Rt 29 Solutions Project Delivery Advisory Panel

April 28, 2016
Agenda item 1: Introductions

Project Delivery Advisory Panel

Technical Team
Agenda item 2: Interaction and Feedback

Live Streaming

<table>
<thead>
<tr>
<th></th>
<th>Apr 14, 2016</th>
<th>Mar 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Viewers:</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Streams:</td>
<td>19</td>
<td>31</td>
</tr>
<tr>
<td>Average Minutes per stream:</td>
<td>26</td>
<td>27</td>
</tr>
</tbody>
</table>
Agenda item 2: Interaction and Feedback (continued)

For the period Mar 29 - Apr 11, 2016

Inbox email and phone calls: 3 emails
• 1 requested directions from Rt 29 SB to Rio during the May 23 - Sep 2 period
• 1 regarding fencing, and maintenance of drainage and the sound wall for Rt 250 / 29
• 1 regarding request that Places 29 Rio discuss two special use permits under consideration by the County

Web Provide Input: No new postings

Project Hotline 844-220-5540: 2 calls
• 1 regarding a vehicle parked on private property
• 1 from Shoppers World inquiring about status of work in front of property
Rt 29 Solutions

Agenda item 3: Report on Panel Feedback

Develop graphic showing status of disposition of bypass right-of-way
• Will be covered in agenda item 7

Send out a notice of upcoming blasting for Berkmar project
• Notice to appropriate landowners sent Apr 26
Agenda item 4: Panel Feedback and Suggestions for Future Agenda Items

Open Discussion
# Agenda item 5: Construction Milestones

**Status as of April 25, 2016**

<table>
<thead>
<tr>
<th>Project</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rt. 29 Widening</strong></td>
<td><strong>December</strong></td>
<td><strong>January</strong></td>
</tr>
<tr>
<td>Rio Road GSI Sep 2, 2016 Dec 2, 2016</td>
<td><strong>Utility Relocation</strong></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td><strong>Drive Abutment Piles 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Set retaining wall piles and widen roadway (95%) 95%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>May 23 start - Rio Restricted Period - Sep 2 intersection open</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Final Pavement and Markings</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Landscape, Hardscape, Staining</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Rt. 29 Widening Oct 31, 2016</strong></td>
<td><strong>Temp. Signals</strong></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td><strong>Gas line relocation - (35%) 50%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ROW Acquisition 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Phase 1 Grading, Drainage and Paving (75%) 80%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Phase 2 Grading, Drainage and Paving (10%) 20%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Phase 4 Grading, Drainage and Paving</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Berkmair Oct 31, 2016</strong></td>
<td><strong>ROW Acquisition (95%) 95%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Clearing North of River 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Rough Grading South of River (70%) 70%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Utility Relocation (90%) 90%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Pier Construction (20%) 25%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Roadway Construction North of River</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>North Abutment (80%) 90%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Roadway Construction South of River</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Steel Girder Erection</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Deck Pans and Rebar</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hillsdale Oct 31, 2016</strong></td>
<td><strong>ROW Acquisition 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>90% Plans 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Final Design 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Utility Relocation (15%) 15%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Adv for Bids Pre-Bid Conf Receive Bids</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Rt. 29/250 May 21, 2016</strong></td>
<td><strong>MSE Wall 100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Pavement Widening (85%) 90%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Final Paving (30%) 30%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sound Barrier (85%) 90%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Construction Complete</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Under way**

**Complete**

**Late**

( % ) %complete prior reporting period
Rt 29 Solutions

Agenda item 6: Rt 29 Solutions Project Updates

Rt 250 / 29 Interchange

Work this week

• Installation of foundation for overhead sign structure 2 along Route 29
• Begin panel installation for sound wall C
• Complete footer for barrier wall along Route 250
• Continue base stone installation along Route 250 WB
• Continue backfilling maintenance bench behind sound walls B, B1, and B2
• Begin lighting foundations along Route 250 WB
• Continue grading for remainder of barrier wall along Route 250 WB (western section)
• Complete curb installation along Barracks Road exit ramp
• Begin mill, overlay, and striping of Route 29
• Resume base and intermediate asphalt along Route 250 (western section)
• Begin ROW fence installation
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 250 / 29 Interchange (continued)

