



PIPELINE STUDY UPDATE AND SMART SCALE CONCEPT PRESENTATION

CTAC Meeting

 Charles Proctor

July 17, 2024

Meeting Agenda

1. Ivy Rd Corridor and US 29/250 Bypass Interchange Study
 - Study Overview
 - Proposed Scenario Concepts
2. CAMPO SMART Scale Round 6 Applications
 - 5th St – I64 Interchange
 - US 250 – Pantop's Corridor Improvements
 - Barracks Rd Corridor and US 29/250 Bypass Interchange Study
3. Albemarle County SMART Scale Round 6 Applications
 - US 250 – Old Trail/WAHS Intersection Improvements
 - Rte. 643 (Rio Rd) – Hillsdale/Old Brook Rd Intersection Improvements
 - Barracks Rd Corridor and US 29/250 Bypass Interchange Study
 - US 29 – Rte. 692 (Plank Rd) Intersection Improvement

What is a Project Pipeline study?

- Initiative led by the Office of Intermodal Planning and Investment (OIPI)
- Aims to identify cost-effective solutions to multi-modal transportation needs
- Intended to provide clear connection between state identified transportation priorities and project development/prioritization
 - Priority 1 & 2 VTrans needs were eligible study locations through the Project Pipeline in the first two rounds
- Utilizes a standardized study process conducted in collaboration with local government and regional planning organizations to understand and develop solutions
 - Phase 1: Understanding/diagnosing the problem
 - Phase 2: Public engagement and identification of alternatives
 - Phase 3: Comprehensive investment strategy

Project Pipeline Studies in the MPO Area

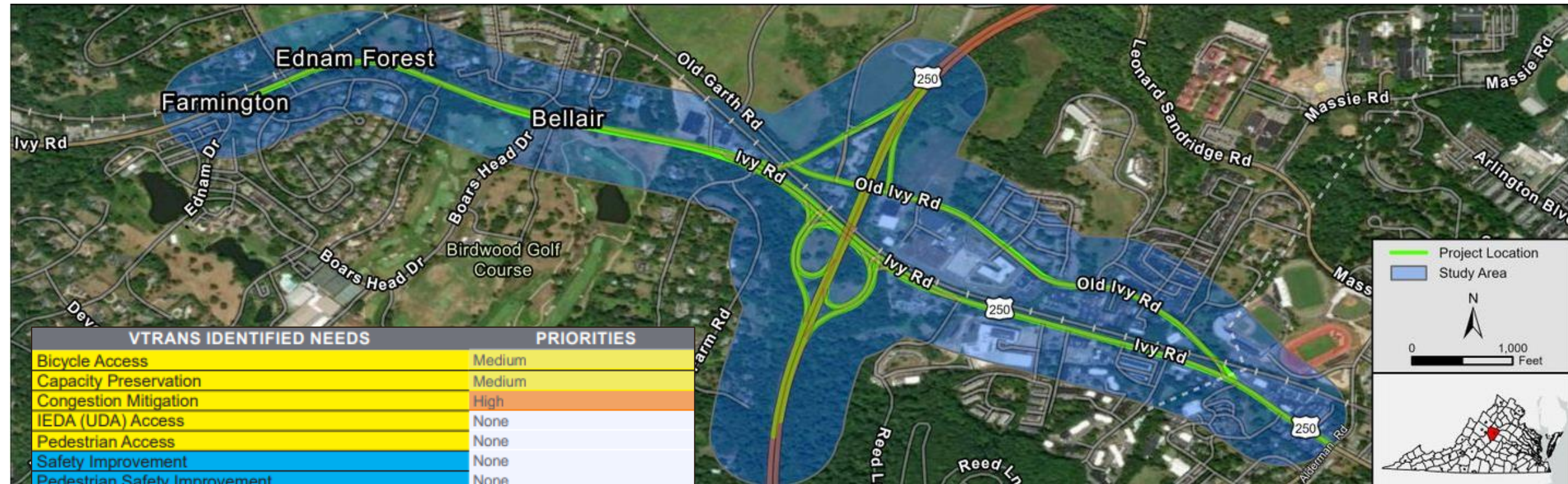
Current:

- Ivy Road Corridor Study
- Barracks Road Corridor Study (completed)

Previous:

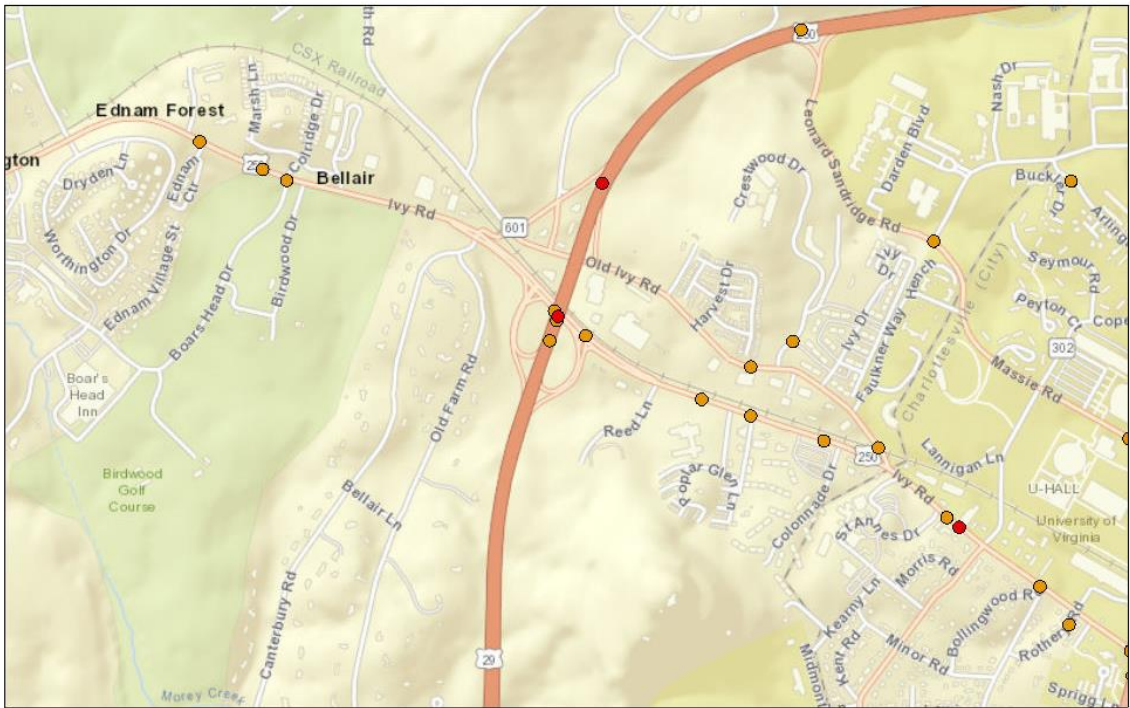
- US 250 – Pantops Corridor
- US 250 – Lousia Road/Milton Road

