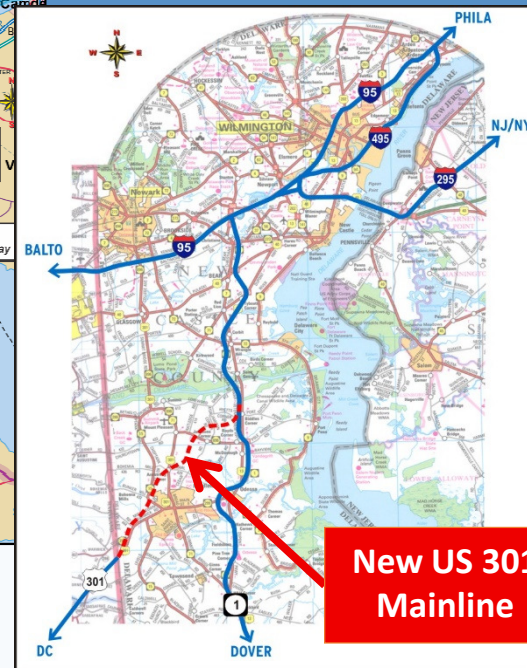
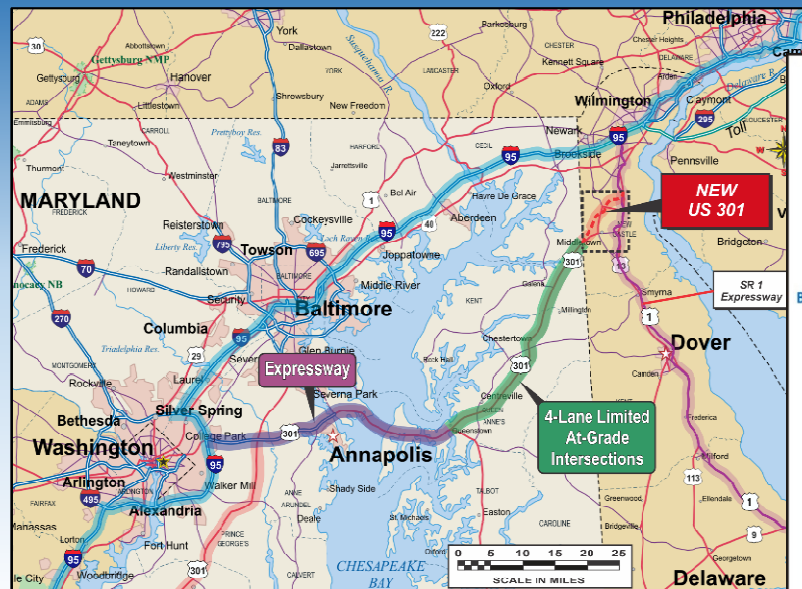




**Delaware Department
of Transportation**



US 301 Construction Overview





Background information

- History of US 301 in Delaware: Early 1960s – 2004
 - Planning/Design of US301 corridor
 - 1970's and 1980's: N/S Toll Road Studies
 - Early 1990's: US301 Corridor Study
 - 2000: Greater Route 301 Major Investment Study
- Project Development Phase: 2005-2008
- Final Design & ROW Acquisition: 2008-2015
- US 301 Mainline Construction: 2016-2019





Project/Corridor Needs

- Improve Safety

- Existing US 301 (2000 – 2013)

- **1,597 total crashes; 500+ resulted in injuries**
 - **21 fatal crashes (6 involved trucks)**
 - 23 fatalities
 - High fatality rate:
 - 64% higher than State average
 - 67% higher than National average

- Manage Truck Traffic

- 23% at State Line

- Reduce Congestion

- 33% of the key intersections & roads projected to fail (Level of Service (LOS) F) by 2030





Project/Corridor Needs: Growth

- Southern New Castle County (NCC) projected as one of the fastest growing areas of the State

- Significant growth projected*:

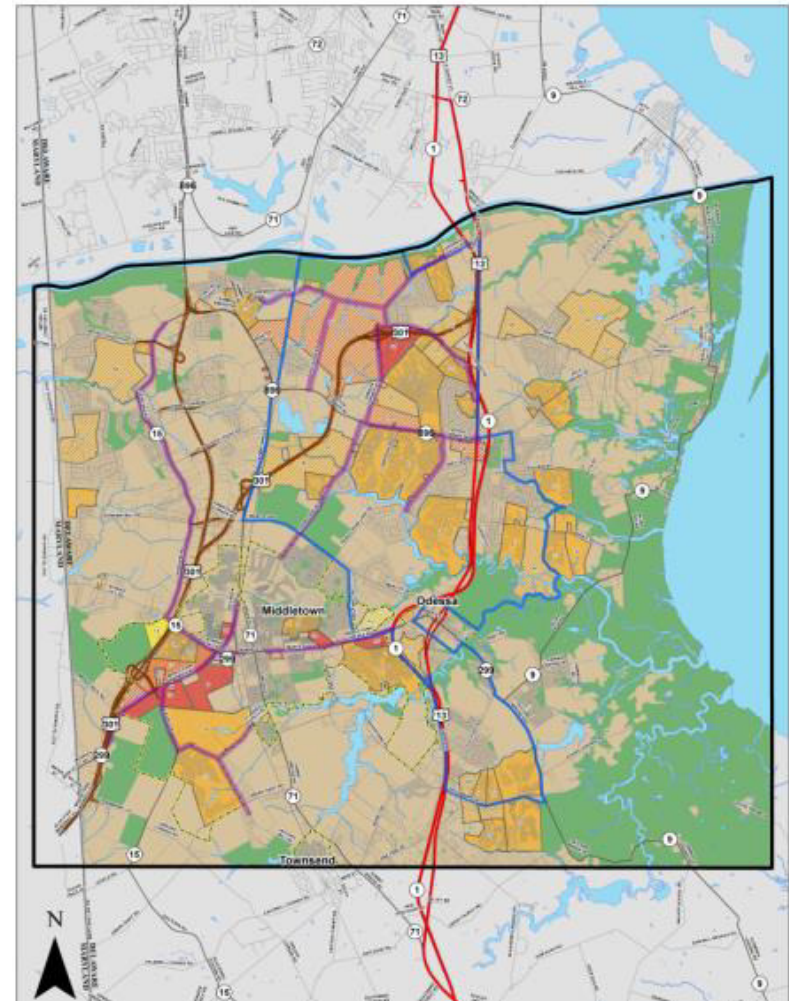
 - Commercial Development: +275%

 - Residential Units: +143%

 - 83.5% of NCC's population growth is projected in southern NCC

*Source: Wilmington Area Planning Council (WILMAPCO)

Southern New Castle County
Land Use and Transportation Activity





Current Conditions: Existing US 301 in DE

- ▶ 8 miles of two-lane roadway (one lane in each direction)
- ▶ 7 miles of four-lane roadway
- ▶ 29 at-grade intersections (18 are signalized)
- ▶ Numerous driveways with direct access