Significant lane closures this week

• Route 250 Bypass westbound, right lane closed from Hydraulic Road to Barracks Road

• Ramp from Barracks Road to the Route 250 Bypass east narrowed with a right shoulder closure

• Intermittent left turn lane and crossover closures

• Ramp from Barracks Road to the Route 250 Bypass east closed; detour in place from Barracks Road to Route 29 north during nighttime

• Alternating nighttime lane closures northbound and southbound on Route 29 for paving
Rt 29 Solutions

Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 250 / 29 Interchange (continued)

Work next two weeks

• Complete pavement marking on Route 29
• Complete installation of barrier wall along Route 250 WB
• Resume installation of detectable surfaces along Route 29 SB
• Continue backfilling maintenance bench behind sound walls
• Continue ROW fence installation
• Complete panel installation for sound wall B
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 250 / 29 Interchange (continued)

Anticipated significant upcoming lane closures
• Route 29 nighttime alternating lane closures for pavement markings
• Ramp from Barracks Road to the Route 250 Bypass east closed; detour in place from Barracks Road to Route 29 north
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rio Grade-Separated Intersection

Work this week
• Widening in all quadrants
• Curb and gutter, sidewalk, underdrain
• Storm drain tie-ins in all quadrants
• Retaining wall backfill
• Preparations for asphalt paving/paving work
• Island construction preparation
• CenturyLink vault repair
• Stormwater Structure 6
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rio Grade-Separated Intersection (continued)

Work this week (continued)

• Abutment A concrete pours
• Median demolition
• Begin stamped concrete locations
• Overhead sign structure foundations
• Pedestrian lighting pole foundations
• Pre-tie Rio retaining wall rebar
• Fire Department Connection installation
• Signal foundations
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rio Grade-Separated Intersection (continued)

Significant lane closures this week

• Rio crossover closed at nighttime restricting thru movements and left turn movements.
• Rte. 29 triple lane closures northbound and southbound
Agenda item 6: Rt 29 Solutions Project Updates (continued)
Rio Grade-Separated Intersection (continued)

Work next two weeks
• Widening in all quadrants
• Curb and gutter, sidewalk, underdrain
• Grading for stamped concrete sections
• Preparations for curb adjustments at Fashion Square Exit
• Fire Department Connection installation
• Stormwater Structure 6
• Prep retaining wall forms
Agenda item 6: Rt 29 Solutions Project Updates (continued)
Rio Grade-Separated Intersection (continued)

Work next two weeks
• Pre-tie Rio retaining wall rebar
• Construct Hardee’s temporary crossover (Rio Road)
• SB traffic shift – May 1, shift to new pavement on outside
• NB mill and overlay (Albemarle Square turn lane)
• Traffic signal foundations, conduit, junction boxes, light pole foundations
• Overhead sign structure foundations
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rio Grade-Separated Intersection (continued)

Anticipated significant upcoming lane closures

• Rio crossover closed at nighttime restricting thru movements and left turn movements.

• Rte. 29 triple lane closures northbound and southbound
Rt 29 Solutions

Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening

Work this week

- Jack and bore structures 7-5
- Jack and bore structure 15-20
- Stream diversions and access to culvert locations
- Begin wire wall construction
- Stripping and hauling topsoil
- Cut and fill in median north of Ashwood Boulevard
- Phase 1 drainage installation
- Phase 2 gas main installation
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening

Significant lane closures this week (nighttime)

- Route 29 left lane closure NB and SB
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening (continued)

Work next two weeks

- Jack and bore structure 7-5
- Jack and bore structure 15-20
- Stream diversions (12-20, 11-4) and access to culvert locations
- Wire wall construction
- Stripping and hauling topsoil
- Cut and fill in median north of Ashwood Boulevard
- Phase 1 drainage
- Phase 2 gas main installation
- Complete signal bores at Hollymead
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening (continued)

Anticipated significant upcoming lane closures (nighttime)

• Route 29 left lane closure NB and SB
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Berkmar Extended

