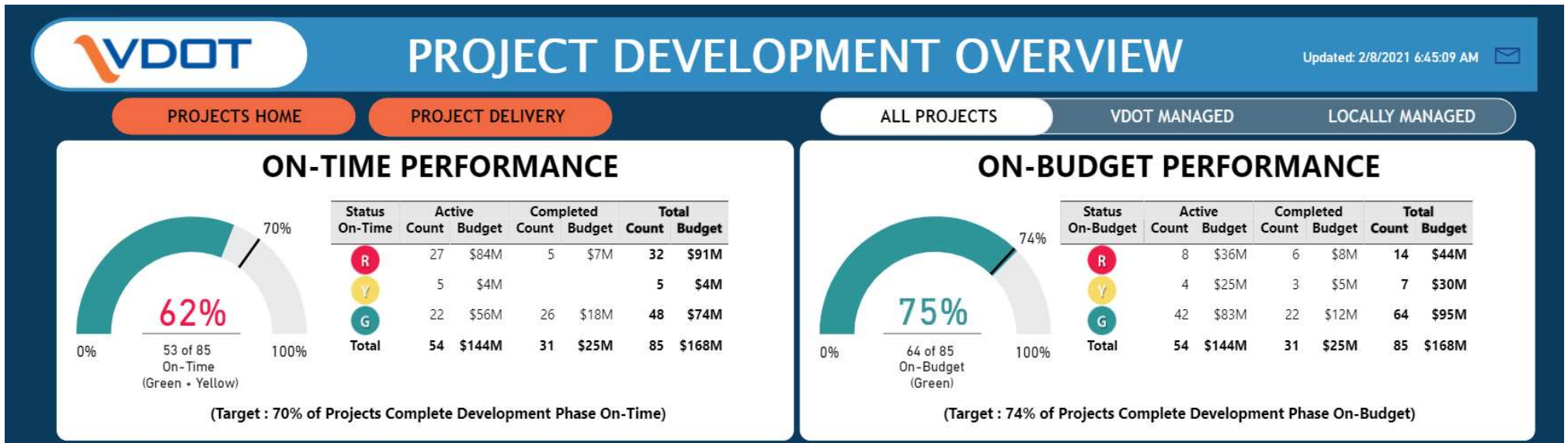
**State**

- **Revenue Sharing**
- **Access Programs (Airport, Economic, and Recreational)**

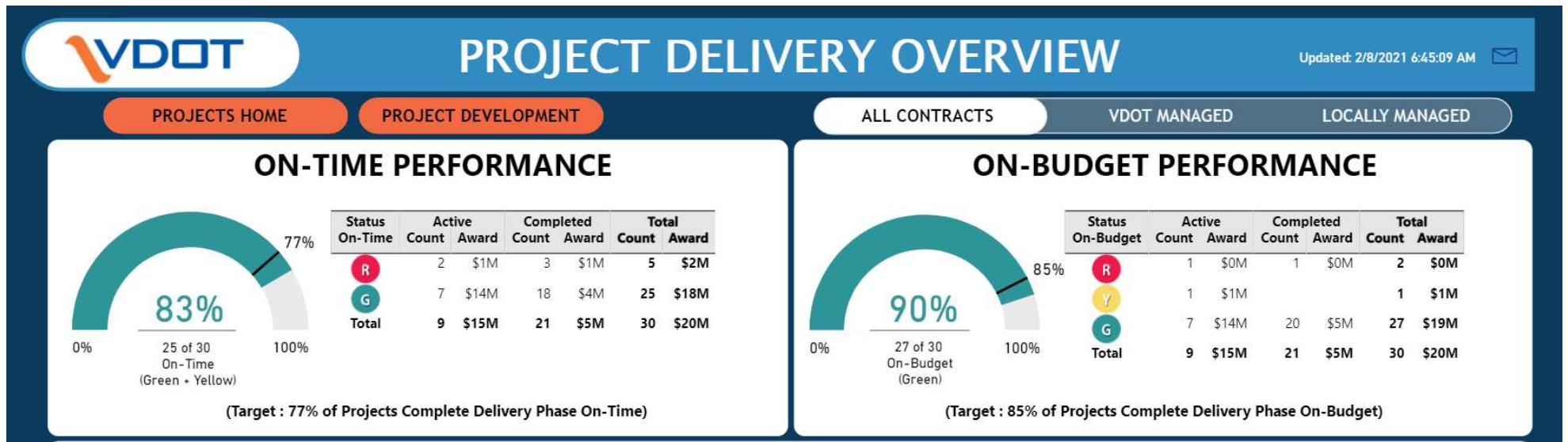
**Local**

- **Matching funds and/or contributing funds to augment budget**
- **Additional funds for all cost overruns**

**Dashboard Goals:  
Project Development (PE & RW)**



# Dashboard Goals: Project Delivery (CN)



## **CULPEPER DISTRICT LOCAL ASSISTANCE**

### **Outlook for Local Projects in 2021**

- **Currently \$144M for 54 projects in Culpeper District.**
- **Application cycle opens this spring for Transportation Alternatives (TA) and Revenue Sharing (RS) projects:**
  - **Mandatory pre-applications due July 1, 2021**
- **TA and RS projects make up the majority of LAP projects so more will be coming for FY22 and FY23.**
- **SMART SCALE, HSIP, SGR, etc. are other possible LAP projects.**

# CULPEPER DISTRICT LOCAL ASSISTANCE

## Streetscape Projects to be Awarded in 2021

Funding Type	Project	Est. Bid Date	Construction Estimate
TA	Stanardsville Streetscape Phase 2 Greene County	February 2021	\$ 750,000



## Road Projects to be Awarded in 2021

Fund Type	Project	Estimated Bidding	Construction Estimate
TA	Road Diet – Town of Culpeper	February 2021	\$ 1,600,000
HSIP	Monticello/Ridge Int. - Charlottesville	May 2021	\$ 160,000
HSIP	Monticello/2 <sup>nd</sup> St. Int. – Charlottesville	May 2021	\$ 420,000
RS	Rosehill/Rugby Int. – Charlottesville	April 2021	\$ 190,000



## **CULPEPER DISTRICT LOCAL ASSISTANCE**

### **Bridge Projects to be Bid in 2021**

<b>Fund Type</b>	<b>Project</b>	<b>Estimated Bidding</b>	<b>Construction Estimate</b>
<b>RS</b>	<b>Belmont Bridge Replacement – C’ville</b>	<b>Jan-Mar 2021</b>	<b>\$ 19,900,000</b>



## **CULPEPER DISTRICT LOCAL ASSISTANCE**

### **Sidewalks & Trails to be Awarded in 2021**

<b>Funding Type</b>	<b>Project</b>	<b>Estimated Bidding</b>	<b>Construction Estimate</b>
TA	N. Main Street Sidewalks - Culpeper	January 2021	\$ 350,000
TA	Sunset & Madison Streets Sidewalks - Culpeper	January 2021	\$ 160,000
RS	Avon/Rio/250 SW – Albemarle Co	February 2021	\$ 1,700,000
TA/SRTS	Mountain View ES SW – Albemarle Co.	February 2021	\$ 350,000
RS	Ivy Road SW – Albemarle Co.	March 2021	\$ 1,250,000
HSIP	McIntire Road Multi-use Path– C’ville	March 2021	\$ 430,000
TA	Rugby Avenue Shared Use Path– C’ville	July 2021	\$ 365,000
HSIP B&P	Washington Park & Madison Ave Bike Connector Trail - C’ville	August 2021	\$ 105,000
TA	Timber Fence Trail Segment #1	March 2021	\$ 260,000
TA	Timber Fence Trail Segment #2	June 2021	\$ 360,000



## **CULPEPER DISTRICT LOCAL ASSISTANCE**

### **Transportation Facilities to be Bid in 2021**

<b>Funding Type</b>	<b>Project</b>	<b>Estimated Bidding</b>	<b>Construction Estimate</b>
TA	Remington Freight Depot	October 2021	\$ 75,000



## Consulting Contract Opportunities for 2021

- **RFP on Design for Preston Ave / Harris St and Ridge St / Cherry Ave sidewalks (\$190,000 & \$185,000 CN, City of Charlottesville)**  
– Summer 2021
- **RFP on Design for Ira Hoffman Sidewalks (\$430,000 CN, Town of Culpeper)**  
– Summer 2021
- **RFP on Design for Sperryville Pike Sidewalk Extension (\$650,000 CN, Town of Culpeper)**  
– Summer 2021
- **RFP on Design for Grace Miller SRTS (\$380,000 CN, Fauquier County)**  
– Summer 2021
- **RFP on Design for West Main Street Sidewalks & Signals (\$480,000 CN, Town of Orange)**  
– April 2021

## ***CULPEPER DISTRICT LOCAL ASSISTANCE***

### **Consulting Contract Opportunities for 2021 (continued)**

- **RFP for CEI on Albemarle County transportation and building projects (multi-year)**
- **RFP for CEI on Timber Fence Trail Phases 1 and 2 (\$620,000 CN, Warrenton)  
– Spring 2021**
- **Assisting localities with applications and estimates**

