



RT. 5 / RT. 614 INTERSECTIONS RSA

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Existing Conditions

Route 614 crosses Rte. 5 as a pair of offset “T” intersections

The T intersections are about 360’ apart

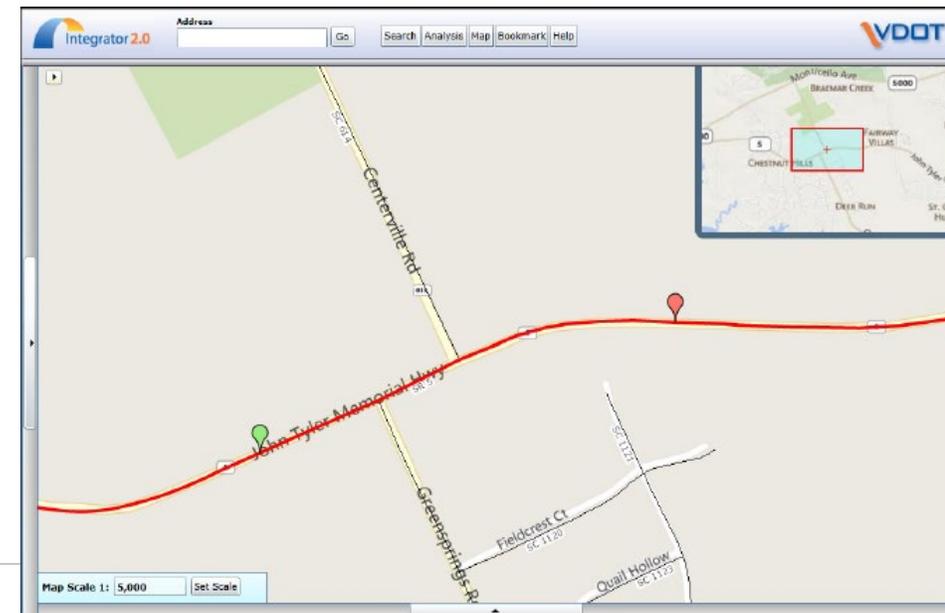
Rte. 5 operates in free flow at both intersections

Rte. 5 2018 AADT of 7780 vehicles

Greensprings Rd. AADT of 3020 vehicles

Centerville Rd. AADT of 4948 vehicles

Posted speed limit is 45 mph



Crash Data

Table 1 – Crash Data

	Rte. 5 @ Greensprings Rd.				Rte. 5 @ Centerville Rd.				Grand Total
	2016	2017	2018	Total	2016	2017	2018	Total	
Total	4	2	5	11	2	6	7	15	26
KABCO Severity:									
Fatal (K)	0	0	0	0	0	0	0	0	0
Incapacitating Injury (A)	0	0	0	0	0	0	0	0	0
Non-Incapacitating Injury (B)	0	0	0	0	0	0	0	0	0
Possible Injury (C)	1	2	4	7	0	1	3	4	11
No Injury (O)	3	0	1	4	2	5	4	11	15
Collision Type:									
Rear End	1	1	3	5	0	4	2	6	11
Angle	0	0	1	1	1	1	4	6	7
Non-Collision	1	0	0	1	0	0	0	0	1
Fixed Object – Off Road	1	1	1	3	1	1	1	3	6
Deer	1	0	0	1	0	0	0	0	1
Weather Condition:									
Clear/Cloudy	1	4	3	8	2	5	5	12	20
Fog	0	0	0	0	0	1	0	1	1
Mist	0	0	0	0	0	0	1	1	1
Rain	1	0	2	3	0	0	1	1	4
Light Condition:									
Daylight	0	1	3	4	2	4	5	11	15
Dusk	0	0	0	0	0	0	1	1	1
Darkness	4	1	2	7	0	2	1	3	10
Alcohol Related:									
	1	1	0	2	1	1	0	2	4

