US 301: SECTION 1 - EAST OF NORFOLK SOUTHERN RAILROAD TO SR 1

US 301 Project Development

6A

Section 1:

US 301, East of Norfolk Southern Railroad to SR 1, south of the C & D Canal

Section 1 is 7.7 miles long and divided into 4 construction contracts: 1A, 1B, 1C, and 1D and includes:

- 2 lanes in each direction with controlled access
- 54 foot wide median (reduced from ROD width of 66 feet)
- Design Speed: 70 mph/Posted Speed 65 mph
- Pavement: Concrete
- US 301 overpass of Boyds Corner Road (SR 896)
- US 301 Diamond Interchange with Jamison Corner Road
- Jamison Corner Road overpass of US 301
- Interchange ramps at Jamison Corner Road to be tolled (to and from north only)
- Hyetts Corner Road overpass of US 301 (Hyetts Corner Road will be closed to through traffic during construction)
- Northbound US 301 overpass of existing SR 1 (north of Biddles Toll Plaza)

Community Commitment:

- Landscaped visual earth berm between Airmont and US 301, constructed as early as practicable during construction (ROD: 6' x 1,670'/Refined: 6' x 1,800')

8.15.11

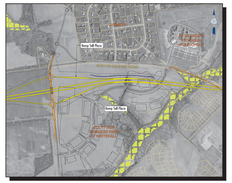
6B

Decisions Since March 2009 Workshop

Adopted Refinements: Provide Diamond Interchange with roundabouts rather than stop-controlled intersections at Jamison Corner Road Interchange

Advantages

- Provides continuous flow at ramp intersections, reducing delays to traveling public
- Reduces the width of the Jamison Corner Road bridge over US 301, reducing costs
  - Roundabouts allow for a two-lane typical section, while stop-controlled intersections require a three-lane typical section to accommodate left turn lanes
- Roundabouts typically reduce speeds and eliminate left-turn and right-angle conflicts, improving safety

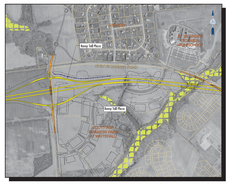


ADOPTED REFINED OPTION

Disadvantages

- None identified

FEIS/ROD Option: Jamison Corner Road Diamond Interchange proposed with Stop controlled intersections



FEIS/ROD OPTION

Agency Coordination/Public Input:

The refinement noted above was presented at the March 2009 Workshop. The public and resource agencies did not object to the refinements.

8.15.11

6C

Modified Project Refinement

US 13 / Port Penn Road / Toll Free Ramp Intersection

Description:

- DelDOT would relocate the existing toll-free ramp about 1,850 feet south of the ROD design and 4,500 feet south of the existing location to intersect US 13 at the existing Port Penn Road intersection.
- This change would require a new traffic signal, a third through lane on southbound US 13, and a left-turn lane along northbound US 13 at the intersection.
- The toll-free ramp would remain a single lane.
- The new left-turn lane along northbound US 13 would be channelized with a curbed island.

Advantages:

- Improves traffic operations and safety by:
  - Constructing a 90-degree intersection at US 13 and Port Penn Road
  - Separating left-turn queues from northbound US 13 through traffic
  - Providing more storage for left-turn queues from US 13 northbound to the toll-free ramp
  - Reducing overall delay by relocating the toll-free ramp to provide direct, signalized access to SR 1 for westbound Port Penn Road traffic
  - Reducing future overall delay on US 13 by consolidating the toll-free ramp traffic signal with the traffic signal that will be required in the future at Port Penn Road.
  - Providing a longer acceleration lane to merge onto SR 1 northbound

Disadvantages:

- Relocating the toll-free ramp would require an additional 5.43 acres of right-of-way and additional easements.
- Adding a new traffic signal along US 13 for Northbound US 13 traffic will occur earlier than if the relocated ramp remained at the ROD location.
- Increases environmental impacts.

Agency Coordination/Public Input:

- The initial refinement was presented at the February 19, 2009 agency meeting and March, 2009 public workshop.
- The initial refinement proposed relocating the toll-free ramp about 1,150 feet south of the existing location and relocating Port Penn Road to the north to provide a four-way intersection.
- Most of the public comments from the workshop supported this refinement.
- Initially, the agencies did not object to this refinement, but agency concurrence will need to be obtained following this public workshop.

8.5.11

6D

Project Refinement

Closing Hyetts Corner Road During Construction

Description:

Detailed design has identified the need to close Hyetts Corner Road to reduce environmental impacts, enhance safety and facilitate construction.

- Closing Hyetts Corner Road is necessary to construct the Hyetts Corner Road overpass embankments, retaining walls, and bridges over Scott Run and US 301 Mainline.
- The detour route would include Jamison Corner Road. DelDOT is committed to provide improvements to Jamison Corner Road, Road 412A, and a segment of Hyetts Corner Road between Jamison Corner Road and St. Georges Technical High School to provide a suitable detour route for the public and school buses prior to closing Hyetts Corner Road. A temporary run-around road will be provided during construction of the new Jamison Corner Road overpass. See map to the right.
- All local access east and west of the proposed road closure will remain open during construction.

Advantages

- The closure of Hyetts Corner Road during construction will eliminate the need for temporary road construction and minimize impacts to Scott Run and its associated wetlands, which are identified as potential bog turtle habitat.
- Hyetts Corner Road will serve as the major route for construction vehicles during the earth hauling effort. Closing the roadway to through traffic will enhance safety during construction and reduce costs by:
  - Minimizing potential conflicts between construction vehicles and local traffic
  - Expediting critical path construction items like earthwork, bridges and retaining walls
  - Reducing construction duration by about 15 months, which reduces overall construction costs and financing costs by about $20 million.

Disadvantages:

- Hyetts Corner Road would be closed to through traffic for approximately three years.

Agency Coordination/Public Input:

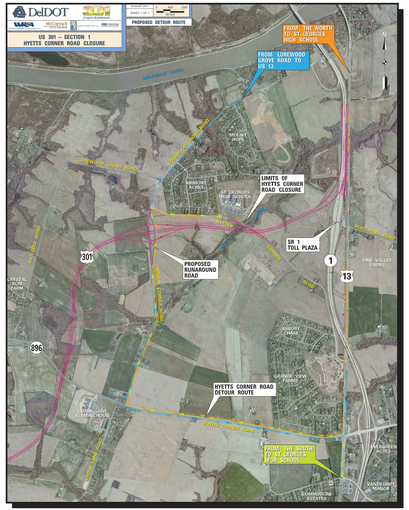
- This refinement was not presented at the March 23, 2009 public workshop.
- This refinement and its effect on the Scott Run stream restoration were discussed at the agency meetings on March 26, 2009 and June 24, 2010.
- The agencies support this refinement due to the reduction in potential environmental impacts on Scott Run and the surrounding wetlands.
- This refinement was also discussed with the local emergency response agencies and they do not object to the closure of Hyetts Corner Road, if improvements to Jamison Corner Road are completed prior to the road closure.

8.5.11

6E

Project Refinement

Closing Hyetts Corner Road During Construction



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