# CULPEPER DISTRICT LOCAL ASSISTANCE



# Culpeper Structure & Bridge

**Teresa Gothard, P.E.**  
***District Bridge Engineer***  
*Teresa.Gothard@VDOT.Virginia.gov*

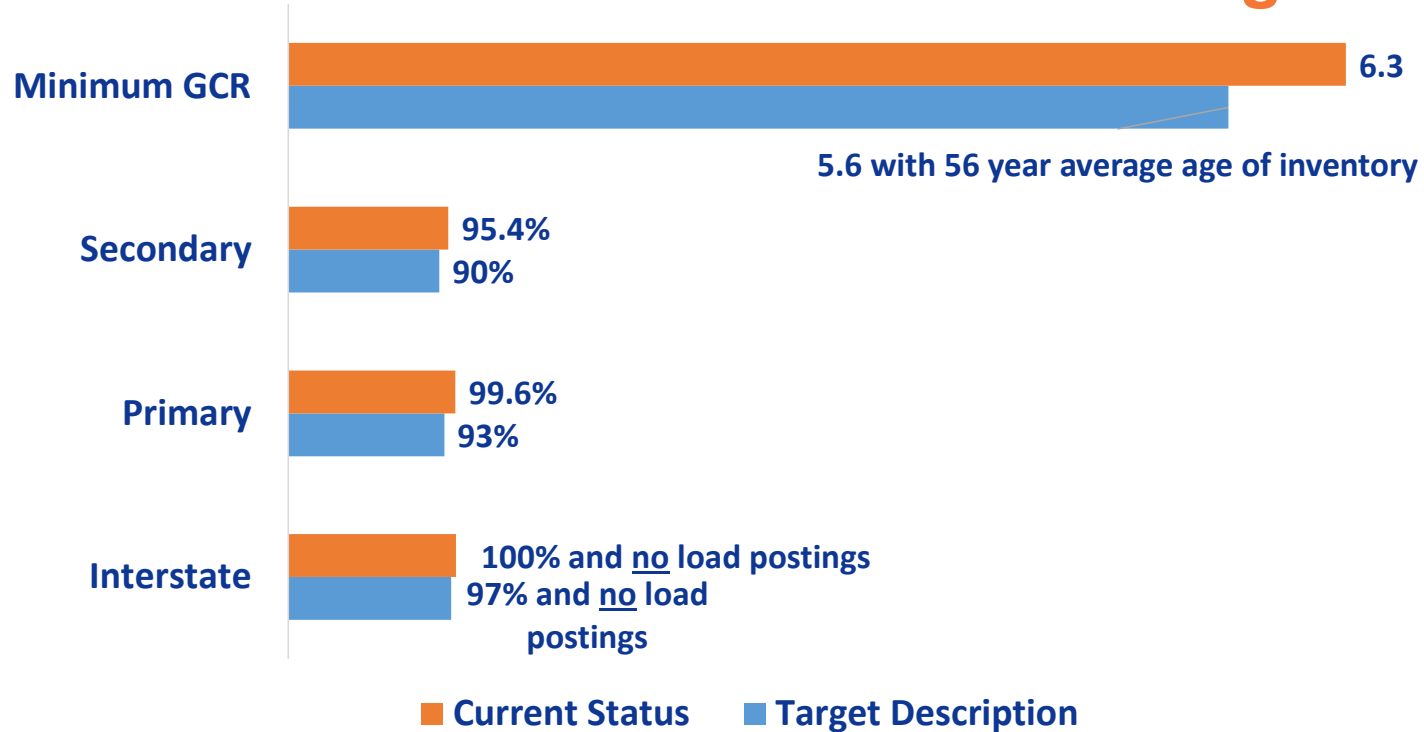
## **CULPEPER DISTRICT MAINTENANCE**

### **New Performance Measure Targets**

<b>Target Description</b>	<b>Current Status</b>
<b>Interstate - 97% non-SD and <u>no</u> load postings</b>	<b>100% and <u>no</u> load postings</b>
<b>Primary - 93% non-SD</b>	<b>99.60%</b>
<b>Secondary - 90% non-SD</b>	<b>95.80%</b>
<b>GCR - Minimum 5.6</b>	<b>GCR of 6.3 with 57 year average age of inventory</b>

# CULPEPER DISTRICT MAINTENANCE

## New Performance Measure Targets



## **CULPEPER DISTRICT MAINTENANCE**

### **Ongoing Bridge Projects**

<b>UPC</b>	<b>Description</b>	<b>CN Estimate</b>
<b>115014</b>	<b>District Wide Preventative Maintenance Contract 2nd year</b>	<b>\$1.1 million</b>
<b>116666</b>	<b>District Wide Epoxy Overlay Contract 4 Interstate and 1 Primary Structures</b>	<b>\$1.4 million</b>
<b>114769</b>	<b>District Wide Scour Repairs</b>	<b>\$0.9 million</b>



# CULPEPER DISTRICT MAINTENANCE

## Ongoing Bridge Projects

Route	Description
635	Rte. 635 over NSRR Bridge Replacement



Route	Description
726	Rte. 726 over Totier Creek Bridge Replacement

Route	Description
647	Rte. 647 over South Anna Superstructure Replacement



**CULPEPER DISTRICT  
MAINTENANCE**

**Upcoming Bridge Projects**

<b>UPC</b>	<b>Description</b>	<b>Ad Date</b>	<b>CN Estimate</b>
<b>117327</b>	<b>District Wide Bridge Cleaning</b>	<b>Under Advertisement</b>	<b>\$0.4 million</b>
<b>116667</b>	<b>Latex Overlay Contract 2 Structures on I-64</b>	<b>Under Advertisement</b>	<b>\$1.2 million</b>

## **CULPEPER DISTRICT MAINTENANCE**

### **Upcoming Bridge Projects**



**UPC 110001 – Rte. 240 over Lickinghole Creek  
Superstructure Replacement  
Ad April 2022 – Advance to Fall 2021  
\$1.3 million – SGR funds**

**UPC 96739 – US 17 over Norfolk Southern RR  
Superstructure Replacement  
Ad January 2021 – LET February 2021  
\$5.7 million – DBF funds**



## **CULPEPER DISTRICT MAINTENANCE**

### **Upcoming & Future Bridge Projects**

#### **4 Minor Rehabilitation Contracts**

- **UPC 118517 – Spot painting contract – CN estimate \$0.7 million**
- **UPC 118528/118529 – (2) latex overlay contracts – CN estimate \$2.3 million**
- **UPC 117882 – Replace existing structure 0707-056-733 – CN estimate \$0.7 million**

#### **13 Bridge Replacement/Rehabilitation Projects**

- **Primary and secondary routes – Bridge and superstructure replacements**
- **Further details on following slide**

#### **Potentially 3 New Bridge Replacement Projects**

- **SGR funds requested for secondary bridge replacement projects**
- **CN estimates total \$16.8 million – will know by end of June 2021**

## **CULPEPER DISTRICT MAINTENANCE**

### **Upcoming & Future Bridge Projects**

<b>UPC</b>	<b>Project Description</b>	<b>County</b>	<b>CN Start</b>	<b>CN Estimate</b>
111777	Rte. 647 over Thumb Run - Bridge Replacement	Fauquier	Jul-25	\$2.0 million
109599	Rte. 701 over Little River - Superstructure Replacement	Louisa	Sep-24	\$1.4 million
110000	Rte. 641 over Marsh Run - Bridge Replacement	Albemarle	Oct-25	\$1.2 million
111779	Rte. 702 over Morey Creek - Bridge Replacement	Albemarle	Mar-22	\$2.5 million
110001	Rte. 240 over Lickinghole Creek- Superstructure Replacement	Albemarle	Apr-22	\$1.3 million
109600	Rte. 667 over Piney Creek - Bridge Replacement	Albemarle	Jan-23	\$1.2 million
111378	Rte. 708 over North Fork Hardware River - Superstructure Replacement	Albemarle	Mar-22	\$4.0 million
111776	Rte. 601 over Rte. 29/250 Bypass - Superstructure Replacement	Albemarle	Jan-24	\$2.3 million
112880	Rte. 707 over Hughes River - Bridge Replacement	Madison	Jan-24	\$3.7 million
113504	Rte. 638 over South River - Bridge Replacement	Greene	Jun-23	\$2.4 million
118405	Rte. 680 over Lickinghole Creek – Bridge Replacement	Albemarle	Oct-24	\$3.3 million
118430	Rte. 759 over Mechunk Creek – Bridge Replacement	Fluvanna	Sept-24	\$5.6 million
118431	Rte. 749 over Hughes River – Bridge Replacement	Madison	Nov-24	\$4.5 million

# Culpeper Maintenance

**David Pearce, P.E.**

***District Maintenance Engineer***

*David.Pearce@VDOT.Virginia.gov*

# Pavements Performance Measures

Performance Measure Description	Old Policy (% Sufficiency)	New Policy (% Sufficiency)
Interstate	82% No Section CCI less than 35	82% No Section CCI less than 35
Primary	82%	82% for $\geq$ AADT 3,500 75% for $<$ AADT 3,500
Secondary	65%	82% for $\geq$ AADT 3,500 60% for $<$ AADT 3,500