Traffic Volumes

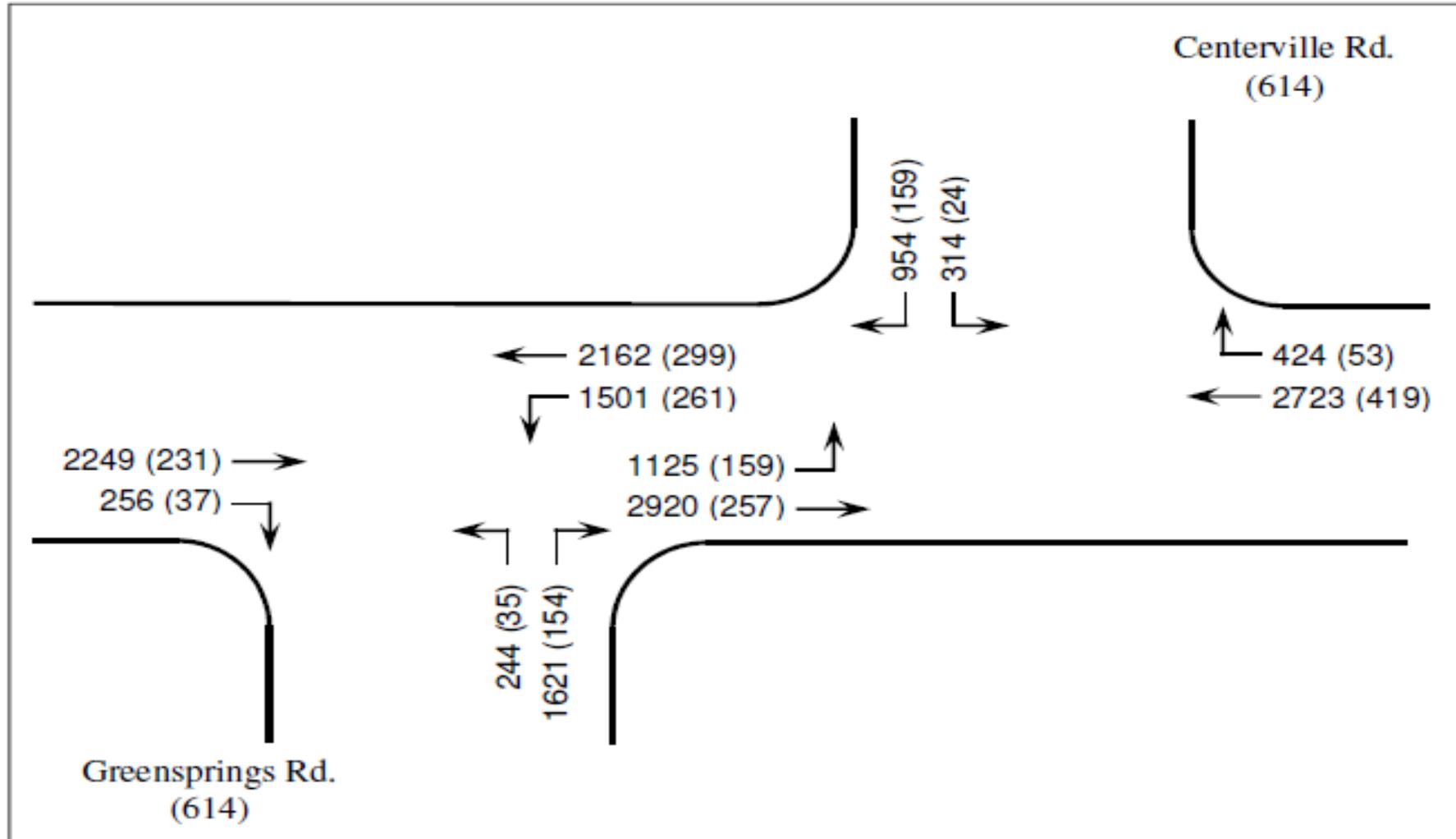


Figure 2 – 12-Hour (Peak Hour) Turning Movements

SAFETY IMPROVEMENT ALTERNATIVES

1. Left-turn lanes added on Rte. 5 between Greensprings Rd. and Centerville Rd.
2. Coordinated traffic signals at Greensprings Rd. and Centerville Rd.
3. Additional STOP signs on Rte. 5
4. Realignment of Greensprings Rd. to a four-leg signalized intersection
5. Realignment of Greensprings Rd. to a roundabout
6. Left-turn restriction from Rte. 5 onto Centerville Rd.
7. Right-in-right-out restriction at Centerville Rd.
8. Full closure of Centerville Rd. from Rte. 5 to Rte. 5000 (Monticello Ave.)

