



ALTERNATIVE RETAINED FOR DETAILED EVALUATION - PURPLE + SPUR ALTERNATIVE

US 301 Project Development

DESCRIPTION OF THE PURPLE + SPUR ALTERNATIVE 4 LANES - LIMITED ACCESS - PARALLEL TO EXISTING BOYDS CORNER ROAD & ON NEW LOCATION

The Purple+Spur Alternative would provide a four-lane, limited access tolled highway constructed on new location, generally north/south, from the Delaware/Maryland state line to south of Armstrong Corner Road, northwest of Middletown. The new alignment would continue northeast to SR 896 west of Jamison Corner Road and Cedar Lane Road, where the alignment would parallel existing Boyds Corner Road (SR 896) and tie into SR 1 just north of the SR 1/Boys Corner Road interchange and south of the existing Biddles Corner Toll Plaza. A two-lane, limited access spur roadway would extend from north of Armstrong Corner Road to just south of the Summit Bridge. Interchanges would be provided at Levels Road and Armstrong Corner Road/Existing US 301 area. The Spur Road would provide interchanges at SR 986 / SR 15, south of Summit Bridge and an interchange or intersection at the Spur Road and Bethel Church Road Extended, serving traffic to and from the north.

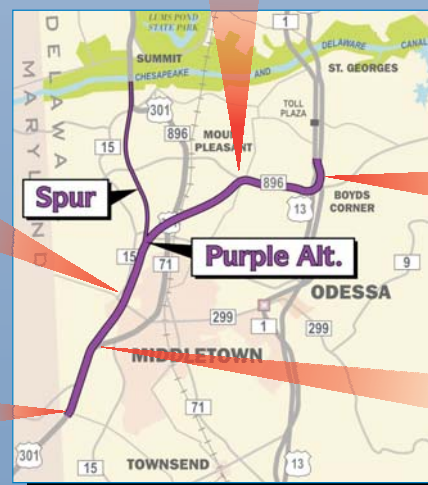
US 301 at Cedar Lane Middle & Elementary Schools
(Looking east along Boyds Corner Road)



Existing Condition



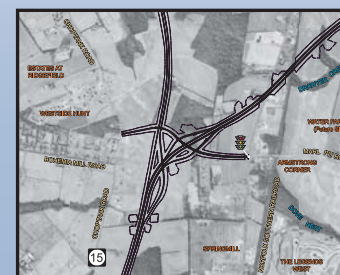
Rendering of PURPLE + SPUR Alternative (Option 1)
(Yellow Alternative similar at this location)



Option 1

Description

- Provides diamond interchange between new US 301 and Armstrong Corner Road



PURPLE + SPUR

Advantages

- Lower wetland impacts than Options 2, 2A and 3
- Mid-range waters of the US impacts
- Utilizes existing Armstrong Corner Road alignment (reduces costs)
- Located farther away from Springmill community than Options 2, 2A and 3
- Located farther away from Armstrong-Walker house (1,400 feet) than options 2, 2A and 3
- Uses signal at Armstrong Corner Road for local access from existing US 301 to new US 301 (minimizes the number of traffic signals on existing US 301)
- Provides greatest spacing between signalized intersections on existing US 301
- Reduces total right-of-way impacts compared to Option 2
- Mainline goes under Armstrong Corner Road, requiring fewer bridges than Option 2 and 2A

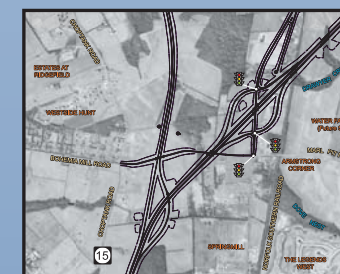
Disadvantages

- Requires acquisition of Middletown Baptist Church property - impacts both church buildings and parking lot
- Spacing between Spur and new US 301/Armstrong Corner Road interchange barely meets minimum design standards
- Does not provide direct tie between Armstrong Corner Road and Bohemia Mill Road
- Locates new US 301 Interchange on local road (Armstrong Corner) rather than arterial (existing US 301)
- Highest forestland impacts
- Highest habitat area impacts
- Impacts on Midland Farms community

Option 2

Description

- Provides diamond interchange between new US 301 and relocated existing US 301



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Advantages

- Less wetland impacts than Options 2A and 3
- Improves spacing between Spur interchange and new US 301/relocated existing US 301 interchange
- Avoids impacts to Middletown Baptist Church buildings, but impacts a portion of the church parking area
- Provides direct connection between Armstrong Corner Road and Bohemia Mill Road
- Locates new US 301 interchange on arterial (existing US 301) rather than local road (Armstrong Corner Road)