Work this week

- Install stream crossings and diversions
- Temporary sediment traps
- Abutment A retaining wall panels and backfill
- Erosion control and seeding
- Permanent pipe installation and headwalls
- Continue drilled shafts (Pier 1, Shaft 1; Pier 2 Shaft 1)
- Pre-blast survey and blasting plan
- Continue grubbing activities
- Abutment A and B stem rebar

Significant lane closures this week

- Flagging operation along Rio Mills Road
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Berkmar Extended (continued)

Work next two weeks
- Grade stormwater pond Station 223+00
- Temporary pipes and stream diversions
- Abutment A and B deliveries and pours
- Cross-Sonic Logging (CSL) testing
- Abutment A retaining wall panels and backfill
- Erosion control and seeding
- Complete stream crossing # 6
- Install 17-3 headwall
- Stream crossing # 5
- Continue drilled shafts (Pier 1, Shaft 2)

Significant upcoming lane closures
- Flagging operation along Rio Mills Road
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Signal Updates

Work this week

• Install signal cabinet

• Install controllers and malfunction management units (MMUs)

Significant lane closures this week

• None

Work next two weeks

• Continue signal configurations

• Complete project
## Rt 29 Solutions

### Agenda item 6: Rt 29 Solutions Project Updates (continued)

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic/Georgetown</td>
<td>Replace controller and MMU, Install broadband, Install video converter</td>
</tr>
<tr>
<td>Barracks/Georgetown</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
<tr>
<td>Hydraulic/Earlysville</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
<tr>
<td>Hydraulic/Lambs</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
<tr>
<td>Hydraulic/Commonwealth</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
<tr>
<td>Rio/Berkmar</td>
<td>To be re-constructed with Rio GSI</td>
</tr>
<tr>
<td>Rio/Hillsdale</td>
<td>Replace cabinet, Install broadband, Replace controller and MMU</td>
</tr>
<tr>
<td>Rio/Greenbrier</td>
<td>No improvements</td>
</tr>
<tr>
<td>Commonwealth/Greenbrier</td>
<td>No improvements</td>
</tr>
<tr>
<td>Berkmar/Woodbrook</td>
<td>Re-constructed fall of 2015</td>
</tr>
<tr>
<td>29-250 Bypass/Barracks</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
<tr>
<td>Rio/Pen Park</td>
<td>No improvements</td>
</tr>
<tr>
<td>Rio/Four Seasons</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
<tr>
<td>Rio/Catec</td>
<td>No improvements</td>
</tr>
<tr>
<td>Hydraulic/Cedar Hill</td>
<td>Replace controller and MMU, Install broadband</td>
</tr>
</tbody>
</table>

**MMU = Malfunction Management Unit**
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Hillsdale Extended

Work this week

- Complete recordation of Certificates of Takes
- Continue with utility relocations for service to commercial buildings
- Continue Dominion Virginia Power boring operation (Parcel 011)
- Continue CenturyLink relocations
- Continue business relocations
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Hillsdale Extended (continued)

Work next two weeks

- Continue with utility relocations for service to commercial buildings
- Continue business relocations
- Complete Dominion Virginia Power boring operation (Parcel 011)
- Continue CenturyLink relocations
- Respond to questions from bidders
Agenda item 7: Status of Disposition VDOT Bypass Right of Way

Total 90 parcels (revised since Apr 14 meeting)
• 15 have been sold
• 21 are under contract
• 30 pending offers to former or adjacent property owners
• 13 pending resolution of condemnation issues
• 5 for sale through public advertisement
• 1 requires asbestos abatement
• 1 used as right of way for Leonard Sandridge Road project
• 3 retained by VDOT for Rt 29 Solutions Program
• 1 in litigation
**Rt 29 Solutions**