Ivy Road Corridor Study Area & Identified Needs

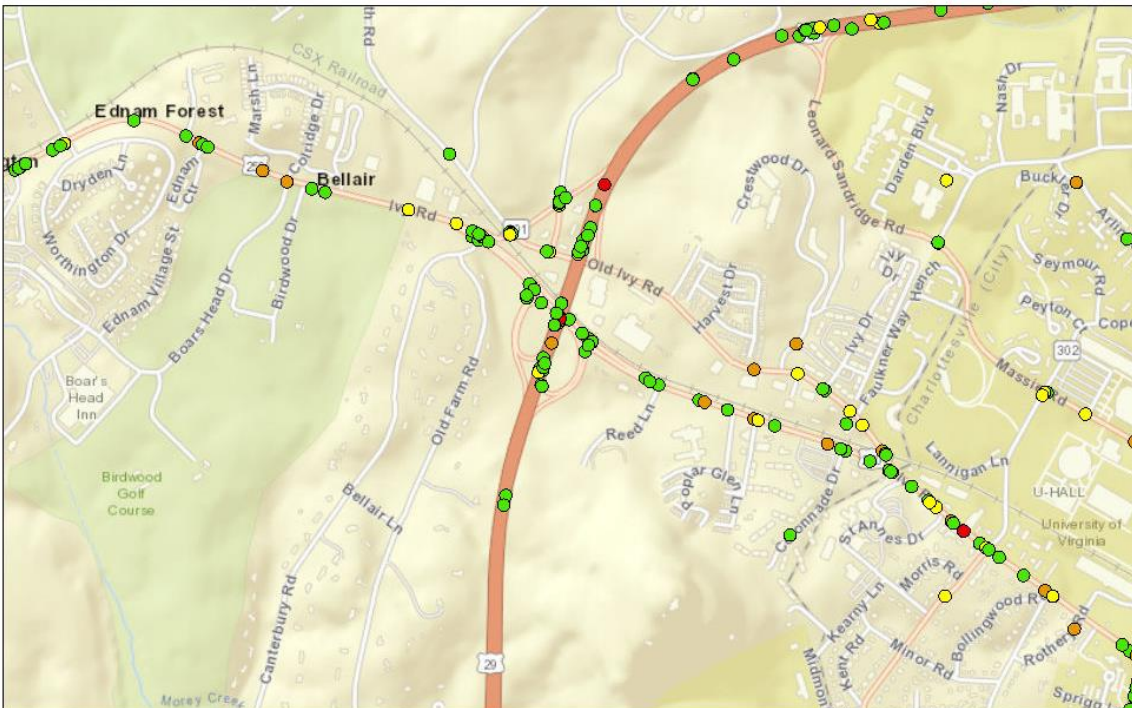
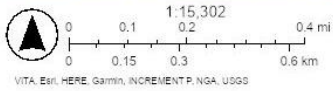


VTRANS IDENTIFIED NEEDS	PRIORITIES
Bicycle Access	Medium
Capacity Preservation	Medium
Congestion Mitigation	High
IEDA (UDA) Access	None
Pedestrian Access	None
Safety Improvement	None
Pedestrian Safety Improvement	None
Reliability	None
Rail On-time Performance	None
Transit Access	Very High
Transit Access for Equity Emphasis Areas	Very High
Transportation Demand Management	Very High

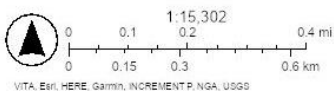
Ivy Rd Corridor Improvements



7/17/2024
Full Crash - CrashData Basic
● K. Fatal Injury
● A. Severe Injury
World Street Map



7/17/2024
Full Crash - CrashData Basic
● K. Fatal Injury
● A. Severe Injury
● B. Visible Injury
● C. Nonvisible Injury
World Street Map



Ivy Rd Corridor Improvements

2045 No-Build Intersection Analysis

No.	Intersection	Approach	Lane Group	HCM NB 2045 Delay (sec/veh)		NB 2045 HCM LOS		Sim Traffic NB 2045 Delay (sec/veh)		NB 2045 SIM Traffic LOS	
				AM	PM	AM	PM	AM	PM	AM	PM
1	Ivy Rd at Ednam Dr -Signalized-		Overall	14.1	10.4	B	B	10.4	11.8	B	B
2	Ivy Rd at Farmington Dr -Signalized-		Overall	11.9	31.8	B	C	8.5	12.6	A	B
3	Ivy Rd at Canterbury Rd -Signalized-		Overall	30.7	43.9	C	D	149.3	127.7	F	F
4	Ivy Rd at US 29 SB Ramp -Signalized-		Overall	12.0	22.6	B	C	32.8	30.2	C	C
5	Ivy Rd at US 29 NB Ramp -Signalized-		Overall	24.9	16.1	C	B	60.0	16.0	E	B
6	Ivy Rd at Old Ivy Rd/St Annes Dr -Signalized-		Overall	14.1	16.4	B	B	10.2	13.1	B	B
7	Ivy Rd at Alderman Rd/Copeley Rd -Signalized-		Overall	21.1	20.8	C	C	15.3	17.0	B	B

No.	Intersection	Approach	Lane Group	HCM NB 2045 Delay (sec/veh)		NB 2045 HCM LOS	
				AM	PM	AM	PM
8	Ivy Rd at Boxwood Estate Rd -TWSC-	EB	EBL	0.0	20.9	A	C
			EBT	0.0	0.1	A	A
		WB	WBR/T	0.0	0.0	A	A
			SBL/R	32.0	44.3	D	E
9	Ivy Rd at Boars Head Dr/Colridge Dr -TWSC-	EB	EBL	12.8	20.9	B	C
			EBR	0.0	0.1	A	A
			EBT	0.0	0.1	A	A
		WB	WBL	0.0	0.0	A	A
			WBR	0.0	0.0	A	A
			WBT	0.0	0.0	A	A
		NB	NBL/R/T	41.0	57.0	E	F
			SBL/R/T	240.6	399.7	F	F
10	Ivy Rd at Reed Ln -TWSC-	EB	EBL/T	0.0	0.0	A	A
			EBR	0.0	0.0	A	A
		WB	WBL	10.0	0.0	A	A
			WBT	0.2	0.0	A	A
		NB	NBL/R	21.0	41.9	C	E
11	Ivy Rd at Stillfried Ln -TWSC-	EB	EBL/T	0.0	0.0	A	A
			EBR	0.0	0.0	A	A
		WB	WBL	0.0	0.0	A	A
			WBT	0.0	0.0	A	A
		NB	NBL	25.4	135.2	D	F
			NBR	20.5	11.3	C	B
12	Ivy Rd at Twin Sycamores Ln -TWSC-	EB	EBL/R/T	0.0	0.0	A	A
			WBL	9.5	8.3	A	A
		WB	WBT	0.1	0.0	A	A
			NB	NBL/R	21.8	34.0	C
13	Ivy Rd at Colonnade Dr -TWSC-	EB	EBL/T	0	0	A	A
			EBR	0	0	A	A
		WB	WBL	9.5	8.5	A	A
			WBT	0.9	0.4	A	A
		NB	NBL/R	24.5	49.9	C	E
14	Ivy Rd at Saint Annes Rd -TWSC-	EB	EBL/R/T	0	0	A	A
		WB	WBL	10	9	A	A
			WBT	0	0	A	A
		NB	NBL/R	17	15	C	B

Ivy Rd Corridor Improvements

Western Corridor Package 1

Modification of the Ednam Drive intersection to provide only right-in/right-out and left-in access	22% 1. Strongly oppose	8% 2. Somewhat oppose	27% 3. Neutral	17% 4. Somewhat support	27% 5. Strongly support
3.19					
Installation of a roundabout at Farmington Drive	22% 1. Strongly oppose	7% 2. Somewhat oppose	12% 3. Neutral	18% 4. Somewhat support	41% 5. Strongly support
3.48					
Modification of the Boxwood Estate Road intersection to provide only right-in/right-out access	13% 1. Strongly oppose	6% 2. Somewhat oppose	35% 3. Neutral	17% 4. Somewhat support	29% 5. Strongly support
3.43					
Installation of a new interparcel connection between Boxwood Estate Road and Kenridge Park Road	10% 1. Strongly oppose	5% 2. Somewhat oppose	42% 3. Neutral	15% 4. Somewhat support	28% 5. Strongly support
3.46					
Modification of the Ednam Center intersection to provide only right-in/right-out and left-in access	14% 1. Strongly oppose	7% 2. Somewhat oppose	32% 3. Neutral	19% 4. Somewhat support	28% 5. Strongly support
3.38					
Installation of a raised median (to prevent turns across the median) between Boxwood Estate Road and Boars Head Drive as shown in the figure	15% 1. Strongly oppose	9% 2. Somewhat oppose	24% 3. Neutral	20% 4. Somewhat support	32% 5. Strongly support
3.46					
Installation of a roundabout at Boars Head Drive/Colridge Drive (assumed improvement associated with the Middle Corridor Improvement Packages)	18% 1. Strongly oppose	7% 2. Somewhat oppose	13% 3. Neutral	17% 4. Somewhat support	44% 5. Strongly support
3.61					