US 301 Northbound
at SR 299 (Middletown)

Westbound SR 896 (Boys
Corner Road) at US 301



Existing US 301





Project Overview

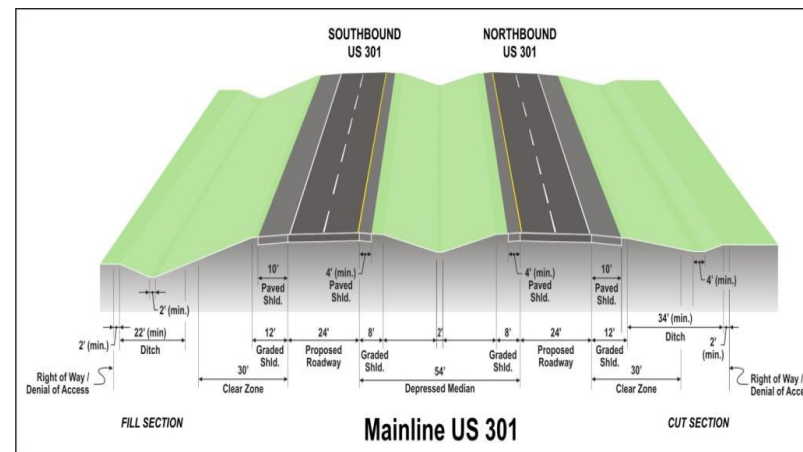
- ▶ **Project Description:** The project consists of new alignment for US 301 and a new Spur Road. US 301 is designed to be a four-lane, limited access toll roadway on new location, extending from the Maryland/Delaware state line to SR-1, a distance of approximately 14 miles. The Spur Road will be a two-lane, limited access roadway on new location, extending from US 301 to Summit Bridge, a distance of approximately 4.5 miles.





Basic Design Features: New US 301

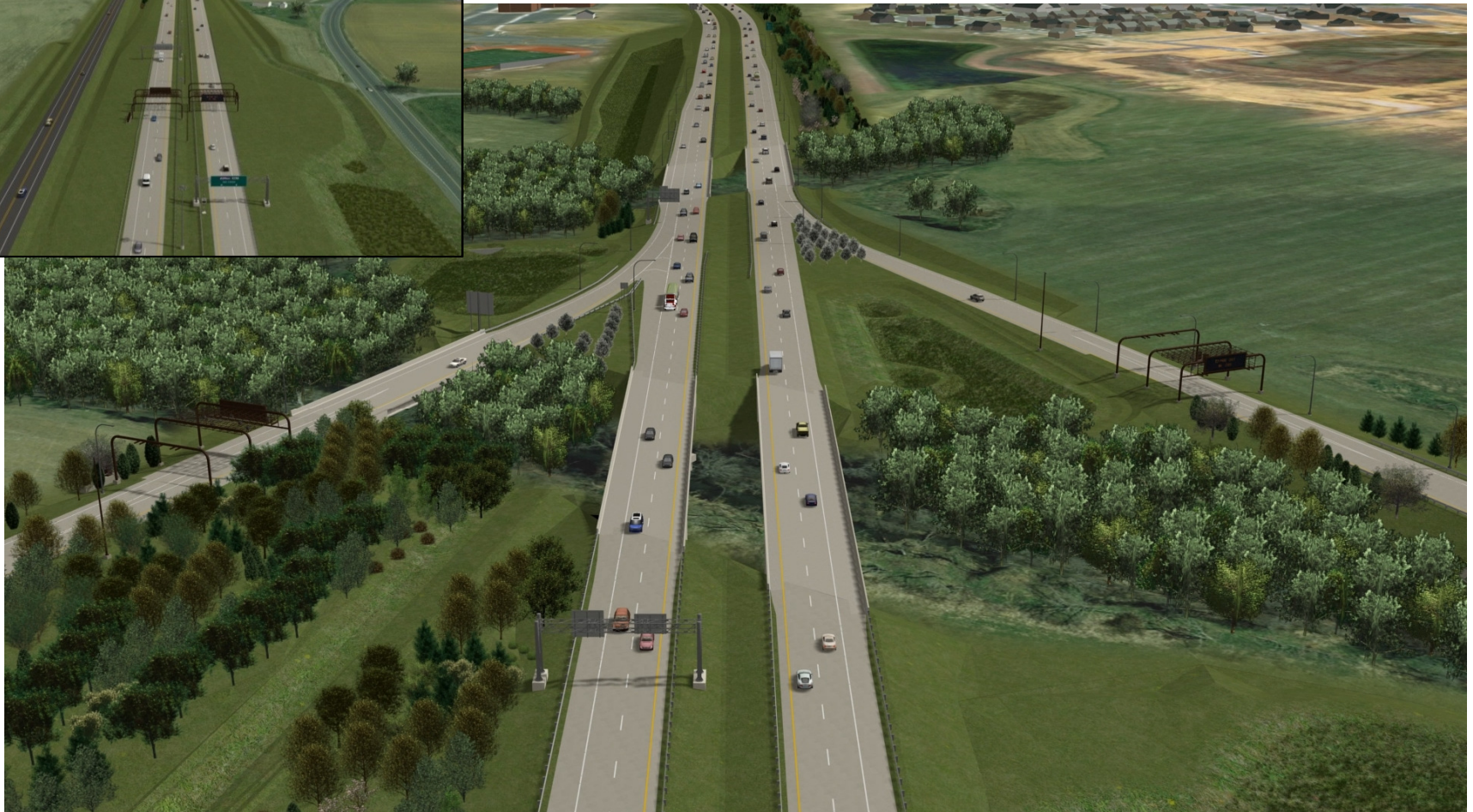
- ▶ Controlled access highway with interchanges spaced throughout the facility
 - Level Rd. Interchange (South Middletown)
 - Summit Bridge Interchange (North Middletown)
 - Jamison Corner Rd.
 - SR1 (Entrance to US301 NB at Port Penn Rd/US13NB and SB SR1 prior to Biddles toll plaza)
- ▶ Four basic lanes (two per direction) with a 70 mph design speed for US 301 Mainline
- ▶ Variable typical sections, and a 54-foot wide Mainline median
- ▶ Guardrail, retaining walls, and other roadside treatments to reduce the road's footprint
- ▶ Intelligent Transportation Systems (ITS)
- ▶ Environmental mitigation features
- ▶ Meets FHWA and AASHTO standards