# Lane Miles Inventory (2019)

District		1/BR	2/SA	3/LY	4/RI	5/HR	6/FR	7/CU	8/ST	9/NV
Interstate		536	504	-	1,325	825	287	279	974	714
Primary	AADT ≥ 3,500	1,366	1,762	1,727	2,293	1,180	1,879	1,436	1,490	1,612
	AADT < 3,500	1,551	884	1,022	986	507	290	398	1,023	53
Secondary	AADT ≥ 3,500	55	276	105	887	188	425	267	235	2,625
	AADT < 3,500	9,577	11,651	10,383	11,997	6,512	8,351	6,445	8,038	7,371
Total Lane Miles		13,085	15,077	13,237	17,488	9,212	11,232	8,825	11,760	12,375



# Historical, Current and Projected Ratio of Pavement Funding Distribution (CY 2018 – 2025)

District	Historical			Current	Projected (at a minimum \$425M)*			
	2018 (\$521M)**	2019 (\$440M)	2020 (\$410M)	2021 (\$425M)	2022	2023	2024	2025
Bristol	10.2%	10.5%	10.6%	12.0%	12.3%	13.1%	11.2%	12.2%
Salem	12.0%	12.2%	12.0%	12.2%	11.6%	11.4%	14.0%	12.3%
Lynchburg	7.3%	7.4%	6.9%	4.7%	3.9%	3.4%	3.7%	3.9%
Richmond	14.5%	15.4%	15.2%	13.3%	13.5%	13.0%	15.2%	13.8%
Hampton Roads	5.9%	5.9%	5.3%	9.5%	9.1%	9.2%	8.9%	9.2%
Fredericksburg	6.4%	6.0%	6.1%	10.9%	10.3%	10.8%	9.8%	10.4%
Culpeper	7.6%	7.1%	7.5%	3.2%	3.0%	3.0%	3.4%	3.1%
Staunton	10.8%	8.9%	10.9%	10.4%	11.6%	11.0%	8.6%	10.4%
NOVA	25.3%	26.6%	25.5%	23.8%	24.7%	25.1%	25.2%	24.8%

\*As budget data is realized, updates will occur to this document

\*\*\$521M – regular schedule work of \$470M and additional \$51M distribution from emergency reserves

**CULPEPER DISTRICT  
MAINTENANCE**

**2021 Maintenance Advertisements**

<b>2021 Paving Schedule</b>	<b>Ad Date</b>	<b>Budget</b>
<b>ST7A-21</b>	<b>11/4/2020</b>	<b>\$2,117,045.59</b>
<b>PM7B-21</b>	<b>12/15/2020</b>	<b>\$2,729,227.00</b>
<b>PM7C-21</b>	<b>1/12/2021</b>	<b>\$4,126,327.93</b>
<b>PM7D-21</b>	<b>2/9/2021</b>	<b>\$3,896,047.01</b>
<b>PM7E-21</b>	<b>1/12/2021</b>	<b>\$993,985.89</b>
		<b><i>Appx. \$13.9 million</i></b>



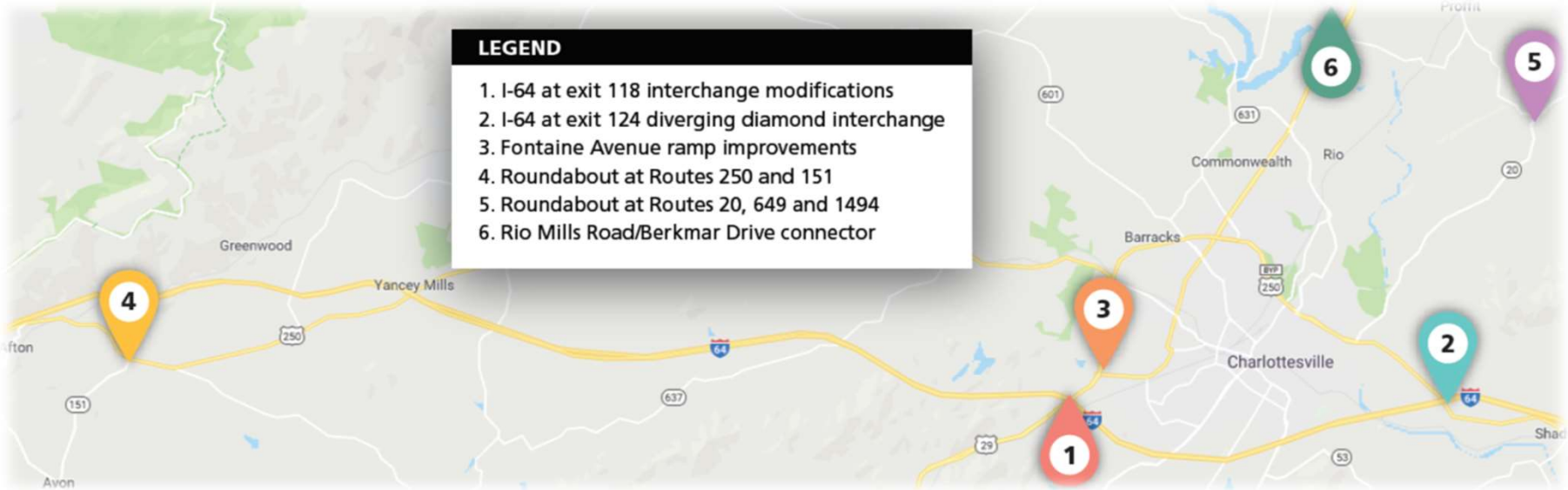
# Culpeper Design-Build Projects

**William Stowe, P.E.**

***Area Construction Engineer***

***Design-Build / Locally Administered Projects***

*William.Stowe@VDOT.Virginia.gov*



# ALBEMARLE BUNDLE

Project No. Various

Contract ID # C00111814DB103

February 25, 2021

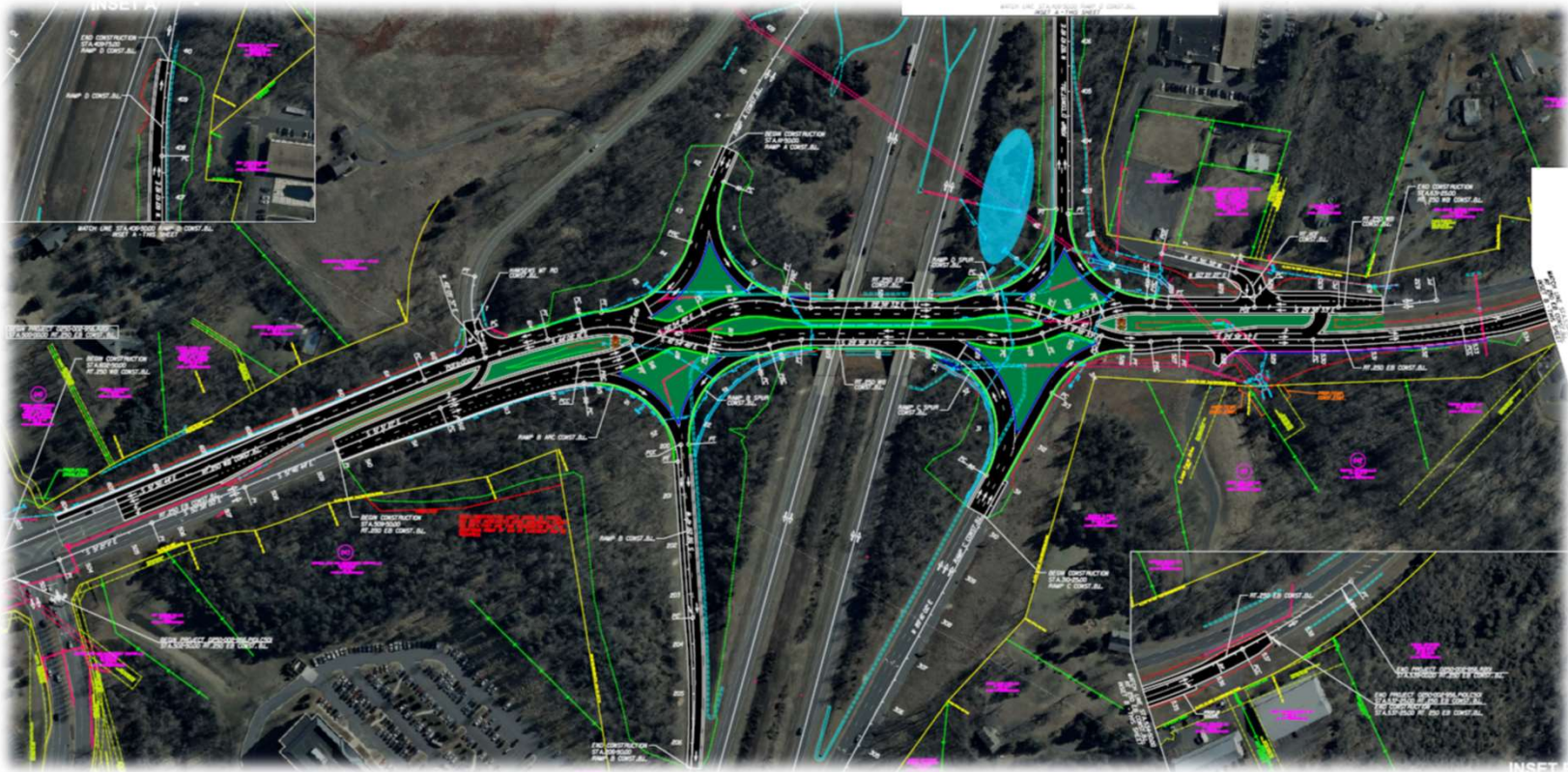
# Agenda

- **Contract Overview**
- **Bundled Efficiencies**
- **How we are using PlanGrid?**
- **Tier I, II, III Drone Flights**
- **Unique Aspects**
  - **Route 20 Virginia Outdoors Foundation Easement**
  - **DDI Diversion Fence**
- **Questions?**