Alternative 1: Left-Turn Lanes Added on RTE. 5



Alternative 2: Coordinated Traffic Signals at Centerville & Greensprings Rd



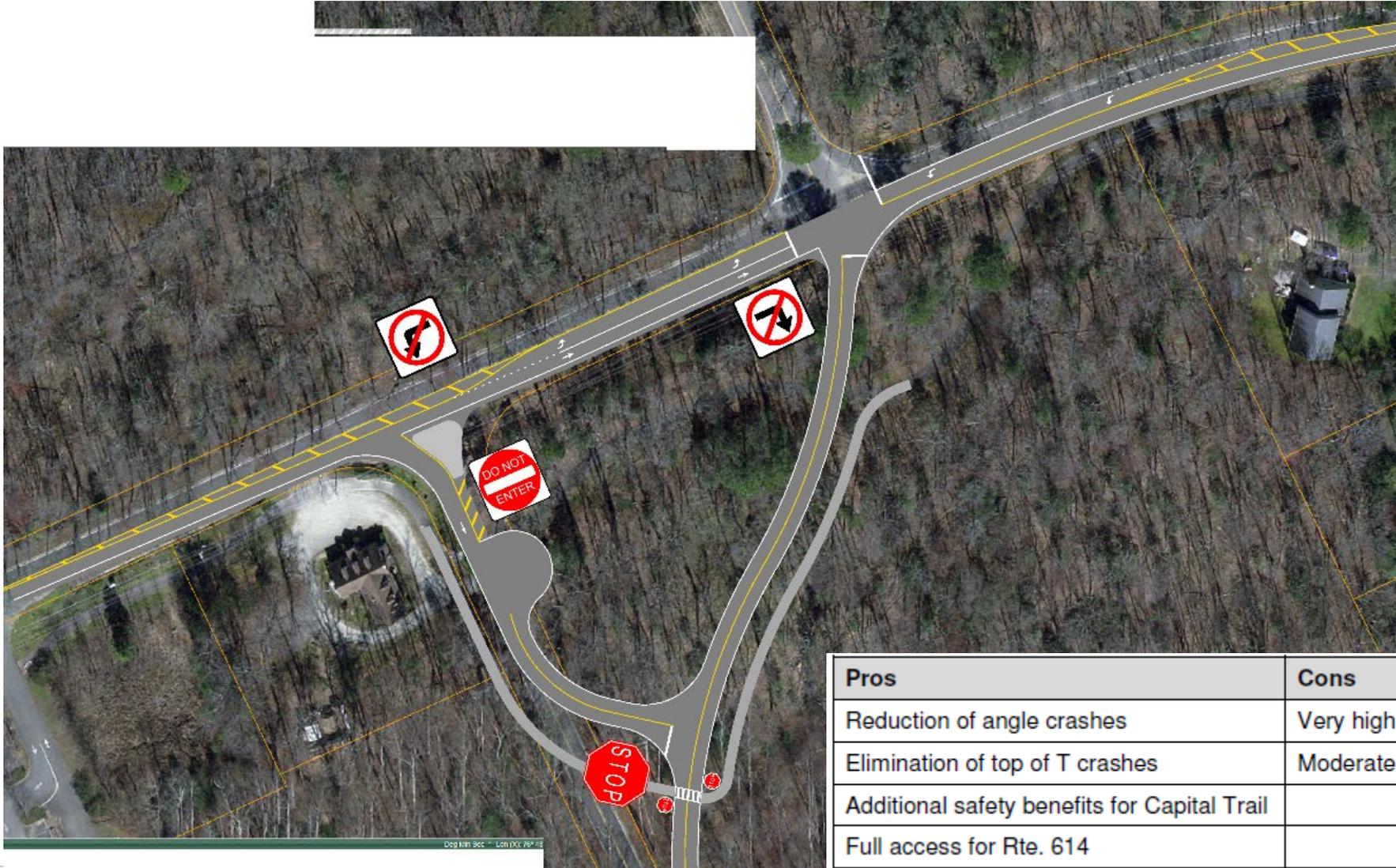
Pros	Cons
Reduction of angle crashes	Moderate cost
Full access at both intersections	Significantly negative operational impact