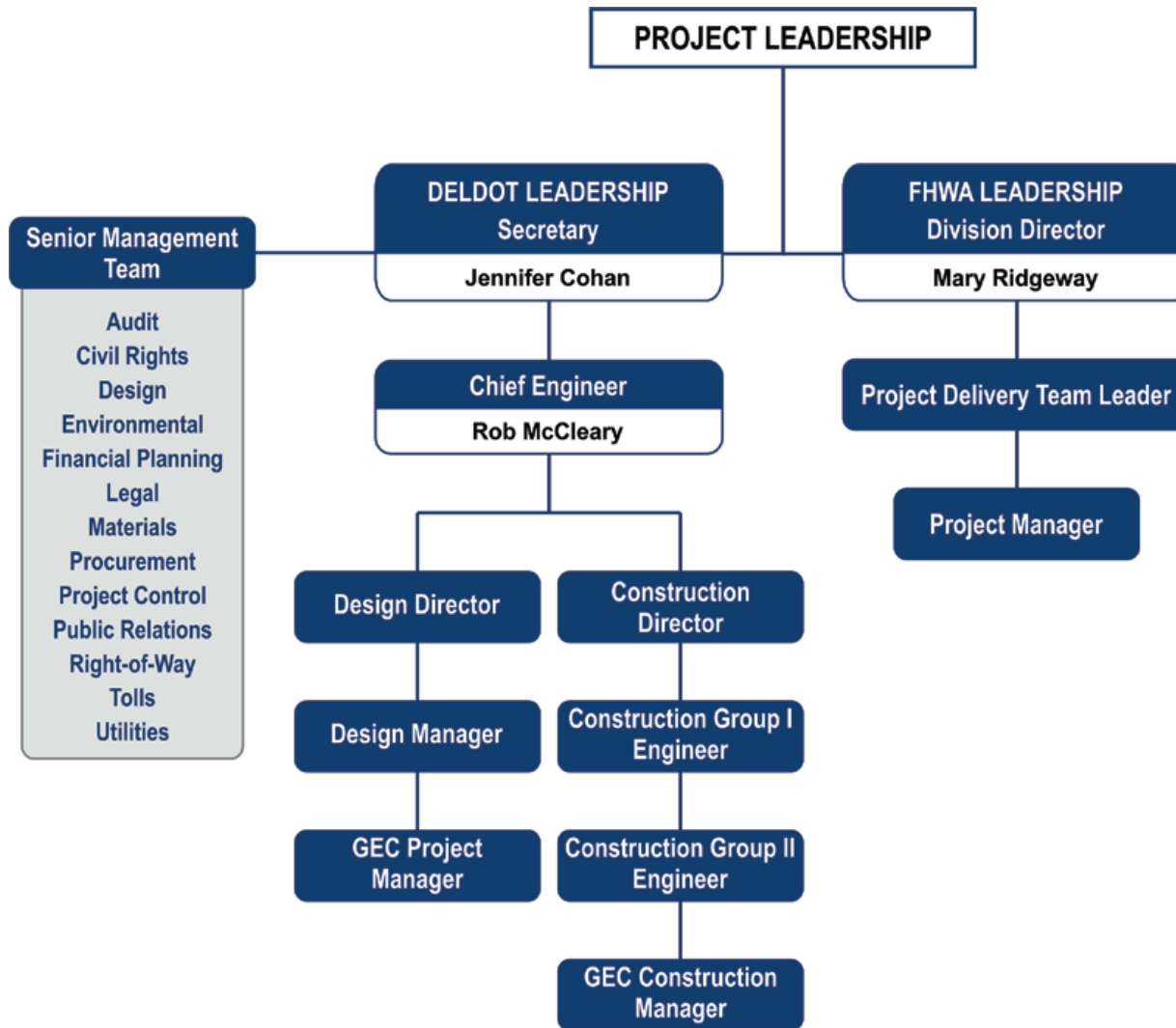
US 301 Visit DeIDOT's US301 Website

<https://www.deldot.gov/information/projects/us301/>





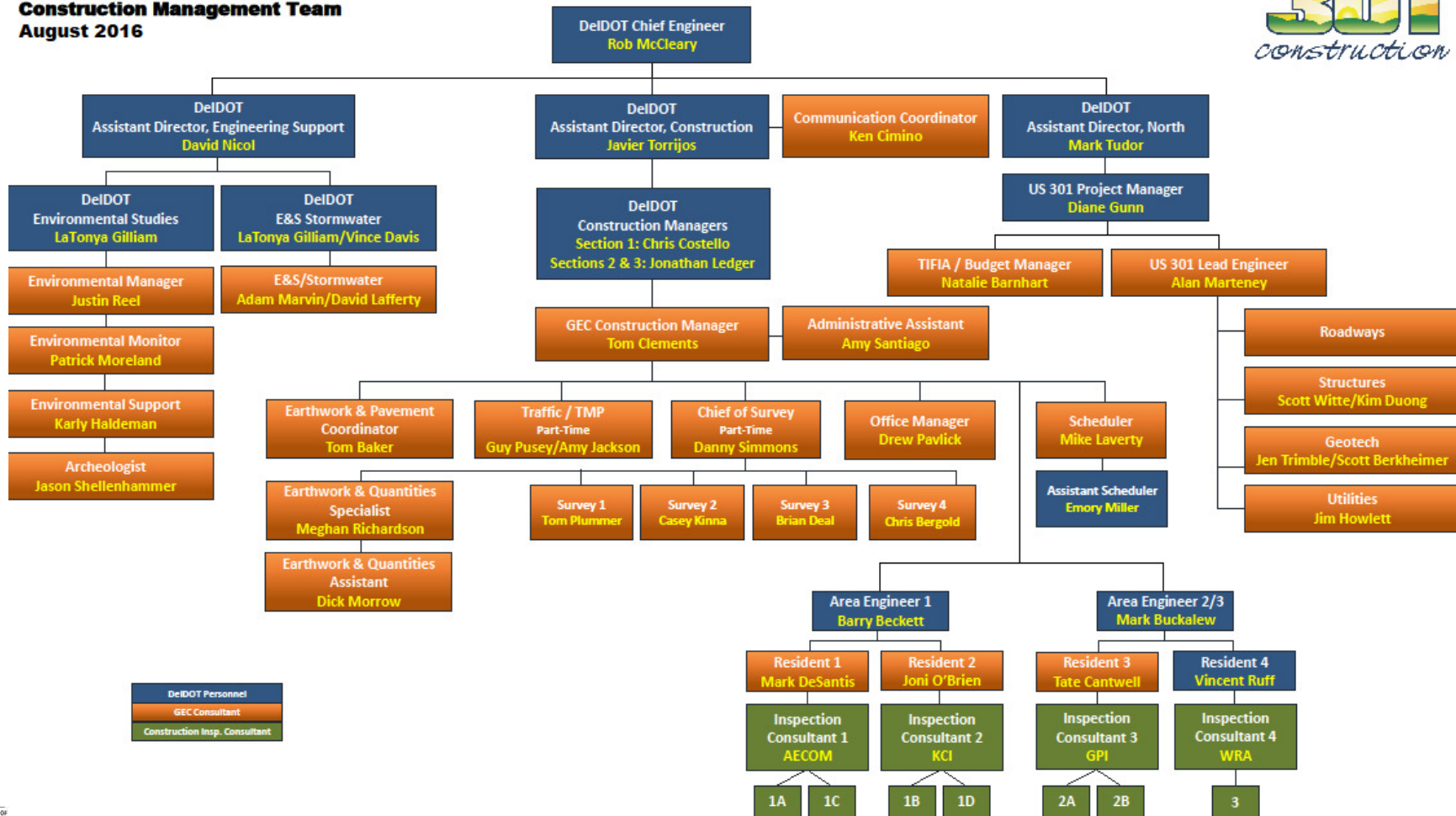
Organizational Overview





US301 Management Team

US 301 Construction Management Team August 2016





Consultant Design Management Team

- GEC Provided Oversight



- 4 Section Design Teams

Section 1	WRA + McCORMICK TAYLOR
Section 2	AECOM + URS
Section 3	JACOBS + Pennoni
Section 4*	URBAN ENGINEERS + JMT

- Toll Planning, Design & Finance



**Section 4 (Spur Road) to be constructed in a future phase T.B.D.*





Document Management

http://dms.us301.com/browse.php?FolderId=2724&page_size=50

Browse — Construction | U... x Gobernador se reúne con direc...