## Contract Overview

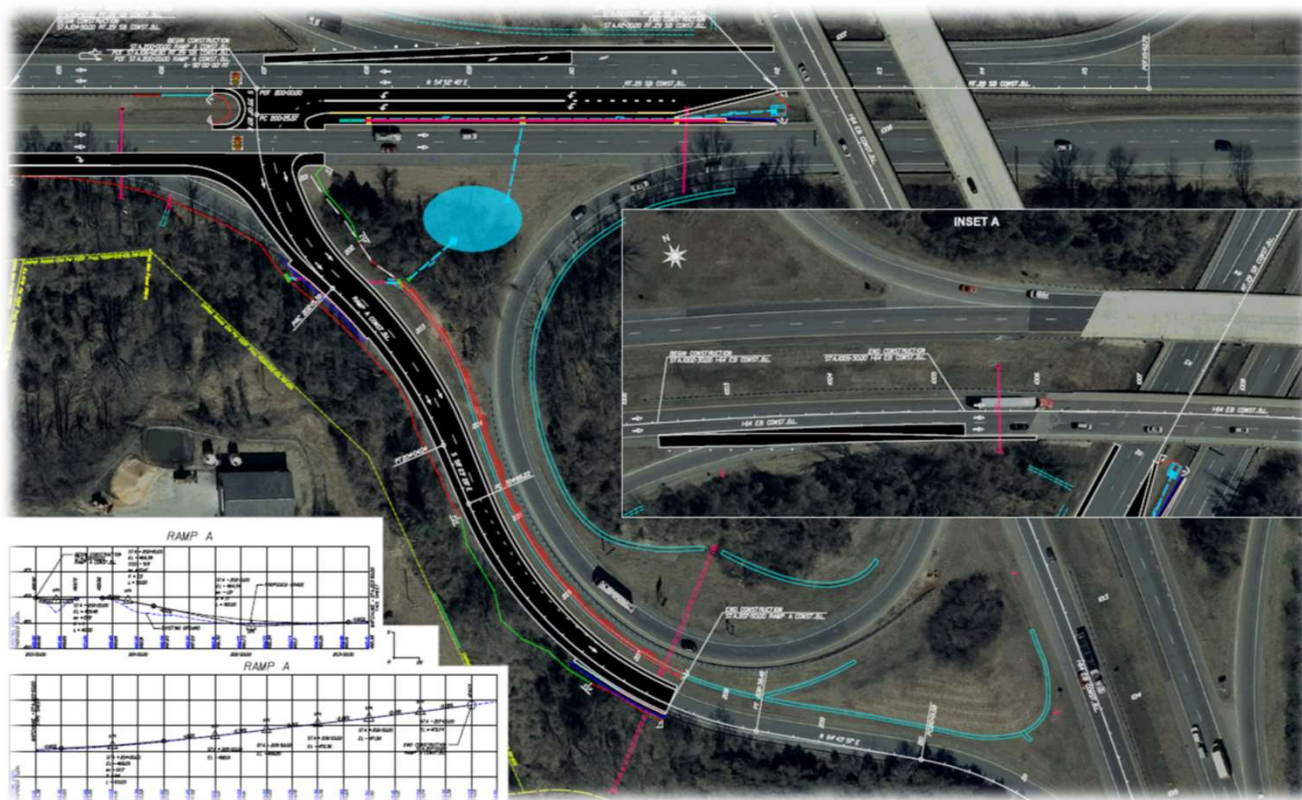
- **Contract Value** **\$28,556,000**
  - **Base + Options 1 & 5**
    - Option 1 is the removal of all landscaping requirements as defined in RFP Part 2, Section 2.8 Landscaping.
    - Option 5 is Economy of Scale assuming all six elements will be included in the award.
- **Contract Execution** **Aug. 16, 2019**
- **Notice to Proceed** **Sept. 5, 2019**
- **Final Completion** **Feb. 3, 2023**
  - **Liquidated Damages = \$3,100/day**