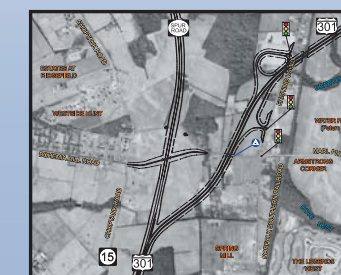
Disadvantages

- Highest waters of the US impacts
- Results in greater ROW and relocation impacts along existing US 301 than Option 1, 2A and 3 (increased costs)
- Increased construction cost due to additional structures and relocation of existing US 301
- Leads to less than desirable spacing of three signalized intersections on US 301
- Impacts on Midland Farms community
- Reduces distance between new US 301 and Springmill (from 1,300 to 940 feet)
- Closer to Armstrong-Walker house (1,100 feet) than Option 1 (1,400)

Option 2A

Description

- Provides an interchange with existing US 301



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Advantages

- Low forestland impacts
- Avoids direct impacts to Middletown Baptist Church property (620 feet from Church building and 170 feet from parking area)
- Locates new US 301 interchange on an arterial (existing US 301) rather than a local road (Armstrong Corner Road)
- 2 additional signals to be placed on existing US 301, but at a greater spacing than Option 2
- Does not require relocation of existing US 301, resulting in decreased construction and right-of-way cost as compared to Option 2

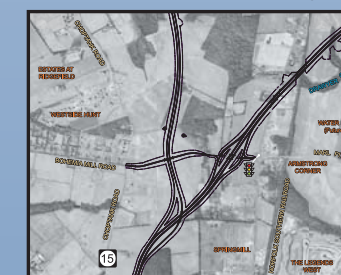
Disadvantages

- Higher wetland and waters of the US impacts than Options 1 & 2
- Not a traditional type interchange, (2,500 feet between access points)
- Wider bridge needed over existing US 301 because of deceleration lane for loop ramp
- Additional turn lanes on existing US 301 for access ramps and loops to new US 301
- Impacts on Midland Farms community
- Closer to Armstrong-Walker house (800 feet) and Springmill (770 feet) than Options 1 & 2

Option 3

Description

- Provides diamond interchange between the new US 301 and Armstrong Corner Road (similar to Option 1), but alignment shifted slightly to southeast to avoid Middletown Baptist Church property



PURPLE + SPUR

Advantages

- Lower waters of the US impacts than Options 1, 2 and 2A
- Lower DNREC Sub-Aqueous Lands impacts than Options 2&2A
- Lower forest impacts than Options 1&2
- Increases distance from new US 301 to Post and Rail Farms community
- Avoids direct impacts to Middletown Baptist Church property (450 feet from church building and 190 feet from parking lot)
- Does not require additional traffic signals on existing US 301
- Provides direct connection between Armstrong Corner Road and Bohemia Mill Road

Disadvantages

- Greater wetland impacts than Options 1, 2 and 2A
- Impacts previously undisturbed, low quality wetland, NW of Springmill
- Impacts on Midland Farms community
- Reduces distance between new US 301 and Springmill community to 670 feet (1300 and 940 feet for Options 1&2, respectively)
- Locates new US 301 interchange on local road (Armstrong Corner Road) rather than arterial (existing US 301)
- Reduces distance between new US 301 and the Armstrong Walker House historic site to 540 feet (1,400 and 1,100 feet for Options 1 and 2, respectively)
- Middletown Baptist Church buildings are located 300 feet from new ramp and 450 feet from new US 301 mainline

	Distance to Middletown Baptist Church Buildings	Distance to Middletown Baptist Church Parking Lot	Distance to Springmill Community	Distance to Historic Armstrong-Walker House
OPTION 1	Requires Location of Church	Requires Location of Church	1,300 feet	1,400 feet
OPTION 2	350 feet	Impacts a portion of the parking lot	940 feet	1,100 feet
OPTION 2A	620 feet	170 feet	770 feet	800 feet
OPTION 3	450 feet	190 feet	670 feet	540 feet

NOTE: Options 1, 2, 2A & 3 in Armstrong Corner Road Area apply to Purple + Spur and Green + Spur Alternatives. See Display 16 for Spur Road - Armstrong Corner Road to Summit Bridge and Interchange Options - South of Summit Bridge (SR 896 / SR15) for Green + Spur and Purple + Spur Alternatives