File Edit View Favorites Tools Help

DeIDOT Intranet (5) DeIDOT Intranet (4) DeIDOT Intranet (3) DeIDOT Intranet (2) Eventbrite - 2015 Delawar... National Highway Institut... Train by Cell - We Make Y... DeIDOT SR-1-1-95 Intercha... Alumni State Detail DeIDOT Intranet 31599009 Home

Dashboard **Browse Documents** Javier Torrijos · Preferences · About · Logout

you are here: [browse](#) » [folders](#) » construction

About this folder

- Display Details
- Folder transactions

Actions on this folder

Upload Document

- Add Document
- Add a Folder
- Bulk Download
- Bulk Upload

Search

- Advanced Search
- Search Criteria Editor
- Manage Saved Search

Browse by...

Subscriptions

<input type="checkbox"/>	Title	Created	Modified	Creator	Workflow State
<input type="checkbox"/>	1A, T200911308, SR896 to SR 1	—	—	Natalie Barnhart	
<input type="checkbox"/>	1B, T200911302, US 301 and SR 1 Intercha...	—	—	Natalie Barnhart	
<input type="checkbox"/>	1C, T200911301, Norfolk Southern Railroa...	—	—	Natalie Barnhart	
<input type="checkbox"/>	1D, T201011302, US 13 and Port Penn Road	—	—	Natalie Barnhart	
<input type="checkbox"/>	2A, T200911303, Levels Road to Summit Br...	—	—	Natalie Barnhart	
<input type="checkbox"/>	2B, T201011301, Summit Bridge Rd. & Arms...	—	—	Natalie Barnhart	
<input type="checkbox"/>	3, T200811301, Maryland Line to Levels R...	—	—	Natalie Barnhart	
<input type="checkbox"/>	Advance Clearing, North	—	—	Tom Clements	
<input type="checkbox"/>	Advance Clearing, South	—	—	Tom Clements	
<input type="checkbox"/>	Aerials	—	—	Alan Marteney	
<input type="checkbox"/>	Community Informational Meetings	—	—	Amy Santiago	
<input type="checkbox"/>	Drive-Thru Videos	—	—	Alan Marteney	
<input type="checkbox"/>	FHWA Participation Guidance	—	—	Tom Clements	
<input type="checkbox"/>	Landscaping	—	—	Natalie Barnhart	
<input type="checkbox"/>	Project Contacts	—	—	Amy Santiago	
<input type="checkbox"/>	Survey Control	—	—	Meghan Bartlett	
<input type="checkbox"/>	TIFIA Reports	—	—	Natalie Barnhart	
<input type="checkbox"/>	Toll Infrastructure; T201711301	—	—	Tom Clements	

18 items, 50 per page per page

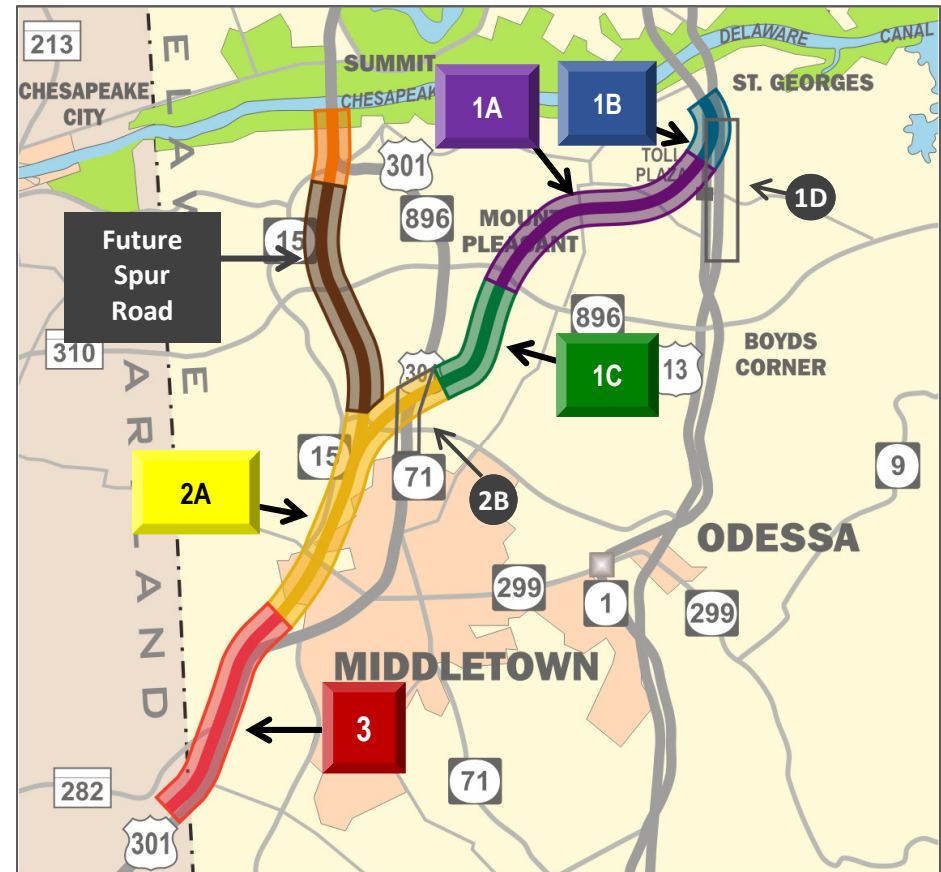
Delete Move Copy Archive Download All Checkout