# Project Information: I-64 Exit 124 / US 250 Diverging Diamond Interchange Conversion

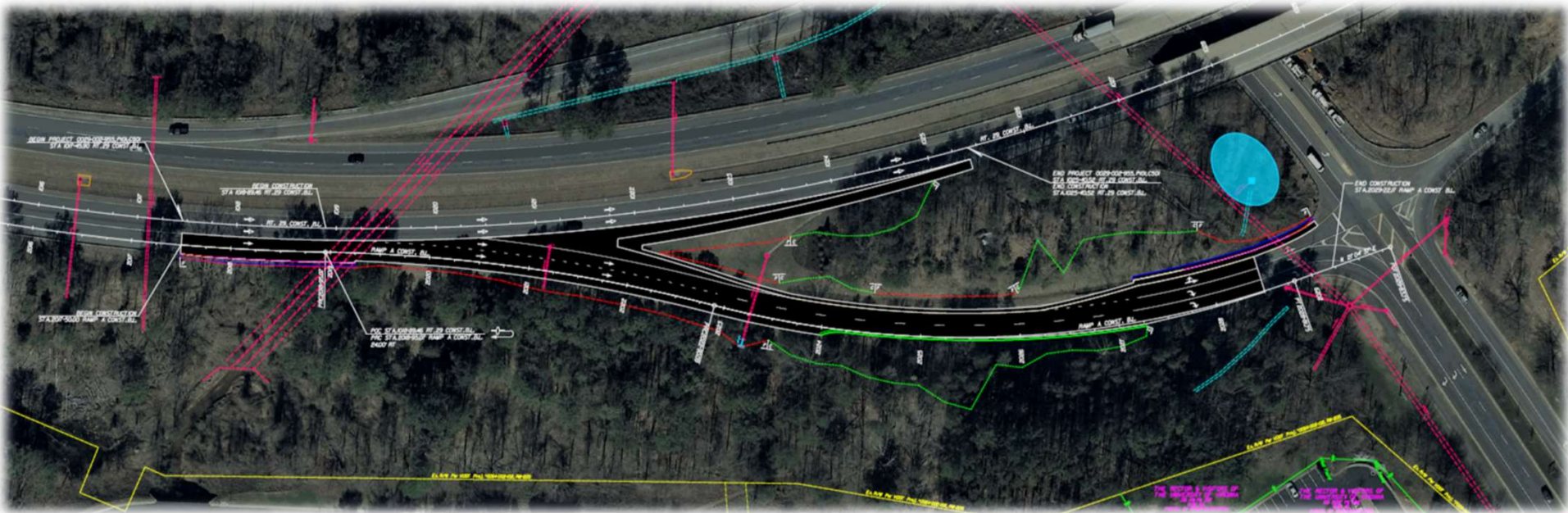




# Project Information: US 29, I-64 Exit 118 Modification



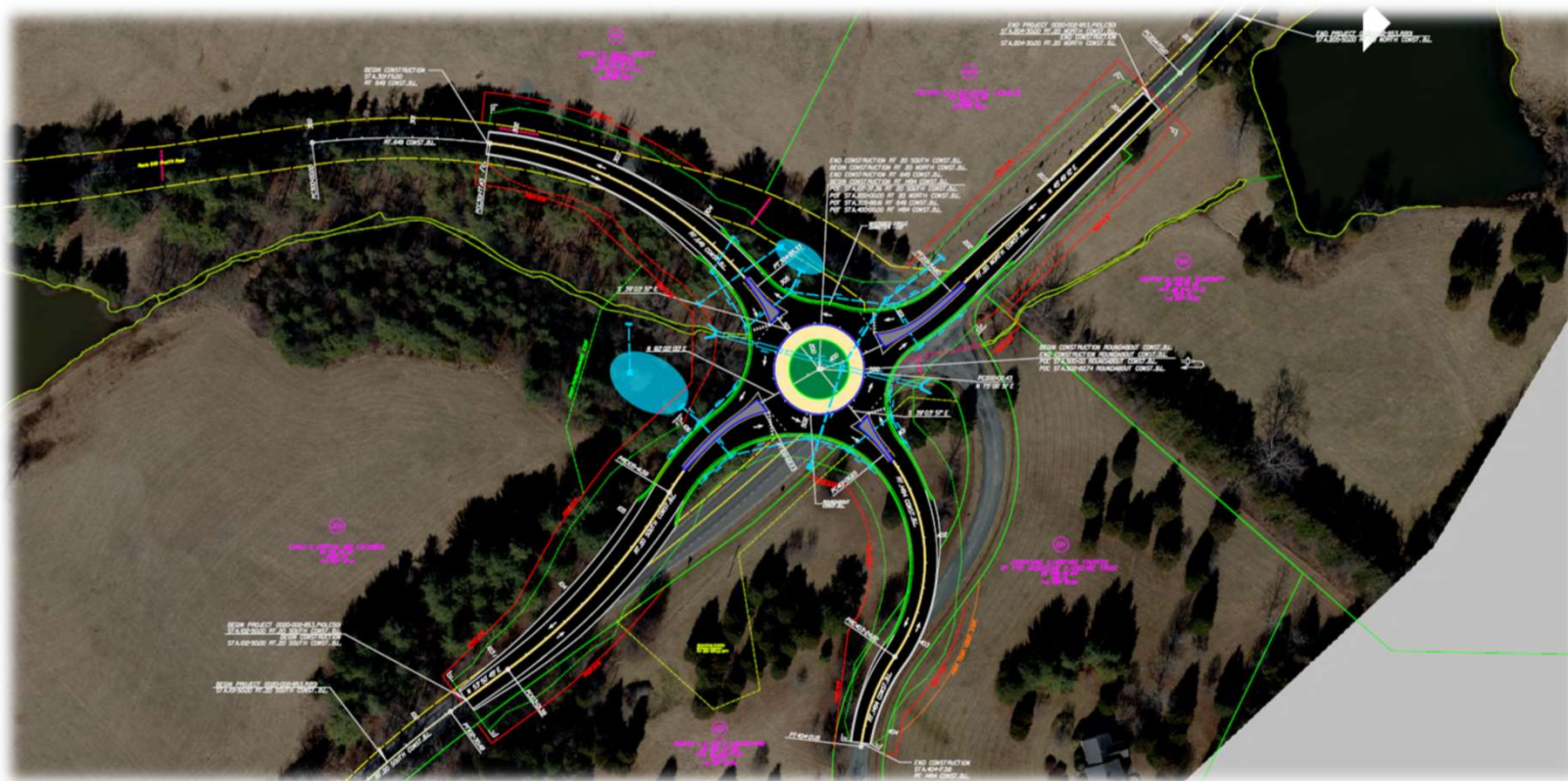
# Project Information: NB US 29 Exit Ramp To Fontaine Avenue



# Project Information: US 250 / Rt. 151 Roundabout



# Project Information: Rt. 20 And Rt. 649 Roundabout





# Project Team



# Project Bundling

## Benefits

- **Expedited Project Delivery.** Project bundling delivers strategic program solutions by streamlining various project delivery requirements such as environmental agreements and standardized designs.
- **Reduced Cost.** Bundling projects with shared features leverages design expertise and achieves economies of scale.
- **Contracting Efficiency.** Using a single contract award for several similar projects streamlines design and construction and saves procurement time.

## Plan Grid

- One-stop shop for deficiencies/ plan revisions/ RFI's
- QA/QC are keeping all diaries and test reports
- The SWPPP book is being kept virtually
- Logging deficiencies with tasks

109397 - Rio Mills Rd

Rio Mills Road, Earlysville, Virginia

▼ 3 workspaces

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109397 - Rio Mills Rd - QC/CCI

Rio Mills Road, Earlysville, Virginia

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109397 - Rio Mills Rd - QA

Rio Mills Road, Earlysville, Virginia

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109397 - Rio Mills Rd - SWPPP

Rio Mills Road, Earlysville, Virginia

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# Tier I, II, III Drone Flights for DDI Element

## Tier I

- **Conducted monthly: Provides progress photos, reviews E&S perimeter controls and estimate volumes of sediment moved.**

## Tier II

- **Conducted quarterly. Provides photo overlays on RFC plans, provides horizontal comparison of construction elements to plans and work zones vs MOT plans.**

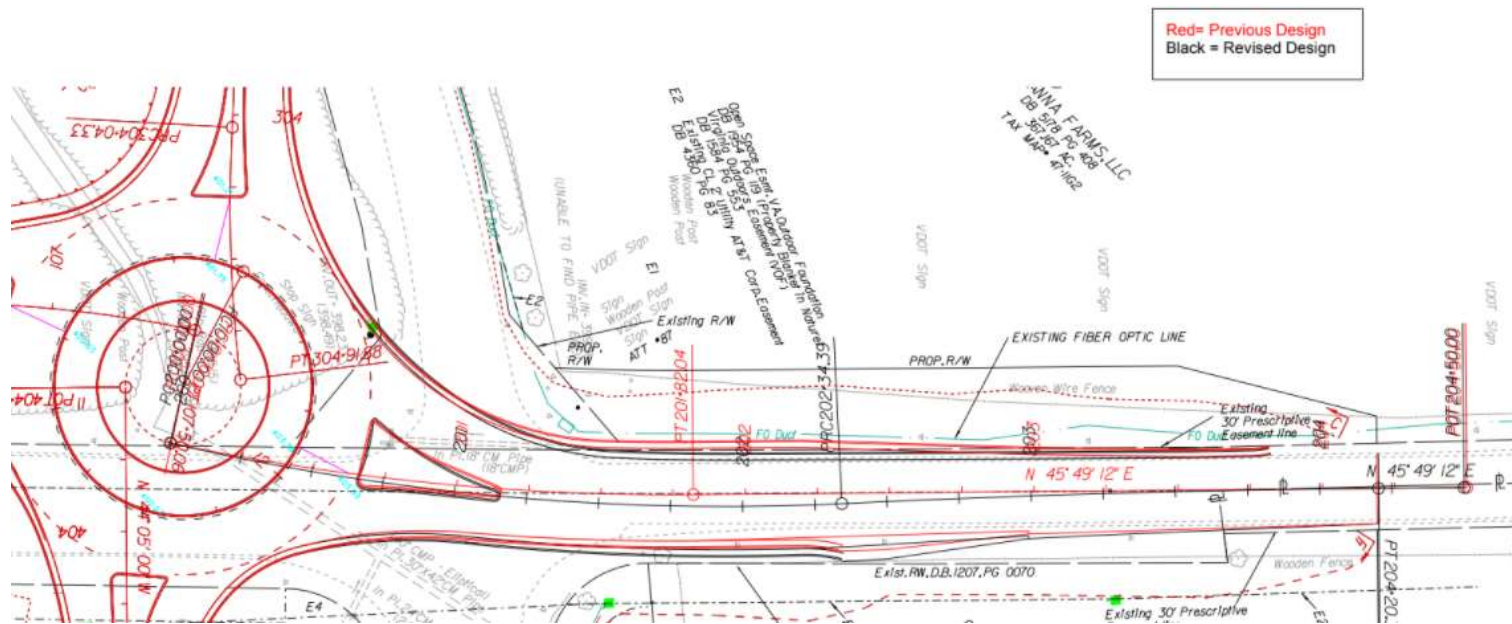
## Tier III

- **As-built end of project. Deliverable not included for this project yet but recently completed Warrenton interchange provided a 3D model and detailed photo overlay to compare as-built condition vs RFC plans.**

# Unique Project Aspects

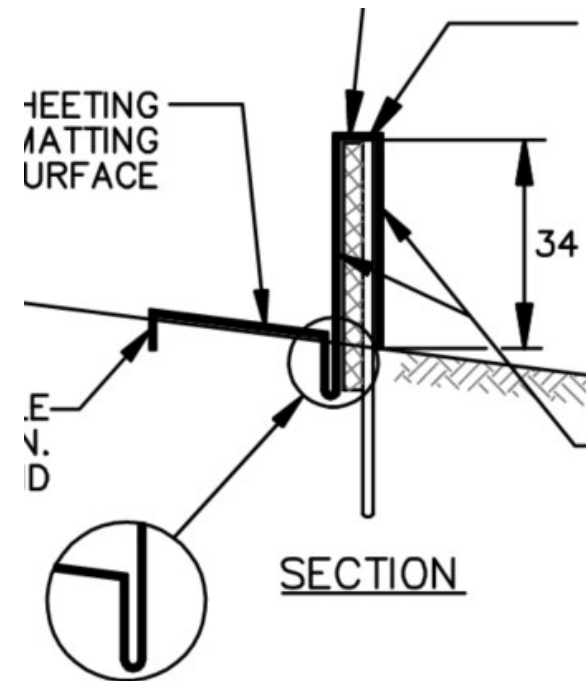
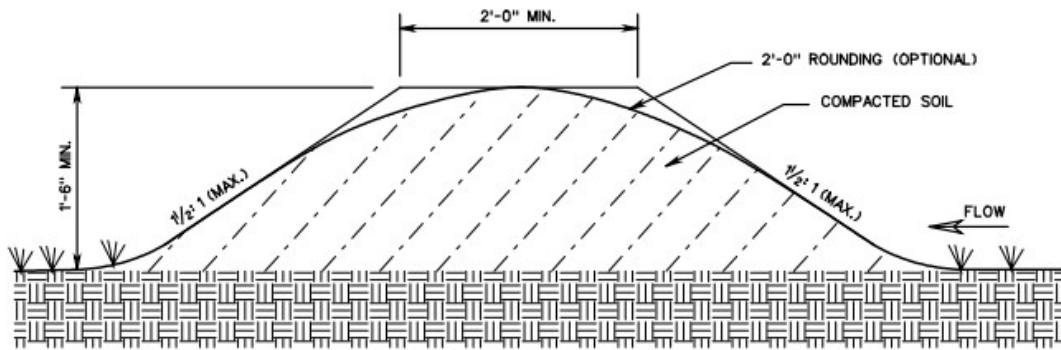
## Route 20 Roundabout Virginia Outdoor Foundation Easement