1,090 respondents



Ivy Rd Corridor Improvements

Western Corridor Package 2

Modification of the Ednam Drive intersection to provide a Green-T intersection	18% 1. Strongly oppose	11% 2. Somewhat oppose	29% 3. Neutral	23% 4. Somewhat support	19% 5. Strongly support
3.14					
Modification of the Ednam Center intersection to provide only right-in/right-out and left-in access	15% 1. Strongly oppose	7% 2. Somewhat oppose	34% 3. Neutral	20% 4. Somewhat support	25% 5. Strongly support
3.33					
Installation of a raised median (to prevent turns across the median) between Ednam Center and Boars Head Drive/Colridge Drive	13% 1. Strongly oppose	9% 2. Somewhat oppose	28% 3. Neutral	19% 4. Somewhat support	30% 5. Strongly support
3.43					
Installation of a roundabout at Boars Head Drive/Colridge Drive (assumed improvement associated with the Middle Corridor Improvement Packages)	17% 1. Strongly oppose	6% 2. Somewhat oppose	13% 3. Neutral	18% 4. Somewhat support	46% 5. Strongly support
3.70					

825 respondents

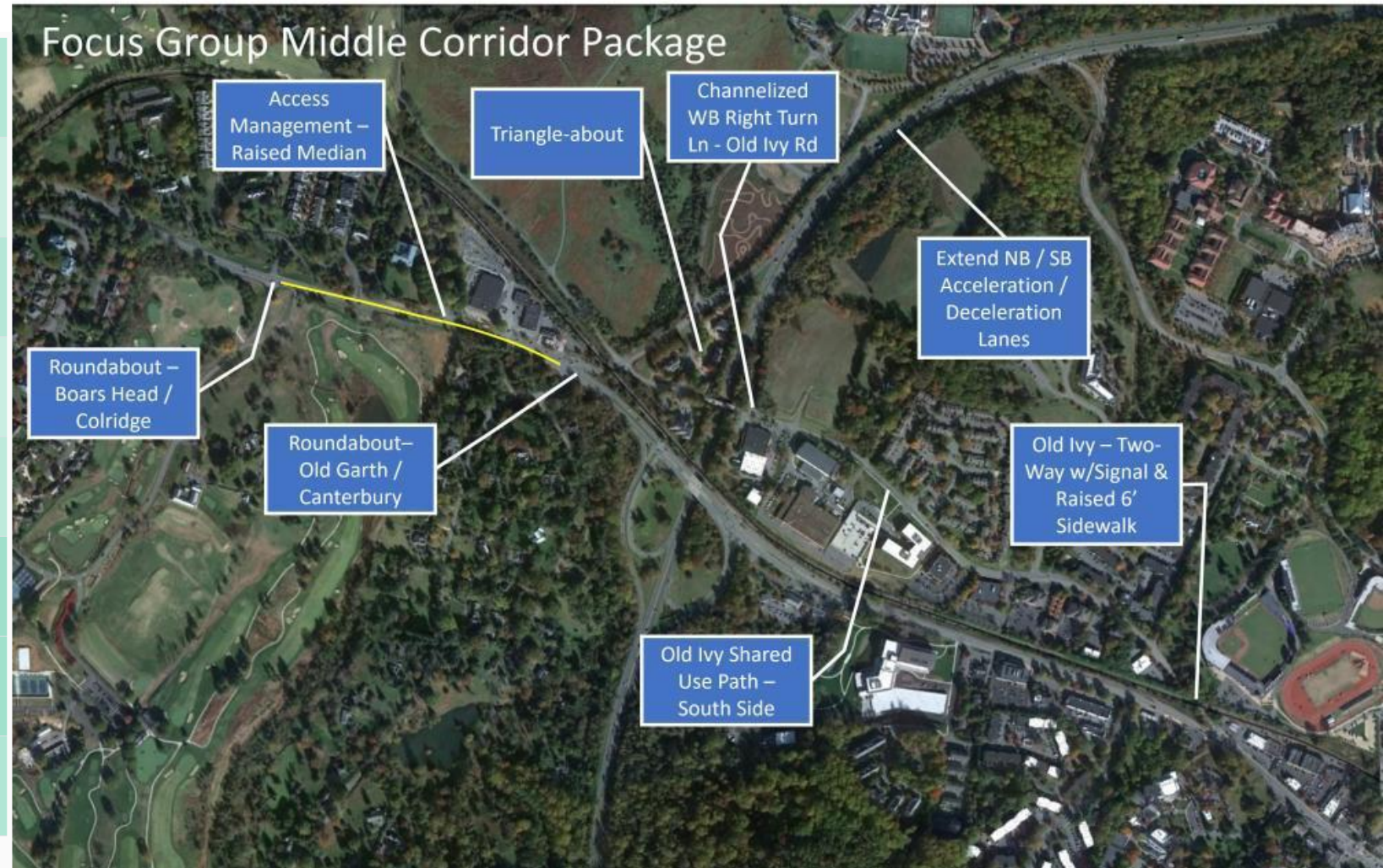


Ivy Rd Corridor Improvements

Focus Group Mid Term Package

Installation of a roundabout at Boars Head Drive/Colridge Drive	17% 1. Strongly oppose	5% 2. Somewhat oppose	15% 3. Neutral	17% 4. Somewhat support	46% 5. Strongly support
3.71					
Installation of a raised median (to prevent turns across the median) from Boars Head Drive to Old Garth Road/Canterbury Road	16% 1. Strongly oppose	8% 2. Somewhat oppose	26% 3. Neutral	19% 4. Somewhat support	31% 5. Strongly support
3.41					
Installation of a roundabout at Old Garth Road/Canterbury Road	17% 1. Strongly oppose	6% 2. Somewhat oppose	14% 3. Neutral	18% 4. Somewhat support	45% 5. Strongly support
3.67					
Installation of a "Triangle-about" at the southbound Bypass off-ramp/Old Garth Road/Old Ivy Road area	18% 1. Strongly oppose	8% 2. Somewhat oppose	19% 3. Neutral	23% 4. Somewhat support	33% 5. Strongly support
3.45					
Installation of a channelized westbound right turn lane on Old Ivy Road at the northbound Bypass on-ramp	11% 1. Strongly oppose	5% 2. Somewhat oppose	21% 3. Neutral	24% 4. Somewhat support	40% 5. Strongly support
3.77					
Extension of the northbound and southbound Old Ivy Road Bypass ramps acceleration and deceleration lanes	8% 1. Strongly oppose	2% 2. Somewhat oppose	12% 3. Neutral	20% 4. Somewhat support	58% 5. Strongly support
4.18					
Installation of a 10' shared use path on the south side of Old Ivy Road	10% 1. Strongly oppose	2% 2. Somewhat oppose	16% 3. Neutral	15% 4. Somewhat support	57% 5. Strongly support
4.05					
Installation of an advanced traffic signal on Old Ivy Road at the eastern railroad overpass to facilitate one-way traffic under the overpass. Also installation of a raised 6' sidewalk under the railroad overpass	14% 1. Strongly oppose	6% 2. Somewhat oppose	14% 3. Neutral	18% 4. Somewhat support	47% 5. Strongly support
3.78					