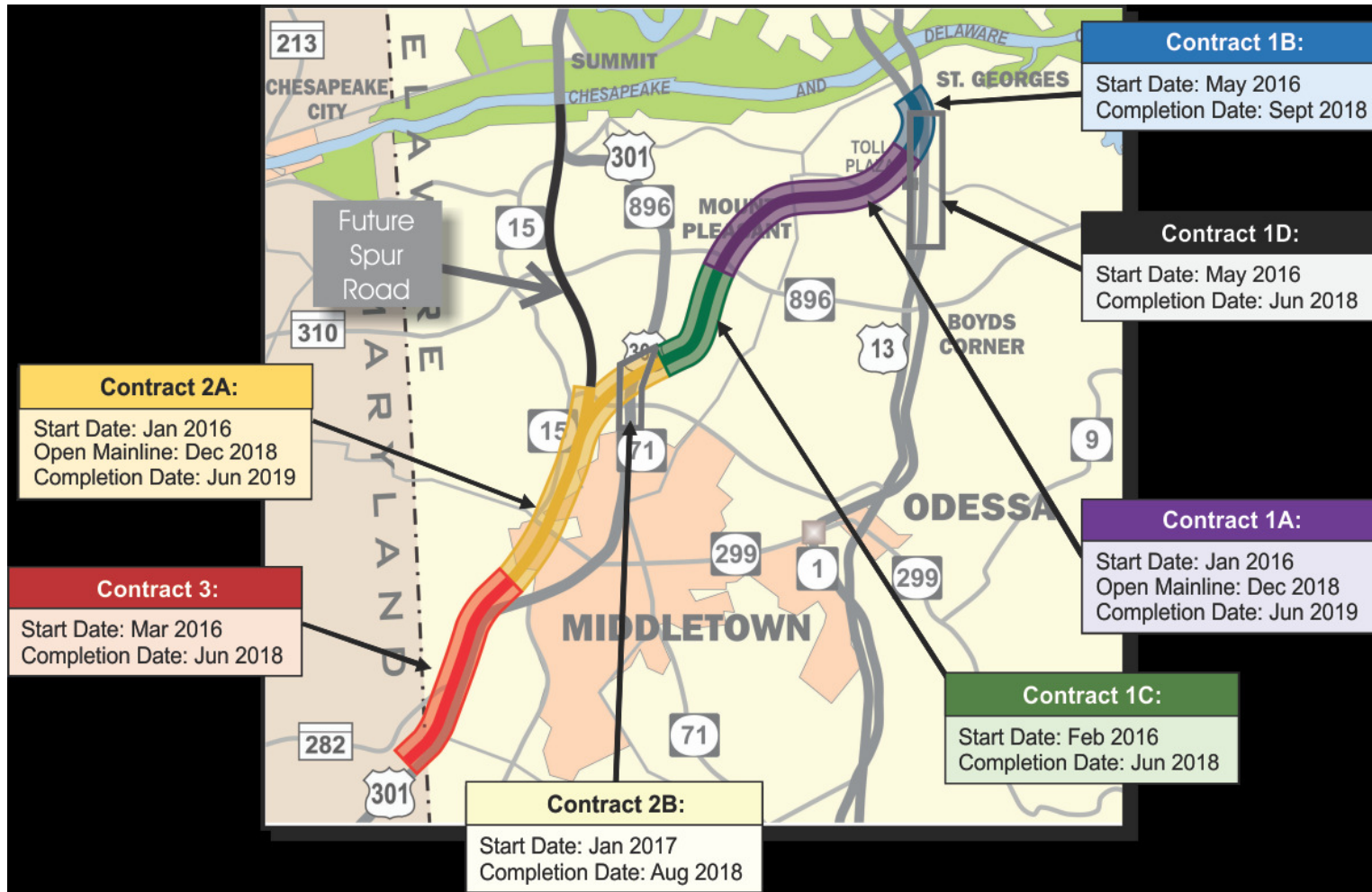
Construction Contracts

- ▶ 7 DBB Mainline Contracts
- ▶ Two advance clearing contracts
- ▶ Toll Infrastructure contract
- ▶ Construction contract limits established to:
 - Minimize and manage construction risks (minimize contractor interfaces)
 - Minimize coordination/interfaces between contractors
 - Optimize competition (regional and local)



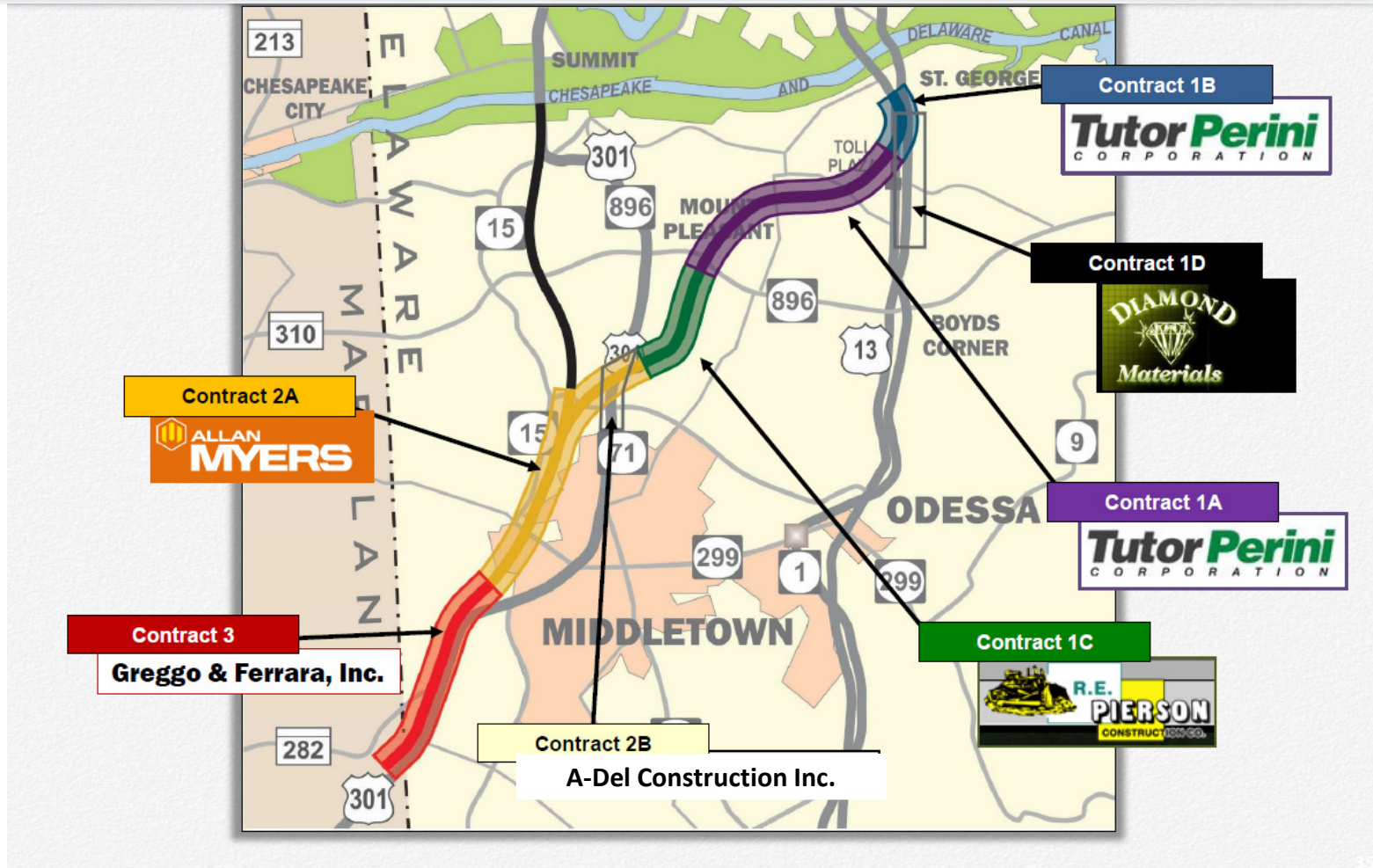


Construction Dates for each Section





US301 Contractors



Advance Clearing Contracts (South and North) – Diamond Materials
Toll Infrastructure – Greggo & Ferrara, Inc.