Alternative 3: ADDITIONAL STOP SIGNS ON RTE. 5



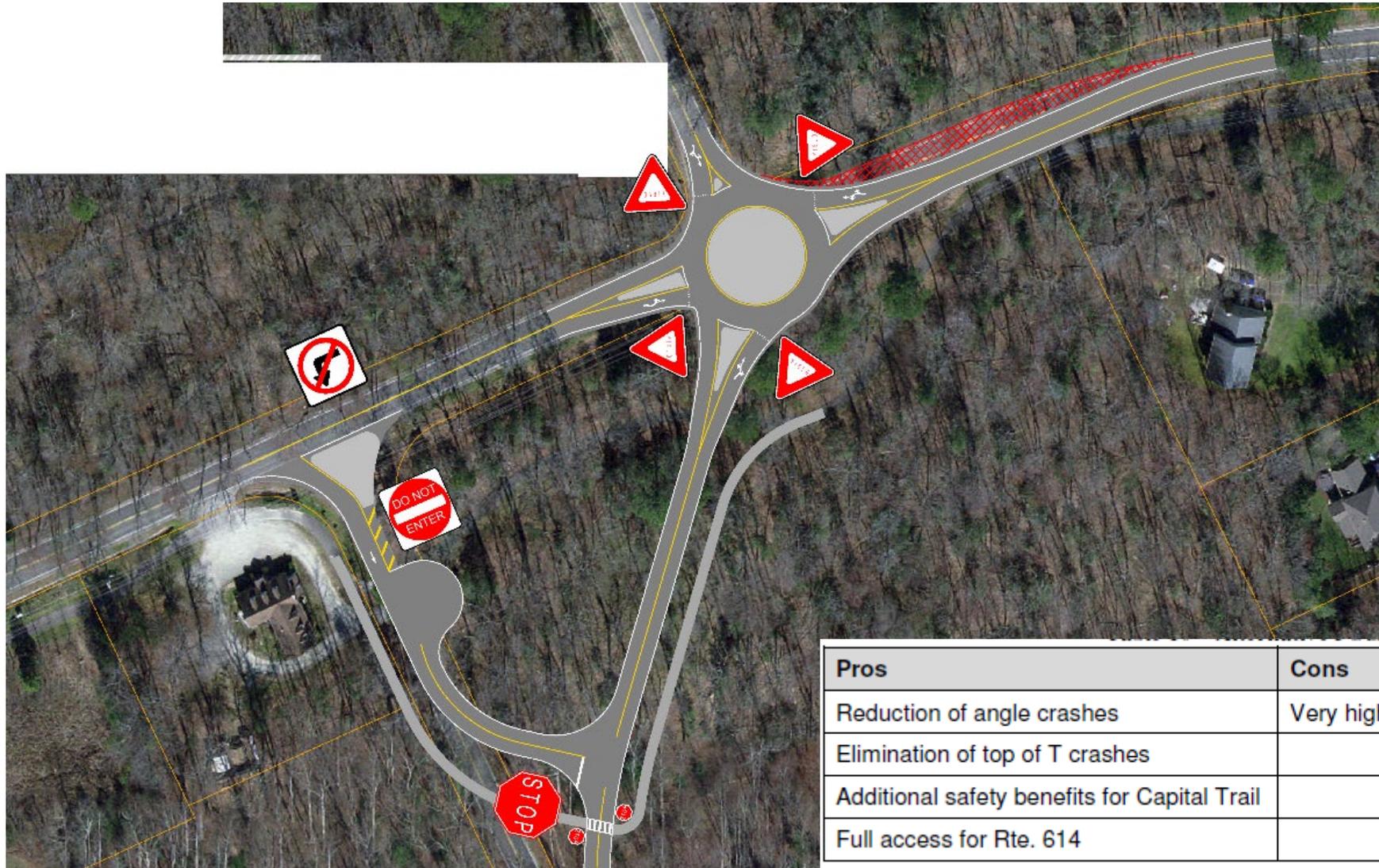
Pros	Cons
Reduction of rear end and angle crashes	Minor increase in through delay
Full access at both intersections	Unusual traffic pattern may be confusing
Quick and easy implementation	
Very low cost	

Alternative 4: REALIGNMENT - FOUR-LEG SIGNALIZED INT



Pros	Cons
Reduction of angle crashes	Very high cost
Elimination of top of T crashes	Moderate increase in delay
Additional safety benefits for Capital Trail	
Full access for Rte. 614	