789 respondents



Ivy Rd Corridor Improvements

Other Short Term Middle Corridor Package

Installation of a roundabout at Boars Head Drive/Colridge Drive	17% 1. Strongly oppose	6% 2. Somewhat oppose	16% 3. Neutral	16% 4. Somewhat support	45% 5. Strongly support
Installation of dual southbound right turn lanes at Old Garth Road/Canterbury Road	25% 1. Strongly oppose	8% 2. Somewhat oppose	24% 3. Neutral	20% 4. Somewhat support	23% 5. Strongly support
Installation of a "Triangle-about" at the southbound Bypass off-ramp/Old Garth Road/Old Ivy Road area	18% 1. Strongly oppose	7% 2. Somewhat oppose	24% 3. Neutral	23% 4. Somewhat support	28% 5. Strongly support
Installation of a channelized westbound right turn lane on Old Ivy Road at the northbound Bypass on-ramp	11% 1. Strongly oppose	5% 2. Somewhat oppose	22% 3. Neutral	27% 4. Somewhat support	34% 5. Strongly support
Extension of the northbound and southbound Old Ivy Road Bypass ramps acceleration and deceleration lanes	7% 1. Strongly oppose	2% 2. Somewhat oppose	15% 3. Neutral	20% 4. Somewhat support	56% 5. Strongly support
Installation of a 10' shared use path on the south side of Old Ivy Road	9% 1. Strongly oppose	3% 2. Somewhat oppose	19% 3. Neutral	14% 4. Somewhat support	55% 5. Strongly support
Modification of the Old Ivy Road eastern railroad underpass to be westbound only with a raised 6' sidewalk on Old Ivy Road under the railroad underpass	26% 1. Strongly oppose	7% 2. Somewhat oppose	16% 3. Neutral	13% 4. Somewhat support	38% 5. Strongly support

699 respondents

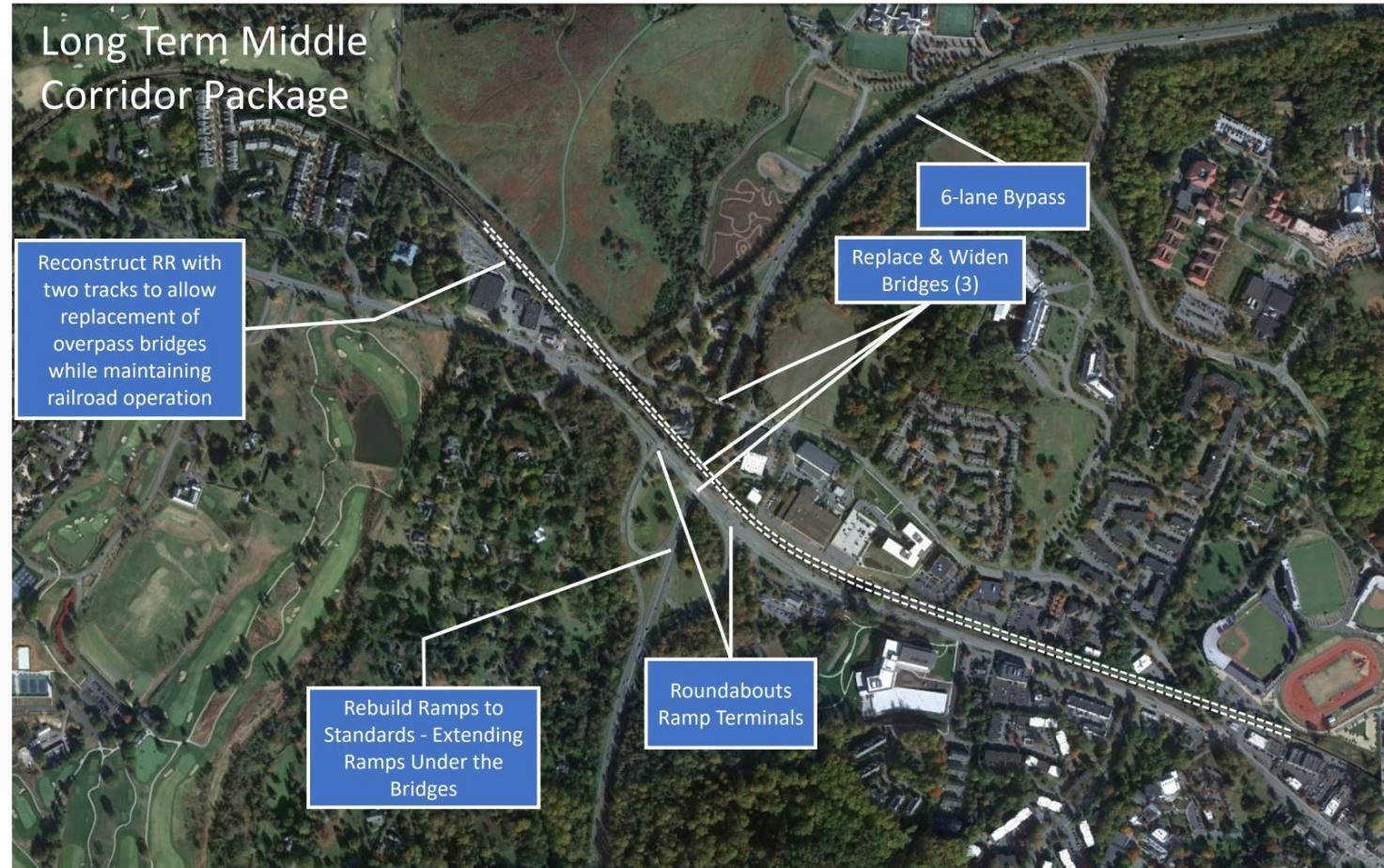


Ivy Rd Corridor Improvements

Long Term Middle Corridor Package

Widening the Bypass to a six-lane typical section	22% 1. Strongly oppose	9% 2. Somewhat oppose	18% 3. Neutral	18% 4. Somewhat support	33% 5. Strongly support
3.31					
Replacement and widening of the Ivy Road bridge, the Old Ivy Road bridge, and the railroad bridge	14% 1. Strongly oppose	7% 2. Somewhat oppose	16% 3. Neutral	23% 4. Somewhat support	40% 5. Strongly support
3.67					
Installation of roundabouts at the Ivy Road interchange terminals	16% 1. Strongly oppose	7% 2. Somewhat oppose	18% 3. Neutral	20% 4. Somewhat support	39% 5. Strongly support
3.60					
Extending the southbound Bypass off-ramp to Ivy Road and the northbound Bypass on-ramp to meet current design standards	8% 1. Strongly oppose	3% 2. Somewhat oppose	16% 3. Neutral	21% 4. Somewhat support	51% 5. Strongly support
4.03					
Reconstruction of the railroad through the Ivy Road interchange area to be double tracked to allow for replacement of the existing railroad bridge over the Bypass (in order to maintain railroad operations)	12% 1. Strongly oppose	5% 2. Somewhat oppose	22% 3. Neutral	20% 4. Somewhat support	40% 5. Strongly support
3.72					