Contract Award Values

- ▶ **Section 1A (TP) - \$69.8M**
- ▶ **Section 1B (TP) - \$35.4M**
- ▶ **Section 1C (Pierson) - \$21.3M**
- ▶ **Section 1D (Diamond) - \$11.1M**
- ▶ **Section 2A (AM) - \$93.80M**
- ▶ **Section 2B (A-Del) – \$10.7M**
- ▶ **Section 3 (G&F) - \$46.1M**
- ▶ **Advance Clearing South and North (Diamond) - \$0.5M**
- ▶ **Toll Infrastructure (G&F) - \$8M**





Construction Begins in late 2015





US301 Key Dates

Mainline Construction Start: January 2016

Open for Toll Revenue Service: December 2018

Construction Complete: Summer 2019





Financials

- All contracts awarded/negotiated (Transcore), except for final landscaping contract (very minor cost)
- Budget upset is \$635M, based on a preliminary TIFIA upset figure of \$211M
- The only available/flexible funding for future change orders, project overruns, etc. is the Contingent Fund (originally \$30.3M) and the Management Reserve Fund (\$10M)





Financials – Funding Sources

	Total Mainline Cost
State Transportation Trust Fund	\$11.8M
FHWA Federal Aid Funds	\$53.5M
GARVEE Bonds	\$125.0M
US 301 Toll Revenue Bonds	\$234.3M
TIFIA Loan	\$211.2M
	\$635.9M

- **Total cost for project is \$636M**
 - Planning, Preliminary Engineering, Right of Way, Construction
- **Construction Cost: \$410M**





Monthly TIFIA Report

Budget Status				
	Current Budget (k)	October Spend (k)	Prior Spend (k)	Remaining (k)
Original Contract	296,200	9,585	169,069	117,545
Executed Change Orders		325	6,082	
Estimated Final Contract	302,607	9,585	169,069	123,953
Contingency	26,381	-	6,407	19,974
Contingency Adjustment	(3,235)	-	(3,235)	-
Inspection	27,283	858	9,896	16,528
Section Design Consultant	4,809	69	2,005	2,735
Utility	1,467	-	-	1,467
Traffic	4,629	-	255	4,375
Construction Mgmt.	24,686	478	8,562	15,647
Future Projects	17,653			17,653
Completed Projects	6,016		6,371	(355)
Budgeted Capital Costs	412,295	10,990	196,194	205,111

Construction Funding Source Expended/Incurred October 2017					
Funding Source	Total (\$k)	Utilized (\$k)	Remaining (\$k)	Remaining (%)	Projected Date of Fund Exhaustion
State TTF	\$ 216	\$ 216	\$ -	0%	
2010 GARVEE Bonds	\$ 26,396	\$ 26,396	\$ -	0%	
US 301 Project Revenue Bonds	\$ 177,085	\$ 133,100	\$ 43,985	25%	
TIFIA Loan (Construction Only)	\$ 208,598	\$ 46,852	\$ 161,746	78%	
Total	\$ 412,295	\$ 206,564	\$ 205,731	50%	

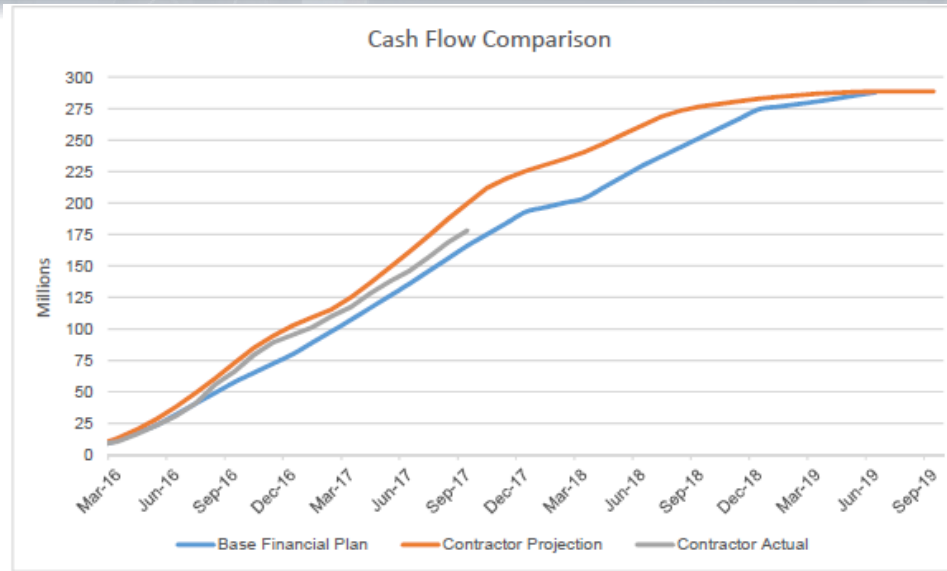
This total includes maintenance equipment, which is not a TIFIA eligible cost.

Project Update
Roughly 96% of all earth moving activities have been completed to date (7.0 million cubic yards). Structures work is ongoing. Roadbox operations are ongoing on sections 1A, 1C, 1D, 2A, and 3. On site work has begun on the Toll Infrastructure and Landscaping Phase 1 projects.





Monthly TIFIA Report - Time and dollars tracking



Quarter Ending	Base Financial Plan	Contractors Spend Plan	Contractor Actual Estimates
Mar-16	\$11,608,200	\$13,262,274	\$10,485,127
Jun-16	\$32,016,600	\$38,228,669	\$31,022,207
Sep-16	\$57,656,900	\$72,795,743	\$65,910,587
Dec-16	\$79,820,645	\$102,691,547	\$95,269,129
Mar-17	\$107,181,224	\$125,014,533	\$117,467,075
Jun-17	\$135,786,124	\$161,147,371	\$146,049,312
Sep-17	\$166,119,474	\$199,805,038	\$178,275,551
Dec-17	\$192,941,999	\$225,499,356	
Mar-18	\$203,723,159	\$240,390,135	
Jun-18	\$229,572,935	\$261,479,847	
Sep-18	\$252,078,035	\$276,674,358	
Dec-18	\$274,462,245	\$282,948,587	
Mar-19	\$280,588,779	\$286,831,672	
Jun-19	\$287,927,629	\$288,684,649	