Alternative 5: Realignment of Greensprings Rd to a Roundabout



Pros	Cons
Reduction of angle crashes	Very high cost
Elimination of top of T crashes	
Additional safety benefits for Capital Trail	
Full access for Rte. 614	

Alternative 6: Left-Turn Restriction From Rte. 5 onto Centerville Rd



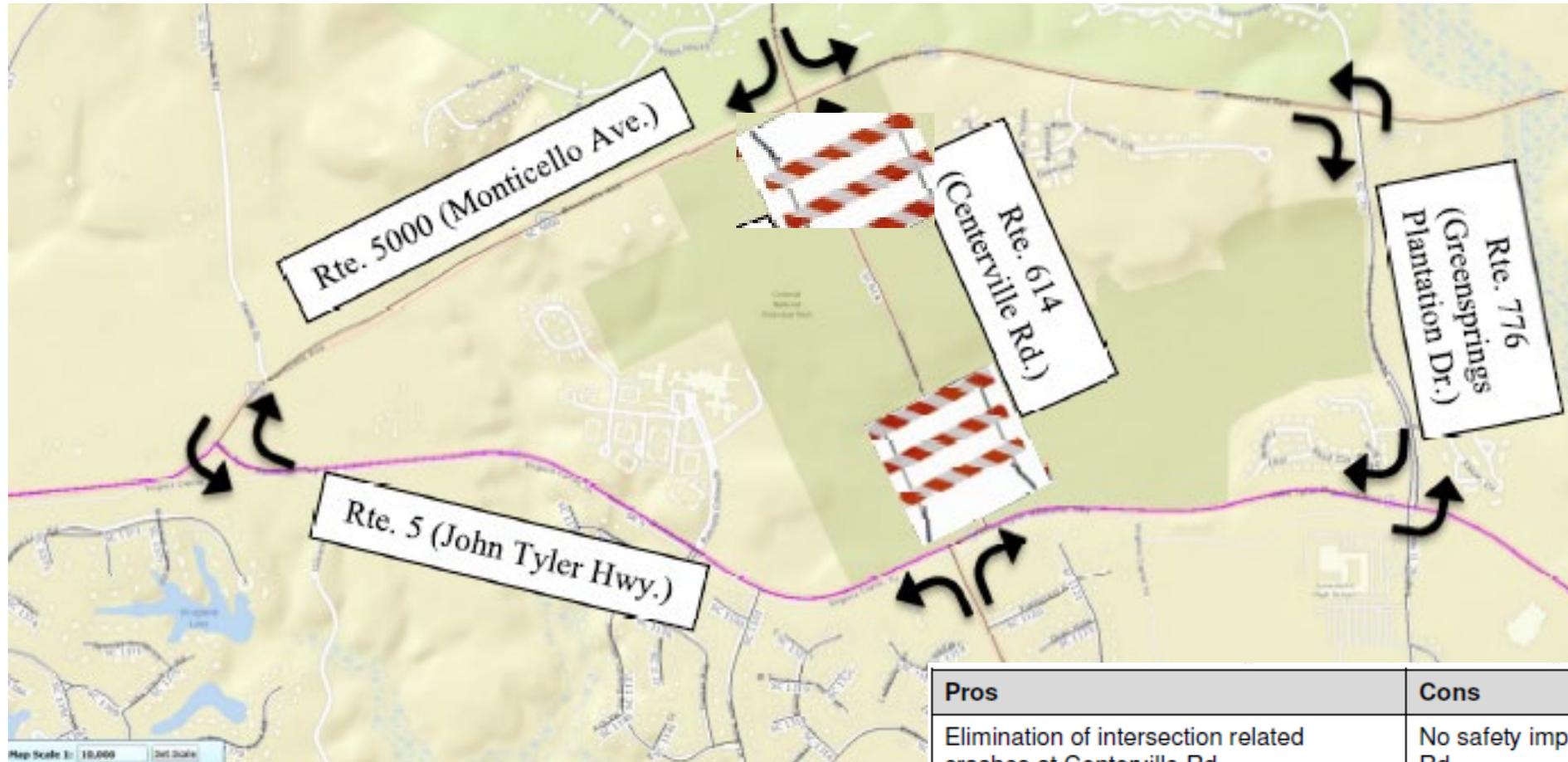
Pros	Cons
Reduction of rear end and angle crashes at Centerville Rd.	No safety improvement at Greensprings Rd.
Low cost	Access reduction at Centerville Rd.
	Difficult to enforce
	Minor impact to surrounding intersections

Alternative 7: Right-In Right-Out Restriction At Centerville Rd.