667 respondents

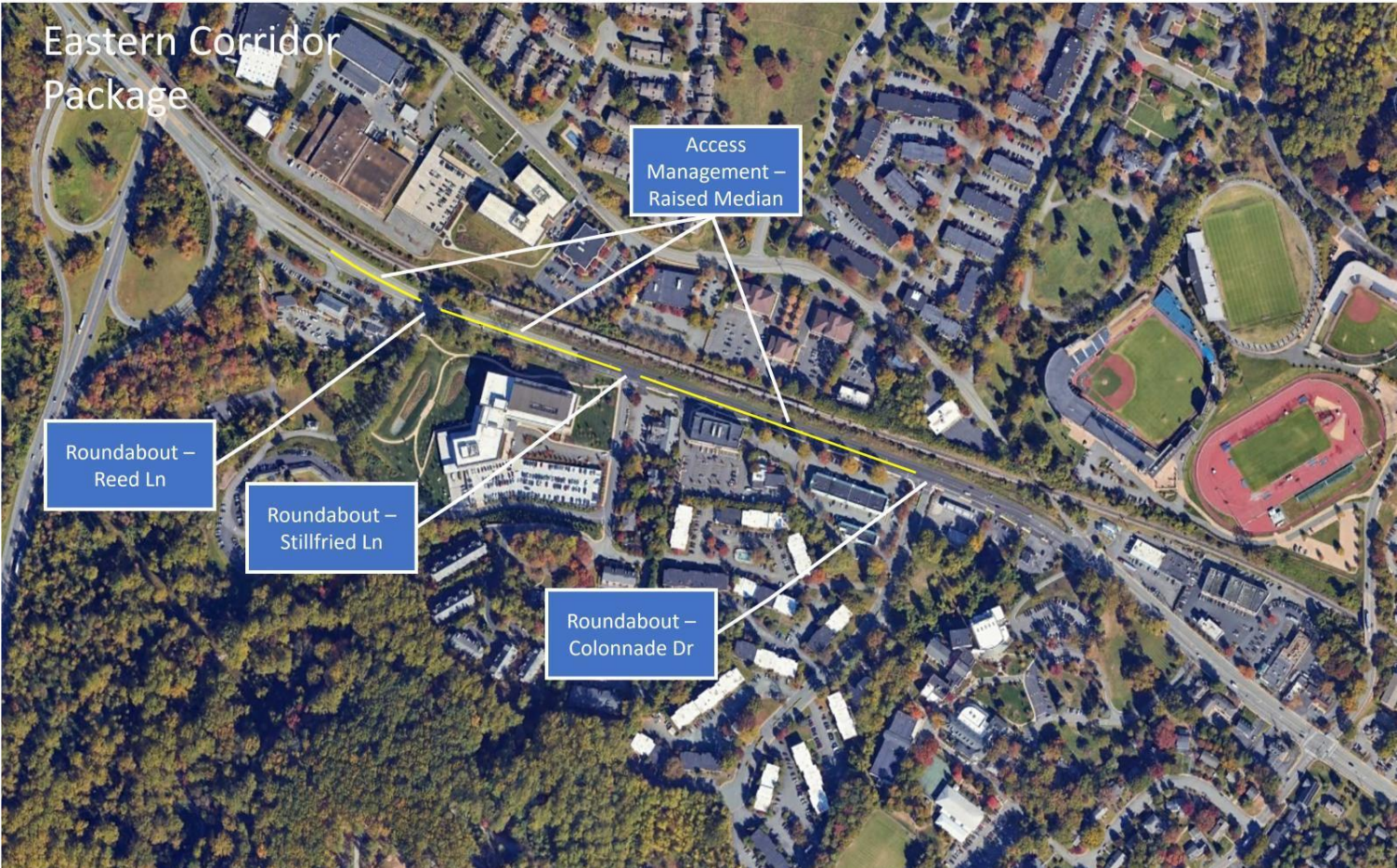


Ivy Road Corridor Improvements

Eastern Corridor Package

Installation of a raised median from the northbound Bypass ramp terminal to Colonnade Drive (to prevent left turns other than those at the proposed roundabouts)	19% 1. Strongly oppose	8% 2. Somewhat oppose	34% 3. Neutral	16% 4. Somewhat support	23% 5. Strongly support
3.18					
Installation of a roundabout at Reed Lane	24% 1. Strongly oppose	10% 2. Somewhat oppose	27% 3. Neutral	13% 4. Somewhat support	27% 5. Strongly support
3.10					
Installation of a roundabout at Stillfried Lane	22% 1. Strongly oppose	9% 2. Somewhat oppose	27% 3. Neutral	14% 4. Somewhat support	28% 5. Strongly support
3.17					
Installation of a roundabout at Colonnade Drive	22% 1. Strongly oppose	8% 2. Somewhat oppose	27% 3. Neutral	15% 4. Somewhat support	29% 5. Strongly support
3.20					

604 respondents



Ivy Road Corridor Improvements

Next Steps

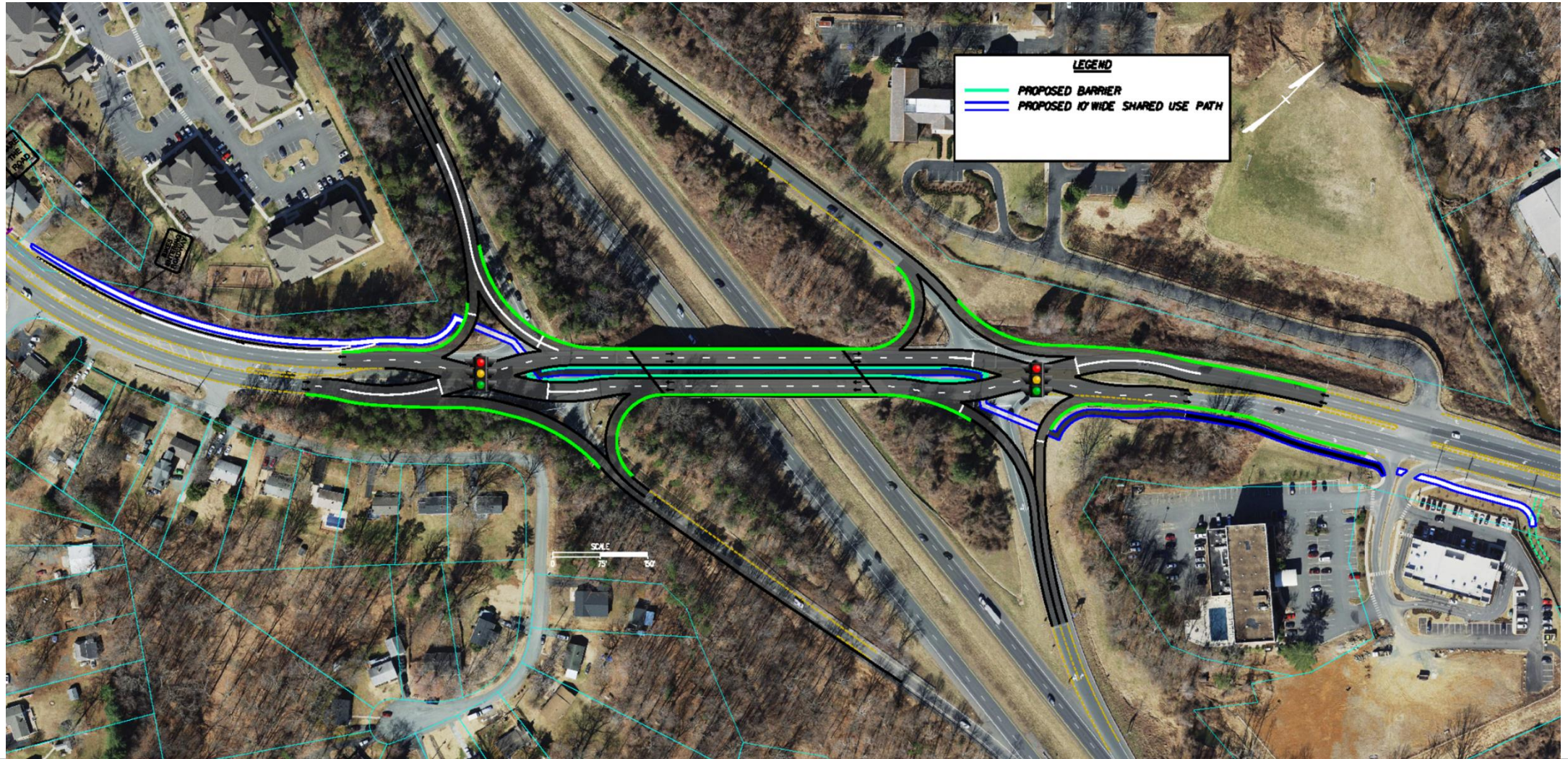
- Finalize preferred alternatives
- Develop a comprehensive funding strategy
- Future funding applications

CAMPO – SMART Scale Round 6 Project List

- 5th St.- I64 Interchange Improvements
 - The Draft Interchange Access Report (IAR) is under review
 - Cost Estimate and Risk Memo is being finalized.
- US 250 – Pantop's Corridor Pipeline Study recommendations
 - Cost Estimate and Risk Memo is being finalized.
- Barracks Rd Pipeline Study (Georgetown Rd to Emmet St. & Interchange to Emmet St.)
 - The Draft Operations and Safety Analysis Report (OSAR) is under review.
 - Cost Estimates and Risk Memo is being finalized..