Schedule		
	Proposed	Actual
Notice to Proceed	1/18/2016	1/18/2016
Time Extensions	0	0
Substantial Completion (TIFIA)	12/31/2018	
Original Contract Completion	5/31/2019	
Current Contract Completion	5/31/2019	5/31/2019
Percentage of Time Complete:	50.61%	50.61%





Some Interesting Facts about US301

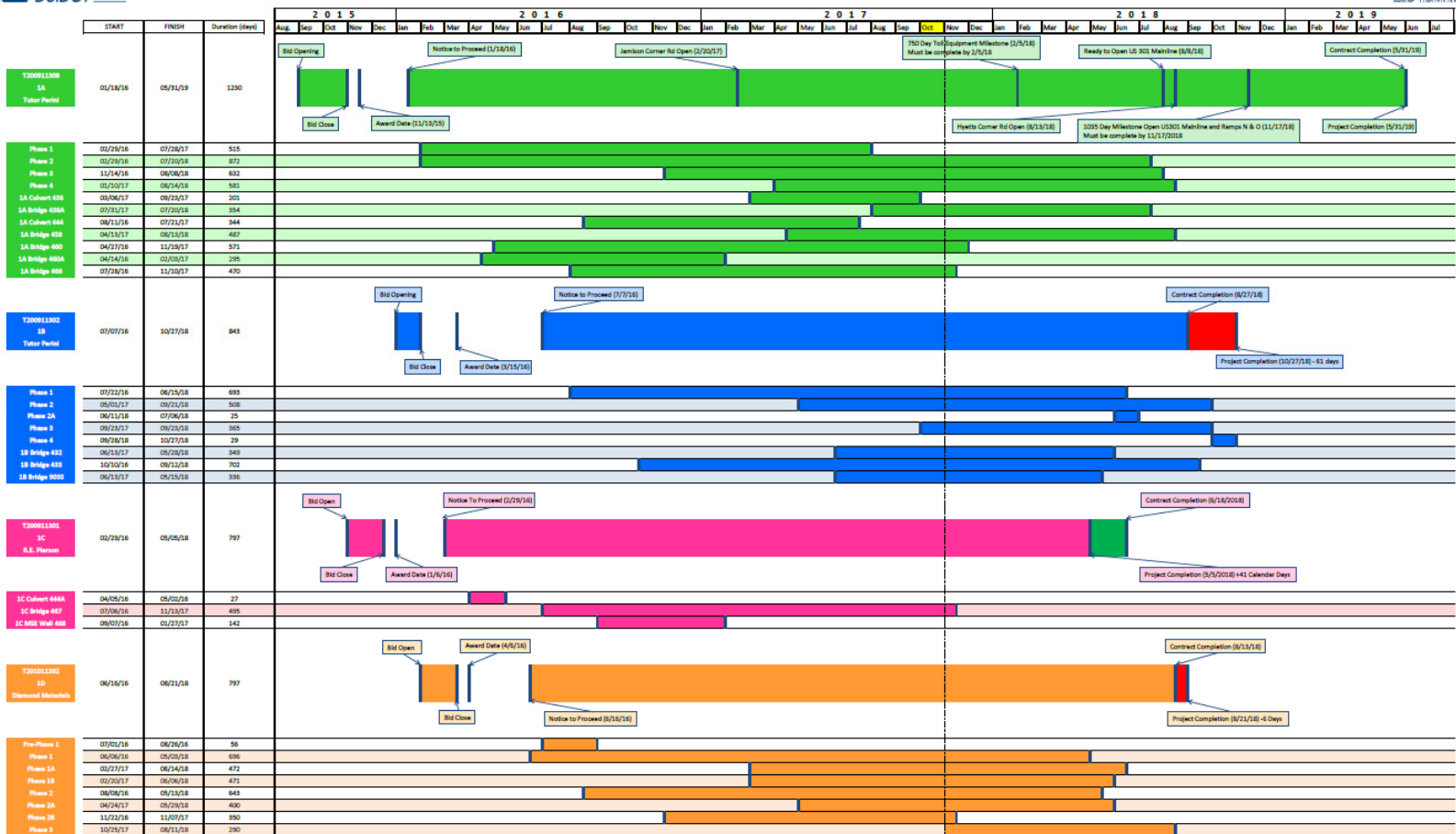
- ▶ 1. Total number of bridges is 28
- ▶ 2. Total estimated footage of H piles is 24,727 L.F. (4.7 miles)
- ▶ 3. Total estimated footage of concrete piles is 63,711 (12.1 miles)
- ▶ 4. Total estimated concrete pavement is 884,549 SY or 294,850 CY which equals to 29,485 truckloads of concrete.
- ▶ 5. Total estimated asphalt pavement is 113,700 tons.
- ▶ 6. Total estimated soil movement is 7,180,000 CY.
- ▶ 7. 14.5 miles of roadway.





US301 Master Schedule

MAINLINE BAR CHART SCHEDULE (Data Date 10/28/17)





Corridor wide Tracking spreadsheet - Earthwork

202000 CUBIC YARDS

COMPLETED **STOCKPILED**

	ACTUAL BID QUANTITY	PRODUCTION RATE PROPOSED	ACTUAL START DATE	CURRENT DATA DATE	CALENDAR DAYS USED TO DATE	QUANTITY MOVED TO DATE	QUANTITY MOVED THIS MONTH	DAILY PROD. RATE	ACTUAL WORK DAYS USED TO DATE	ACTUAL WORK DAY PROD. RATE	BALANCE TO COMPLETE	% COMPLETED	A BORROW	D BORROW
1A Tutor Perini	1596312.00	5600	3/7/2016	8/22/2017	533	1596312	36681	2994.96	345.00	4626.99	0.00	100.00%	83983	31027
1B Tutor Perini	234235.00	5600	8/26/2016	10/28/2017	428	137239	36781	320.65	134	1024.17	96996.00	58.59%	19871	5639
1C R.E. Pierson	874981.00	6000	3/9/2016	7/29/2017	507	874981	2787	1725.80		#DIV/0!	0.00	100.00%	43138	14018
1D Diamond Materials	73680.00		7/10/2016	8/26/2017	412	73320	261	177.96		#DIV/0!	360.00	99.51%	11816	929
2A Allan Myers	3351106.00	11000	3/8/2016	10/28/2017	599	3273216	28183	5464.47	381	8591.12	77890.00	97.68%	104234	44267
2B	90017.00		3/22/2017	10/28/2017	220	45557	18748	207.0772727		#DIV/0!	44460.00	50.61%		
3 Greggo and Ferrara	1091303.00	2200	4/11/2016	7/29/2017	474	1091303	33693	2302.33		#DIV/0!	0.00	100.00%	122789	27986
TOTALS	7311634.00					7091928.00	157134.00				219706.00	97.00%	385831.00	123866.00
total with 10% not counted to date						7113898.60					21970.6	97%		





Section 1A Tutor Perini





Section 1A US301 over Boyd's Corner Rd.