Pros	Cons
Reduction of rear end, angle and top of T crashes at Centerville Rd.	No safety improvement at Greensprings Rd.
Low cost	Access reduction at Centerville Rd.
	Difficult to enforce
	Minor impact to surrounding intersections

Alternative 8: Full Closure of Centerville RD. from RTE. 5 to RTE. 5000



Pros	Cons
Elimination of intersection related crashes at Centerville Rd.	No safety improvement at Greensprings Rd.
	No access at Centerville Rd.
	Minor impact to surrounding intersections

Conclusion

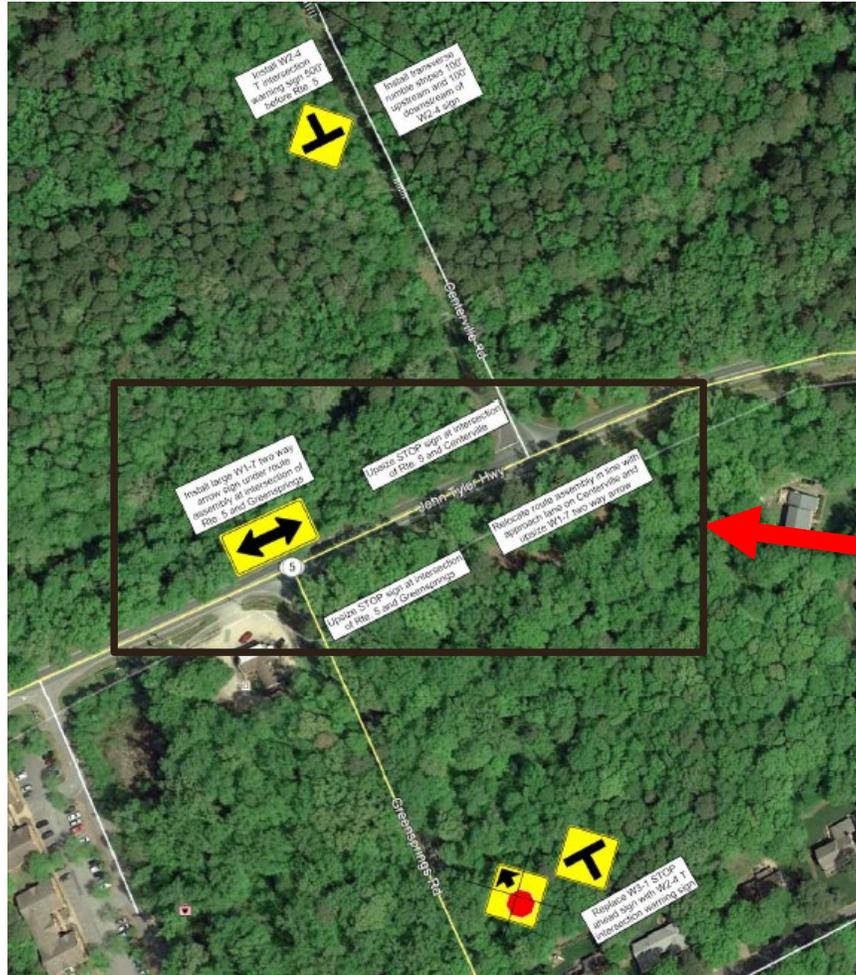
The signing and pavement marking shown in next slide will be implemented

Alternatives 4 and 5 were preferred for long-term implementation and Alternative 7 was preferred for short-term implementation.

- 4. Realignment of Greensprings Rd. to a four-leg signalized intersection
- 5. Realignment of Greensprings Rd. to a roundabout
- 7. Right-in-right-out restriction at Centerville Rd.

When the Residency and County have determined a funding source, a will be initiated by a consultant to perform a complete scoping analysis of Options 4, 5 and 7.

Additional Signing and Pavement Marking



Alternative 4 & 5 Overview