SMART Scale Round 6 – CAMPO

I64 – 5th St Interchange Improvements (Exit 119)



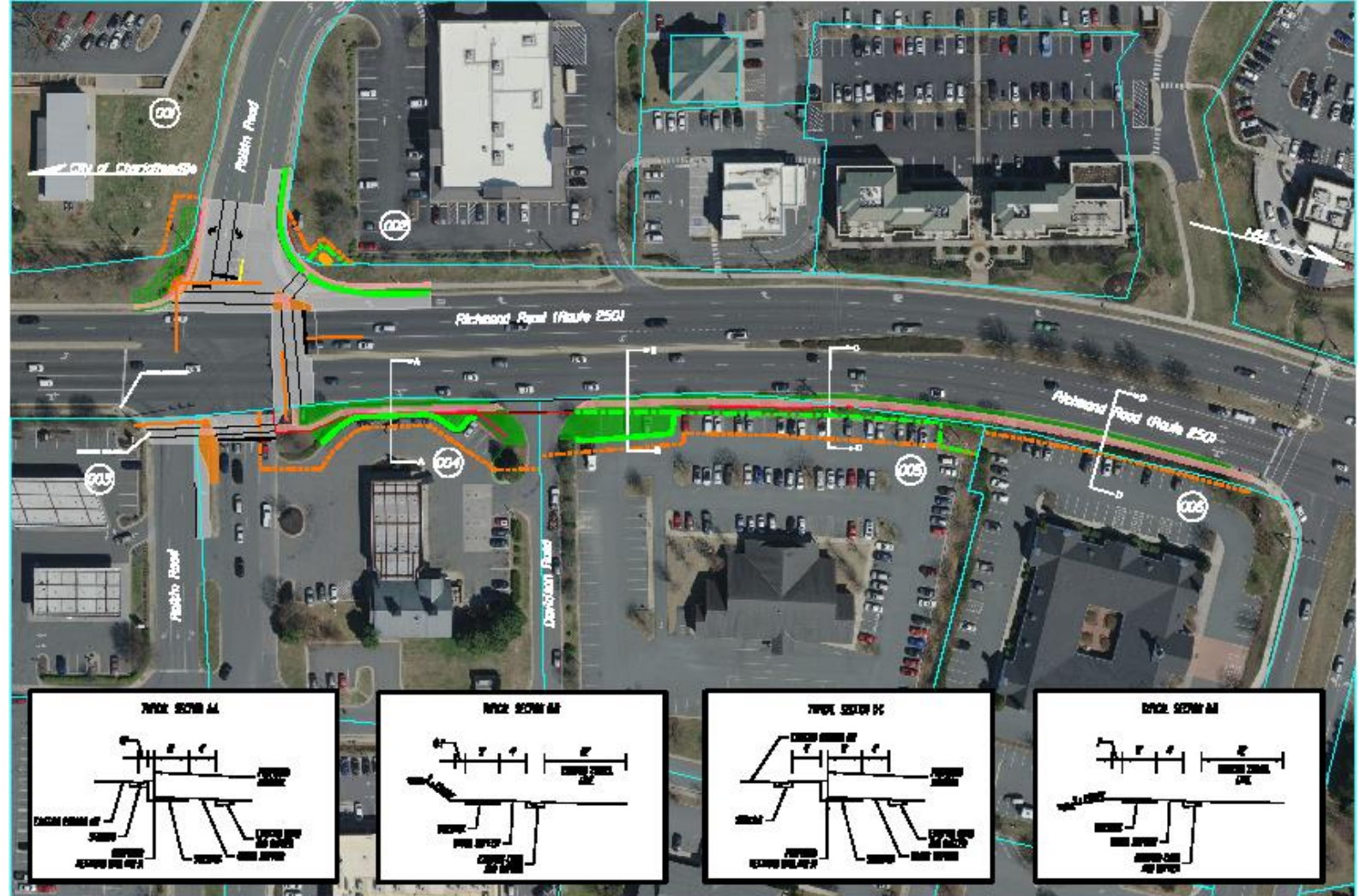
SMART SCALE Round 6 – CAMPO

US 250 – Pantops (1 of 2) (Rolkin Rd Intersection Improvements)

Project Includes:

- Replacing the signal at Rolkin Rd. / US 250 Intersection;
- Adds crosswalks across US 250; and
- Installs sidewalk along US 250 from Rolkin Rd to State Farm

APP ID # 11487



SMART SCALE Round 6 – CAMPO

US 250 – Pantops (2 of 2) (Peter Jefferson Pkwy Intersection Improvements)

Project Includes:

- Closing the median crossover to the Hilton Inn
- Converting the intersection to a Thru-Cut (eliminate the side street thru movements) with an EB Right Turn Lane;
- Adding a 50 Space Park & Ride Lot with Bus Loop.