ROUTE 20N REVISED DESIGN PROPOSAL 2-2-21



# Unique Project Element

## Diversion Dike vs Diversion Fence



**Michael Barnes**  
***Local Program Coordinator***  
*Michaeld.Barnes@VDOT.Virginia.gov*



# City of Charlottesville's Belmont Bridge Replacement Local Assistance Project

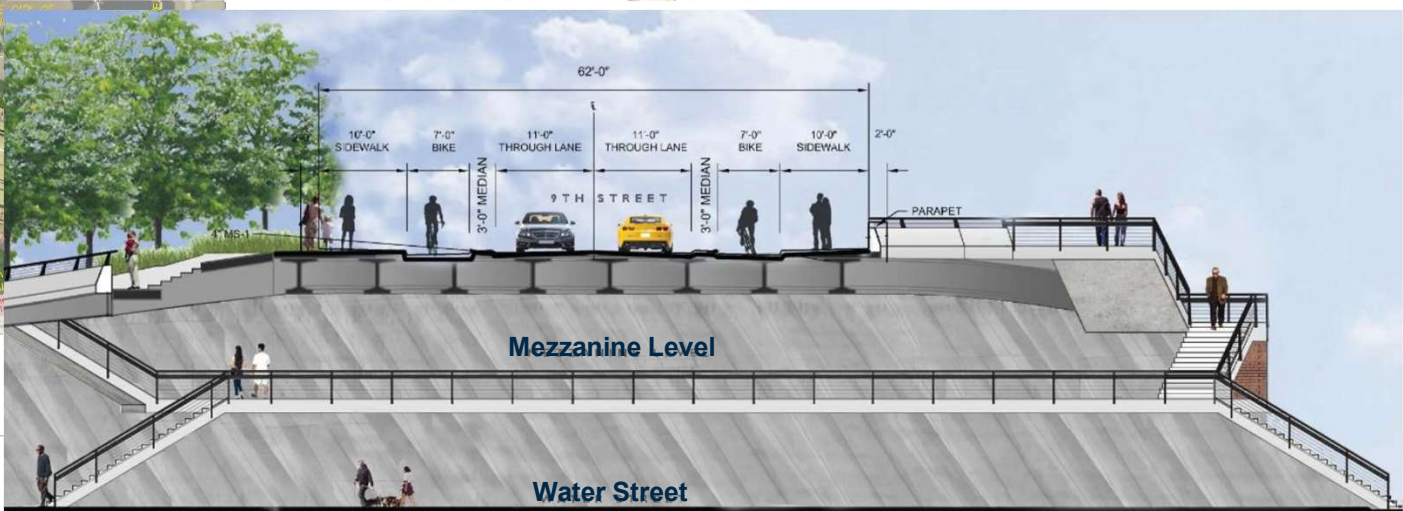
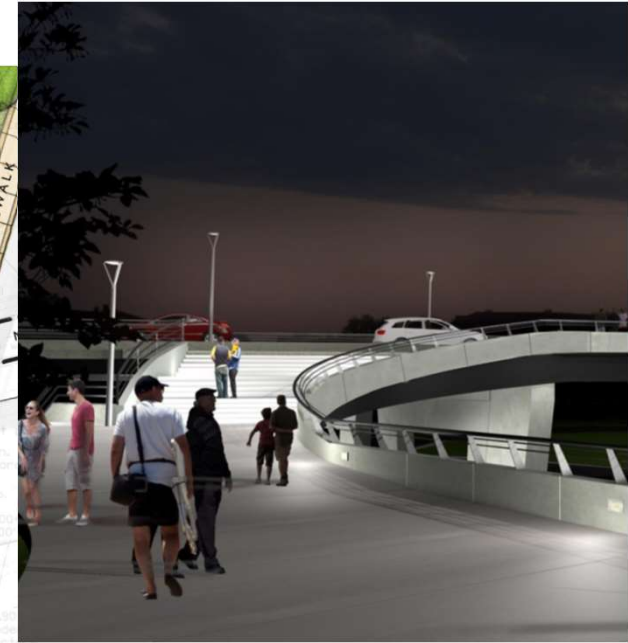
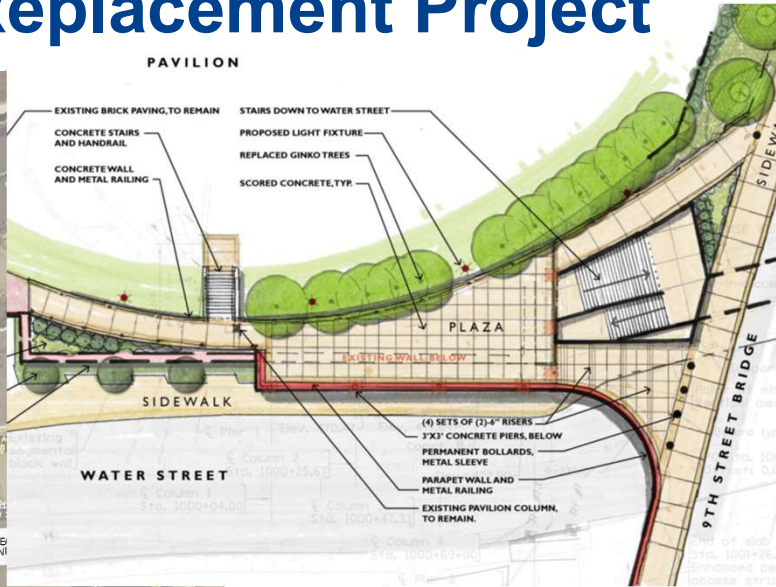
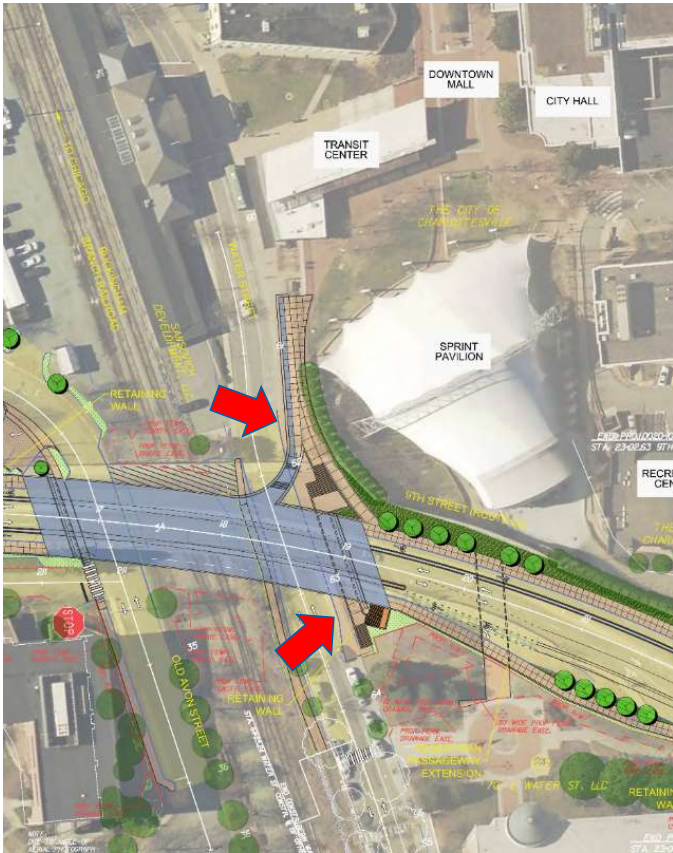