**Agenda item 8: Rt 29 Solutions Program Budget Update**

---

**Route 29 Solutions Budget Update as of April 25, 2016**

<table>
<thead>
<tr>
<th>Construction Contracts</th>
<th>Original Construction Contract Value</th>
<th>Expended ( invoiced) as of February 15, 2016</th>
<th>Approved Change Orders</th>
<th>Exposure (Anticipated COs)</th>
<th>Remaining CV</th>
<th>Total Anticipated Construction Expenditures at Completion</th>
<th>Total SYIP Allocations for Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rte. 29 Solutions Design-Build</td>
<td>$116,746,000</td>
<td>$47,870,280</td>
<td>$523,412</td>
<td>$2,075,737</td>
<td>$69,399,132</td>
<td>$119,345,149</td>
<td>$155,775,000</td>
</tr>
<tr>
<td>Change from Mar 17</td>
<td>$3,199,984</td>
<td>$174,884</td>
<td>$(174,884)</td>
<td>$(3,025,100)</td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rte. 29/250 Interchange</td>
<td>$11,121,078</td>
<td>$8,961,847</td>
<td>$109,216</td>
<td>$475,863</td>
<td>$2,268,447</td>
<td>$11,706,157</td>
<td>$14,632,000</td>
</tr>
<tr>
<td>Change from Mar 17</td>
<td>$1,106,670</td>
<td>$0</td>
<td>$(92,009)</td>
<td>$(1,106,670)</td>
<td>$(92,009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptive Signals</td>
<td>$3,720,000</td>
<td>$2,293,215</td>
<td>$125,000</td>
<td>$50,000</td>
<td>$1,551,785</td>
<td>$3,895,000</td>
<td>$3,420,000</td>
</tr>
<tr>
<td>Change from Mar 17 (total budget)</td>
<td>$66,782</td>
<td>$0</td>
<td>$0</td>
<td>$(66,782)</td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hillsdale Extended (Construction Budget)</td>
<td>$11,198,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$11,198,000</td>
<td>$11,198,000</td>
<td>$11,198,000</td>
</tr>
<tr>
<td>Change from Mar 17</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$142,785,078</td>
<td>$59,125,342</td>
<td>$757,628</td>
<td>$2,601,600</td>
<td>$84,417,364</td>
<td>$146,144,306</td>
<td>$185,025,000</td>
</tr>
<tr>
<td>Change from Mar 17</td>
<td>$4,373,436</td>
<td>$174,884</td>
<td>$(266,893)</td>
<td>$(4,198,552)</td>
<td>$(92,009)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Agenda item 9: Interim Milestones for September 2 Completion

Contract definition of Interim Milestones for Rio GSI completion:

The Interim Milestone Completion Work for the US 29 & Rio Grade Separated Intersection is defined as all lanes, local and through, open to traffic in near final configuration such that the traveling public has unrestricted use including, at a minimum, the completion of the following items: (continued on next slide)

“Unrestricted use” is defined as all lanes and movements (through and local) being available for use by vehicular traffic between the daytime hours of 6:00am and 9:00pm. Nighttime closures will be allowed to complete all work in accordance with the allowable lane closure periods.

The final completion date for all Rio GSI work is December 2, 2016
Agenda item 9: Interim Milestones for September 2 Completion

Minimum items required to meet Interim Milestone

• Asphalt pavement at minimum through intermediate course
• Temporary or permanent line striping and directional arrows
• All directional and regulatory signing
• Permanent or temporary signals installed and operational
• Loop detectors or other detector systems installed and operational
• Signal timing functional according to signal plans
• Bridge structure with all safety items installed
• Drainage structures and systems installed and functional
• All barrier walls and attenuators
Agenda item 9: Interim Milestones for September 2 Completion

Minimum items required to meet Interim Milestone (continued)

• All turning and through movements open
• Crosswalks marked and refuge areas accessible and functional
• Under-bridge lighting installed and operational
• Albemarle Square signal removed and right-in/right-out access controlled
• Fashion Square signal removed and right-in/right-out access controlled
• Removal of temporary signs or signals not required for further operation
• Permanent stormwater management systems installed and functional
• Any under-bridge fire suppression and ventilation systems installed, tested and functional
• Utilities relocated to their final position with no service interruptions
Agenda item 10: Secretary Aubrey Layne Attending May 26 Meeting

Rescheduled from attending May 12 meeting

Start time?
• Morning, or
• Afternoon at usual 2pm time
Agenda item 11: New Business and Wrap Up
Agenda item 12: Adjourn
Rt 29 Solutions Project Delivery Advisory Panel

April 28, 2016