APP ID #11487

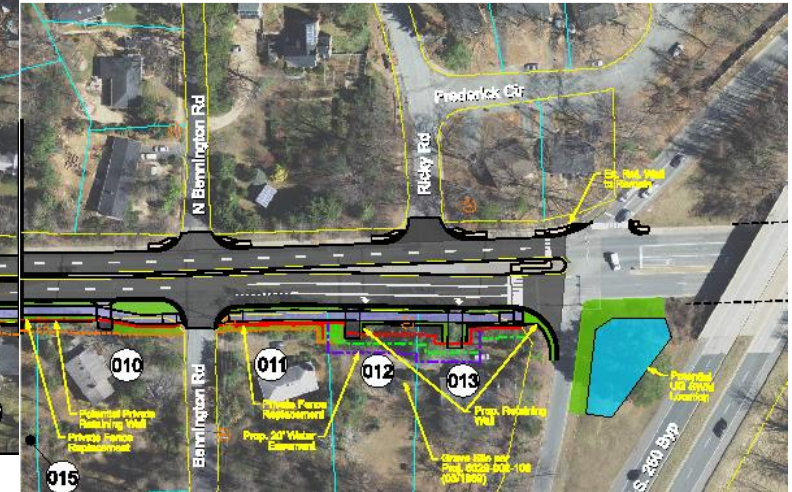
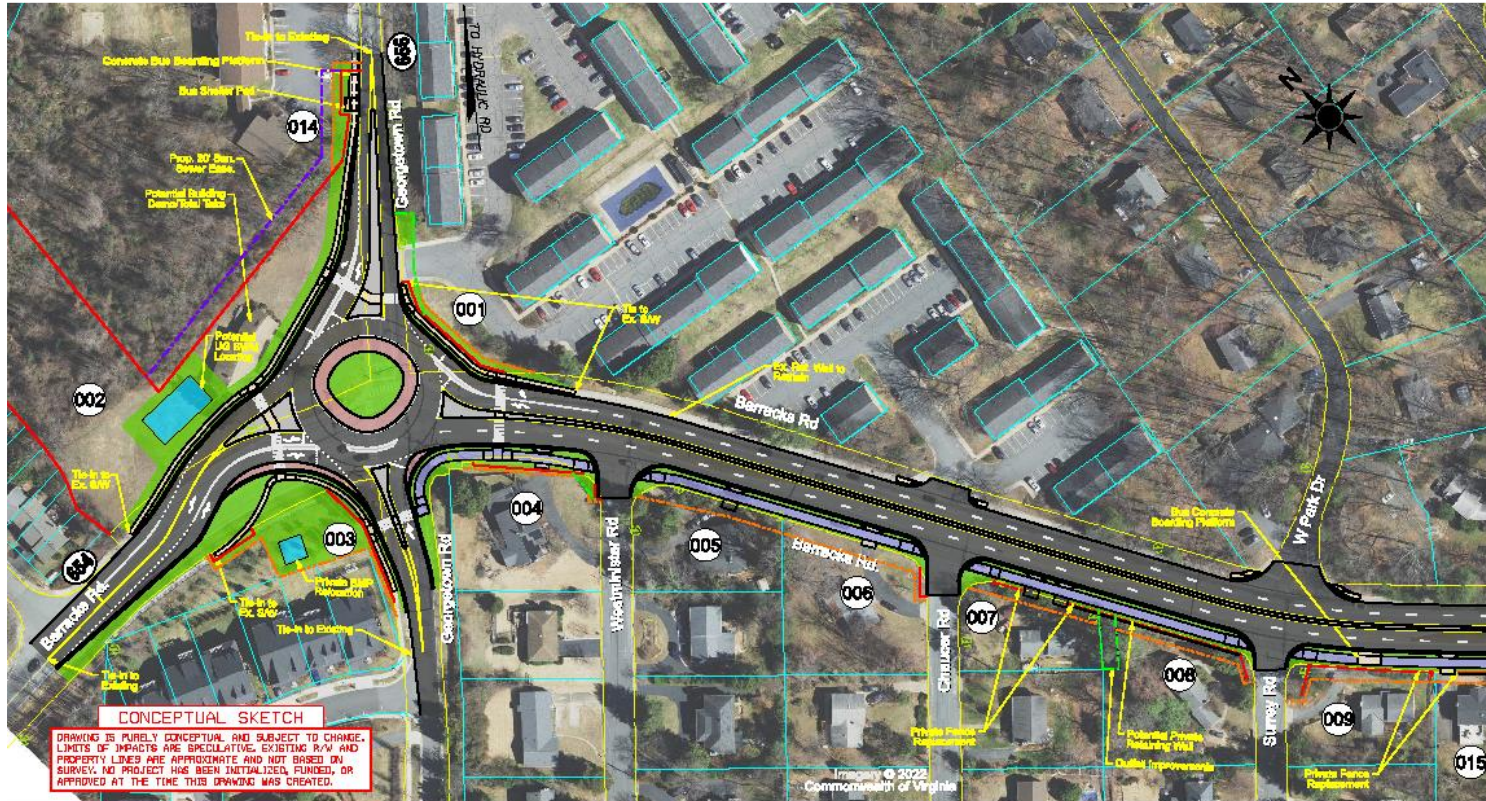


SMART SCALE Round 6 – CAMPO

Barracks Rd Corridor Improvements (1 of 3)

Albemarle County portion
Georgetown Rd to the US
29/250 Interchange

App ID # 11772

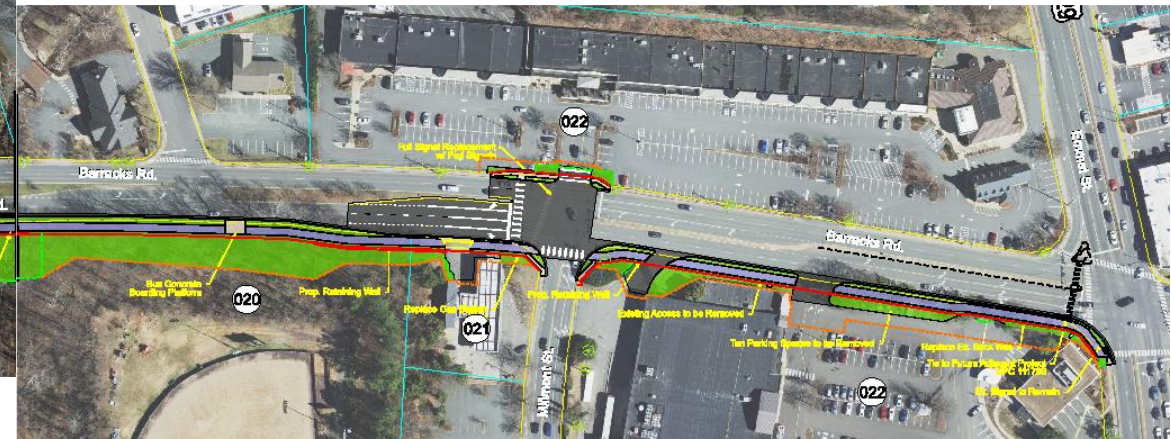


Project Includes:

- Converting the Georgetown Rd Intersection to a Hybrid Roundabout;
- Narrowing and Closing the median crossovers between Georgetown Rd and the interchange; and
- Adds a Shared Use Path along the corridor.

Barracks Rd Corridor Improvements (2 of 3)

APP ID # 11679 (Corridor)



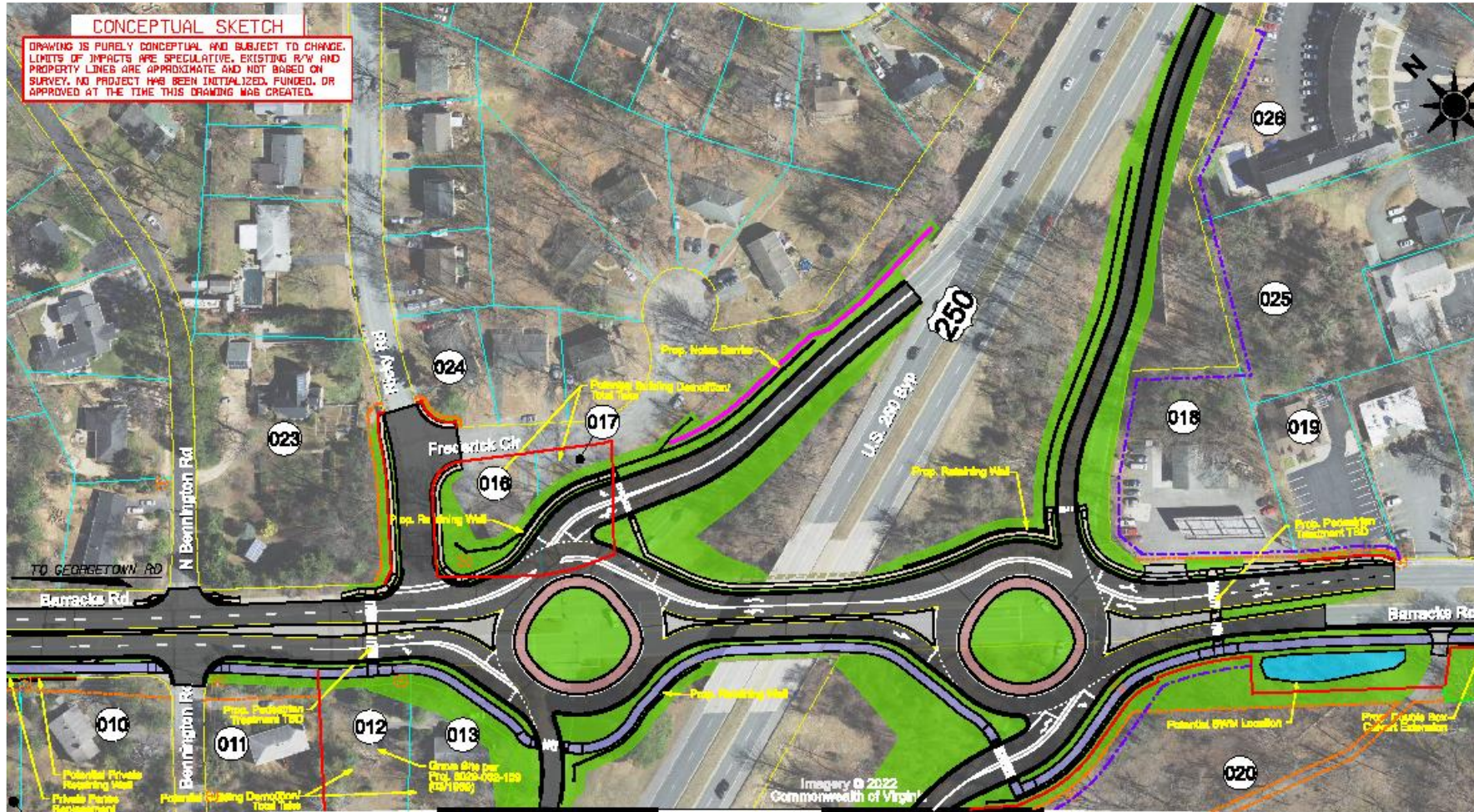
Project Includes:

- Converting the Interchange to a Double Roundabout Configuration;
- Adds a Shared Use Path along the corridor thru the interchange.

SMART SCALE Round 6 – CAMPO

Barracks Rd Corridor Improvements (3 of 3)

Changed Portion for the entire
Corridor Concept
APP ID # 11679 (Corridor)



Albemarle County – SMART Scale Project List

- Resubmitting US 250 – Old Trail Dr. / WAHS Intersection Improvements
 - Final cost estimate are being finalized
- Rte. 631 (Rio Rd.) – Rte. 1427 (Hillsdale Dr.) & Rte. 631 (Rio Rd.) – Old Brook Rd. Intersection Improvement
 - Final cost estimate are being finalized
- Barracks Rd Pipeline Study (Georgetown Rd RDBT& Access Management and SUP on Barracks from Georgetown to the interchange)
 - Final cost estimate are being finalized
- US 29 – Rte. 692 (Plank Rd.) Intersection Improvement
 - Final Cost Estimate is being Finalized

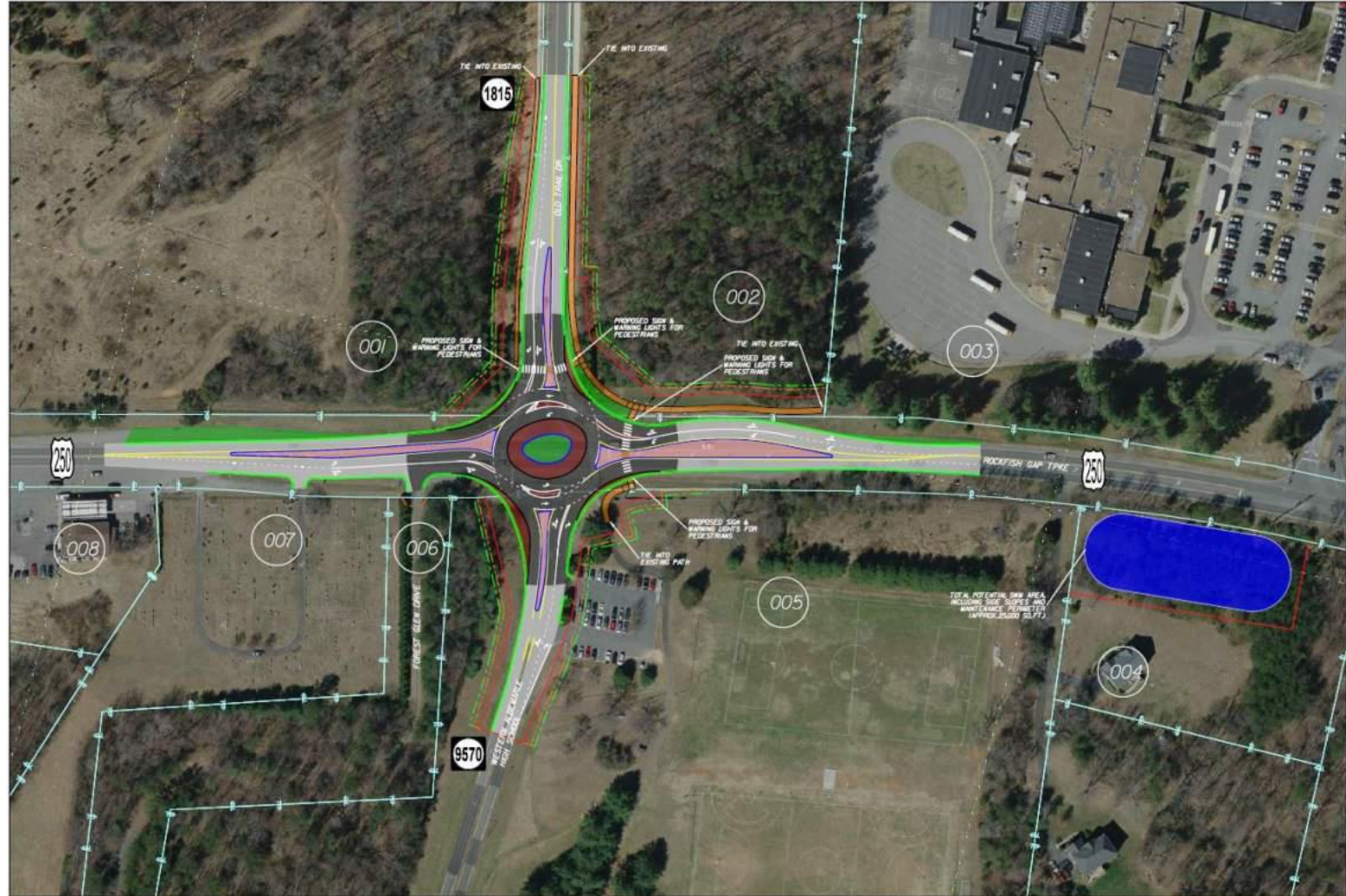
SMART SCALE Round 6 – Albemarle County

US 250 at Old Trail/ WAHS Intersection Improvement

Project Includes:

- Converting the signalized intersection of 2 – Two Lane Roadways to a Hybrid Roundabout to address an on-going Safety Concern.
- Resubmission from SS Round 5.
- Updating the study and safety analysis to include the new ICAP tool.

APP ID 11600



Rte. 643 (Rio Rd) – Hillsdale / Old Brook Rd Intersection Improvements

- Converting the two adjacent signalized intersections into a peanut shaped Hybrid Roundabout.
- Adds sidewalks, Shared Use Path and crosswalks
- Address an on-going Safety Concern.
- Study and safety analysis to include the new ICAP tool.

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SMART SCALE Round 6 – Albemarle County

US 29 – Rte. 692 (Plank Rd.) Intersection Improvement

APP ID # 11715



Project Includes:

- Converting the crossovers at Plank and Sutherland Rd to unsignalized RCI's with a U-turns at the adjusted crossover north of Plank Rd. to address safety concerns at the intersections.
- Updating the study and safety analysis to include the new ICAP tool.
- This is a PSI Intersection Ranked # 66.