# Belmont Bridge Replacement Project



Virginia Department of Transportation

# Belmont Bridge Replacement Project



**VDOT**

Virginia Department of Transportation

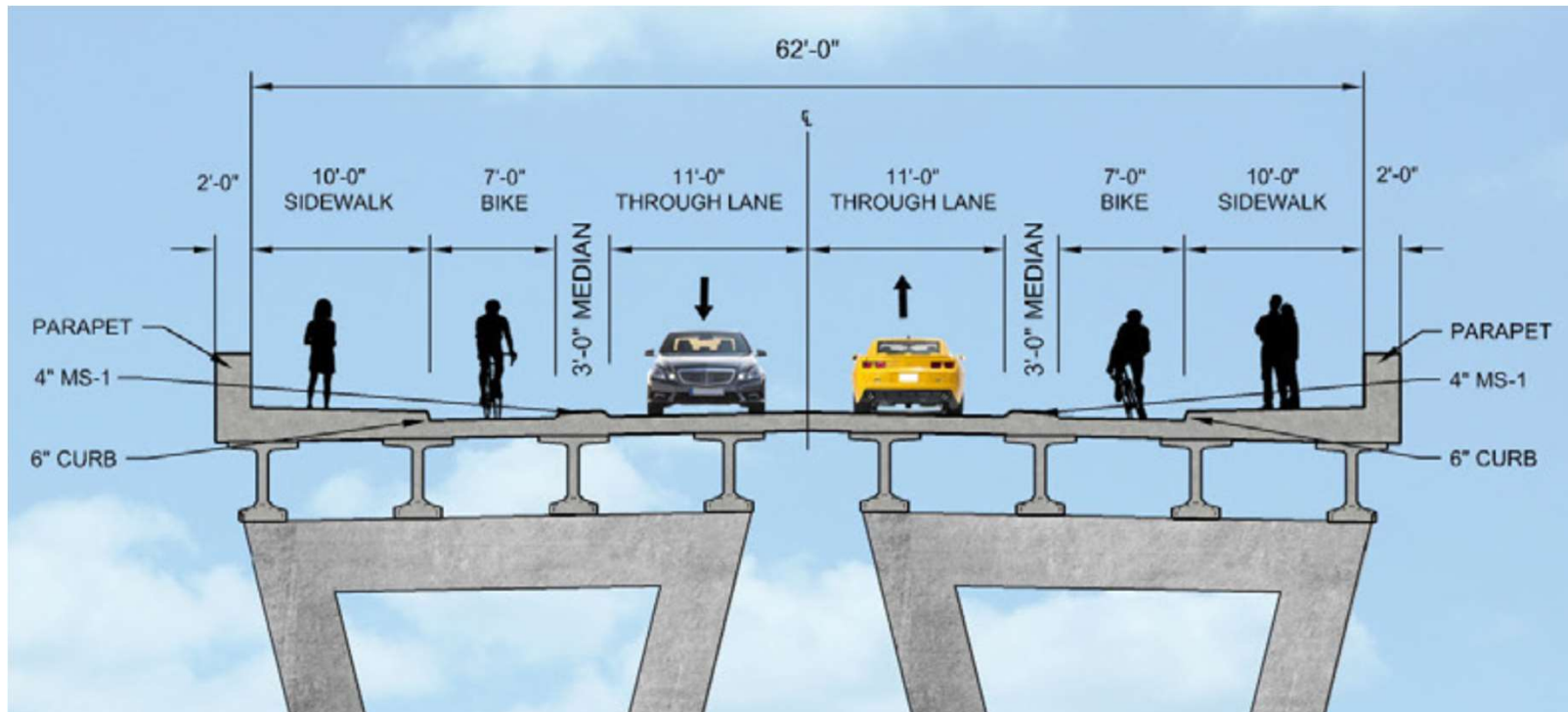
# Belmont Bridge Replacement Project



Virginia Department of Transportation



# Typical Cross-section





The existing bridge dates to 1961



A 2013 Citizen generated concept for the replacement of the Belmont Bridge with a pedestrian bridge arching over the railroad. And a 3-lane road section running under the railroad



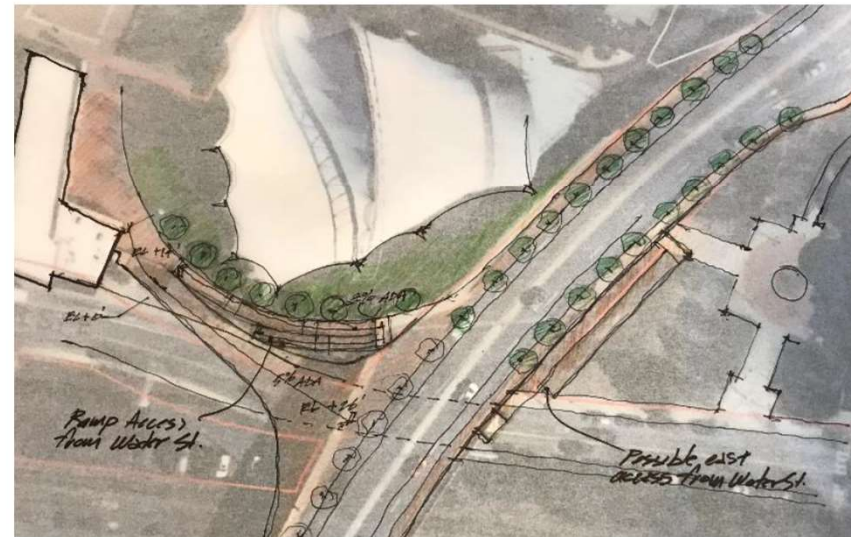
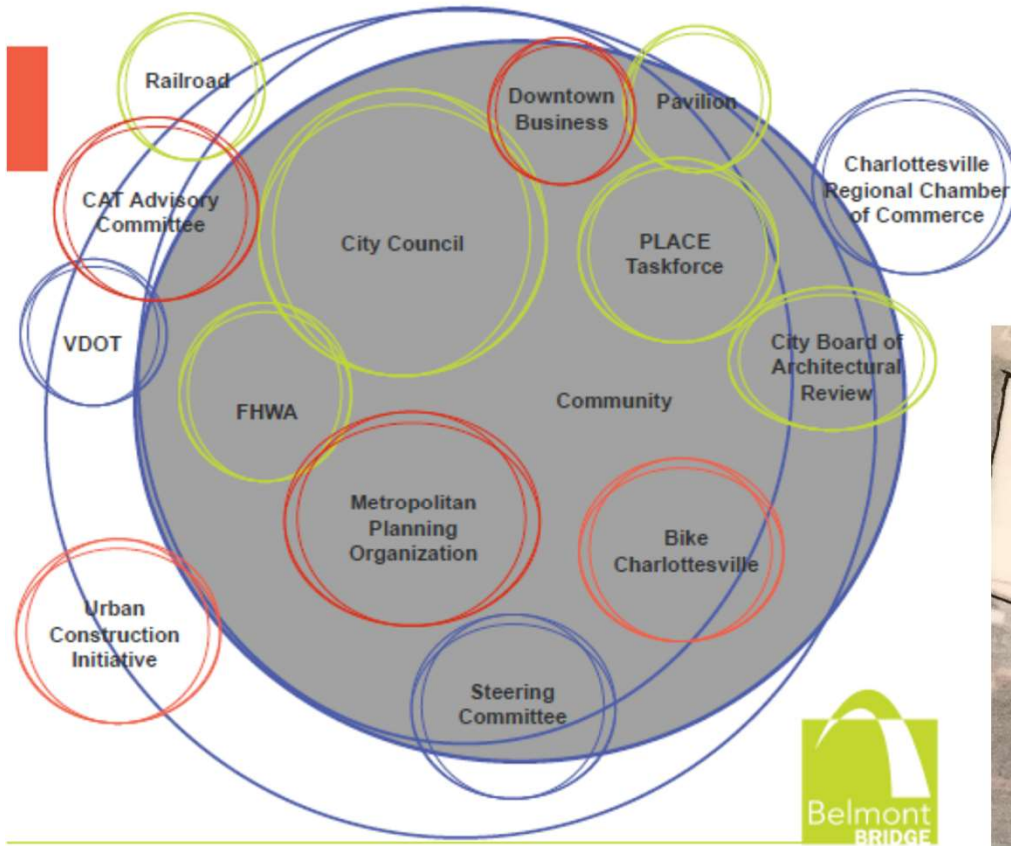


**BELMONT BRIDGE**  
MAY 8, 2014

**ENHANCED DESIGN**  
MMM DESIGN GROUP

MMM Design's bridge design presented to City Council in July 2014

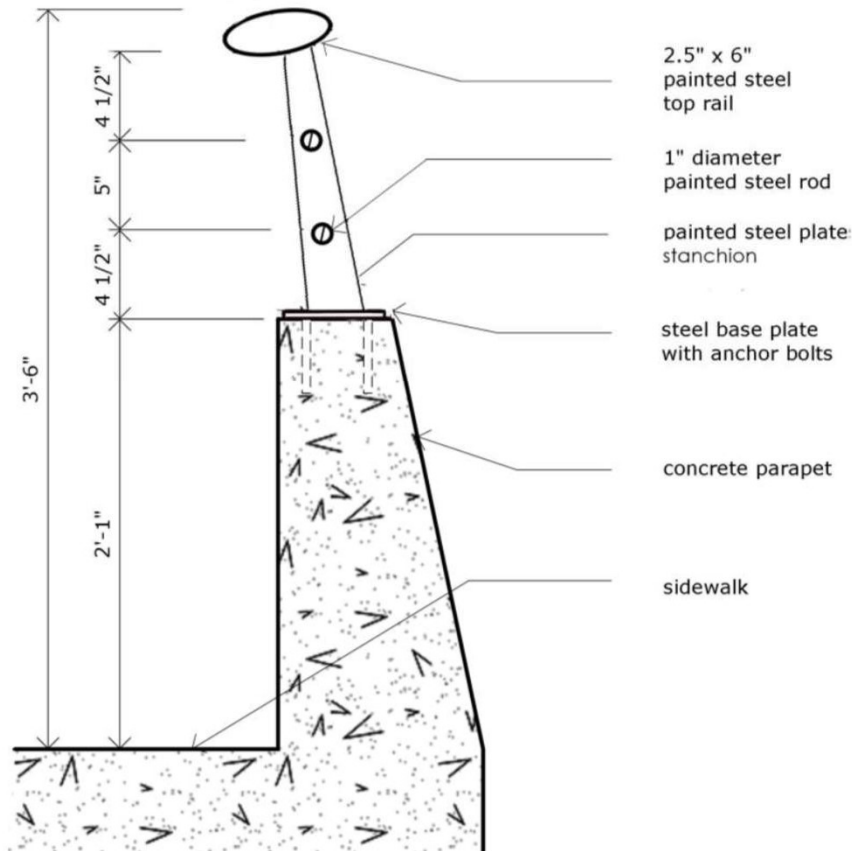
# Kimley-Horn/ City's Preliminary Design Process



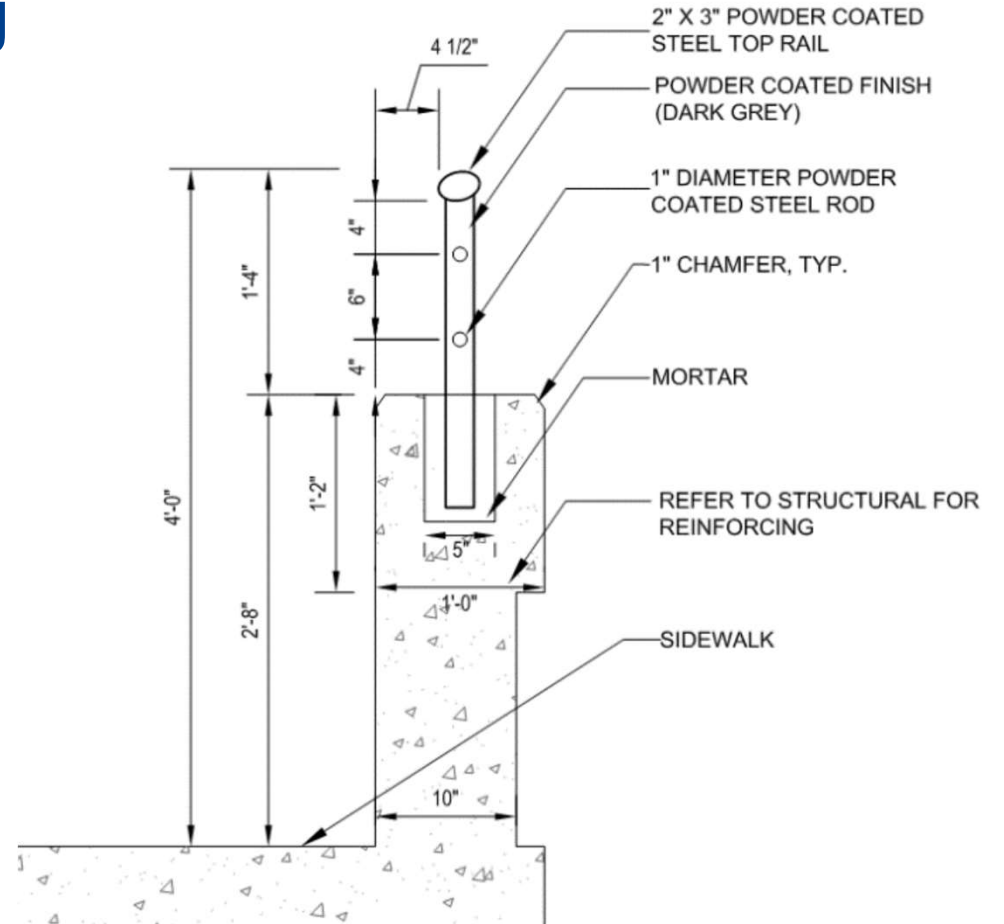
Virginia Department of Transportation



# Crash-tested Bridge Railing



**Initially Proposed**



**Final Design**

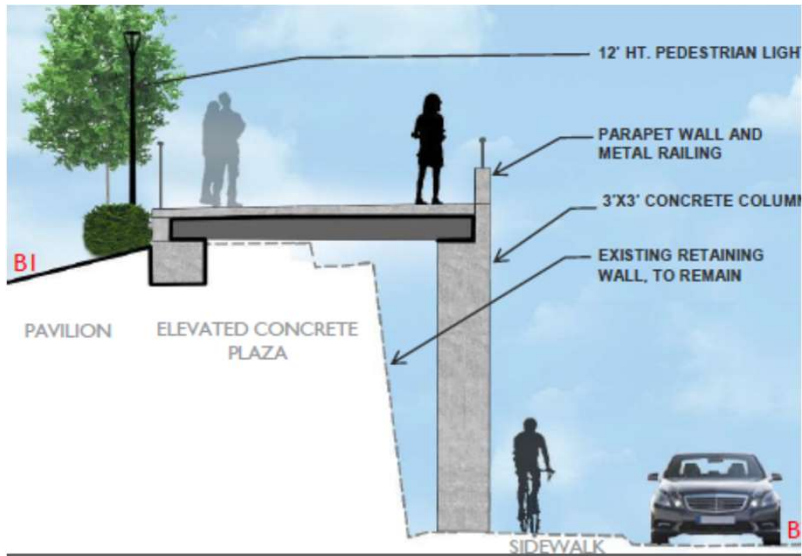
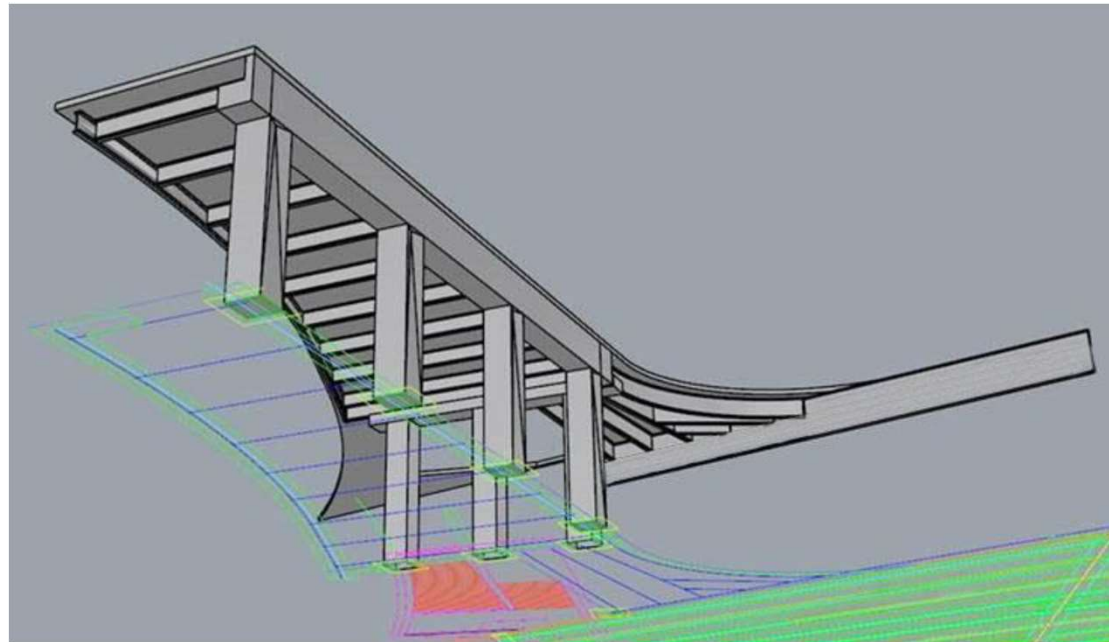


# Knuckle Bridge



Design Challenges:

- ADA Compliance
- Access for future maintenance and inspections
- Structure and constructability concerns related to attachment of the Knuckle Bridge to the Main Bridge



# Fence along top of the bridge to protect the railroad

Enter search term



Enter article no.



The railroads have supported the elimination of the railroad fencing with several stipulations:

- Design of fencing including a bridge design that will not preclude the installation at a later time.
- CCTV monitoring via video cameras on the bridge.
- Liability agreement between the railroad companies and City.