301-Section 1 Nov 2017





Section 1A Culvert for wildlife crossing



301-Section 1 Nov 2017





Section 1A Soil Cement underway



301-Section 1 Nov 2017





Section 1A Jamisons Corner Rd Interchange



301-Section 1 Nov 2017





Section 1A US301 over Scott Run





Section 1A Hyetts Corner Rd. over Scott Run





Section 1A Hyetts Corner Rd. over US301



301-Section 1 Nov 2017





Section 1A US301 over Scott Run Tributary

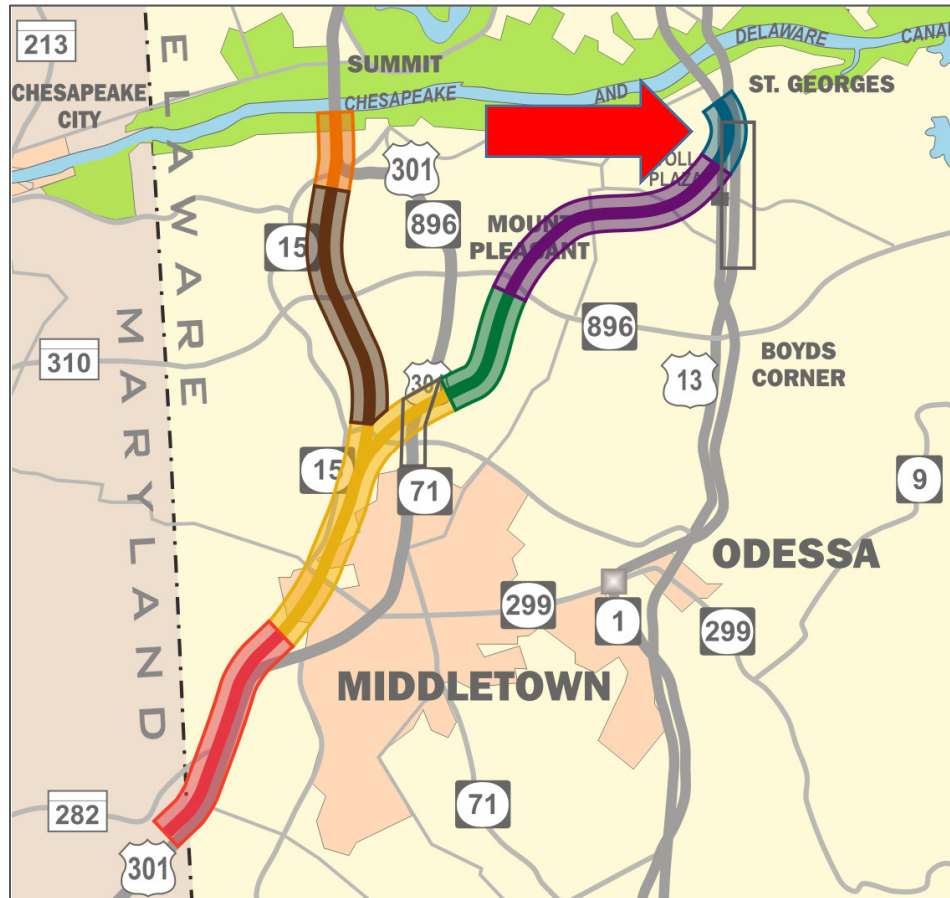


301-Section 1 Nov 2017





Section 1B Tutor Perini





Section 1B US301 over SR1





Section 1B US301 over SR1



301-Section 1 Nov 2017





Section 1B MSE Wall and Abutment





Section 1B MSE Wall





Section 1B US301 NB over Scott Run



301-Section 1 Nov 2017





Section 1B US301 Stream protection





Section 1C R.E. Pierson Construction





Section 1C Concrete Pavement



301-Section 1 Nov 2017





Section 1C US301 over Drawyer Creek



301-Section 1 Nov 2017





Section 1C Resource Protection Fence



301-Section 1 Nov 2017





Section 1C Staging Area

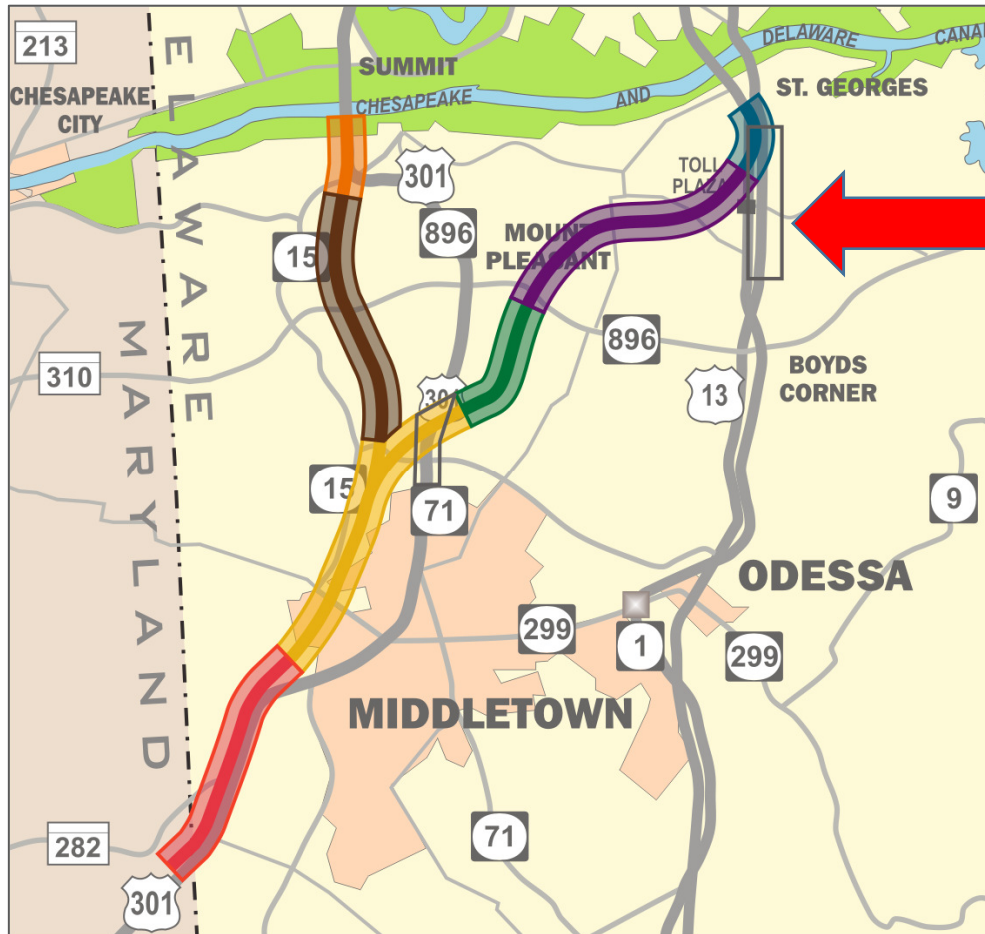


301-Section 1 Nov 2017



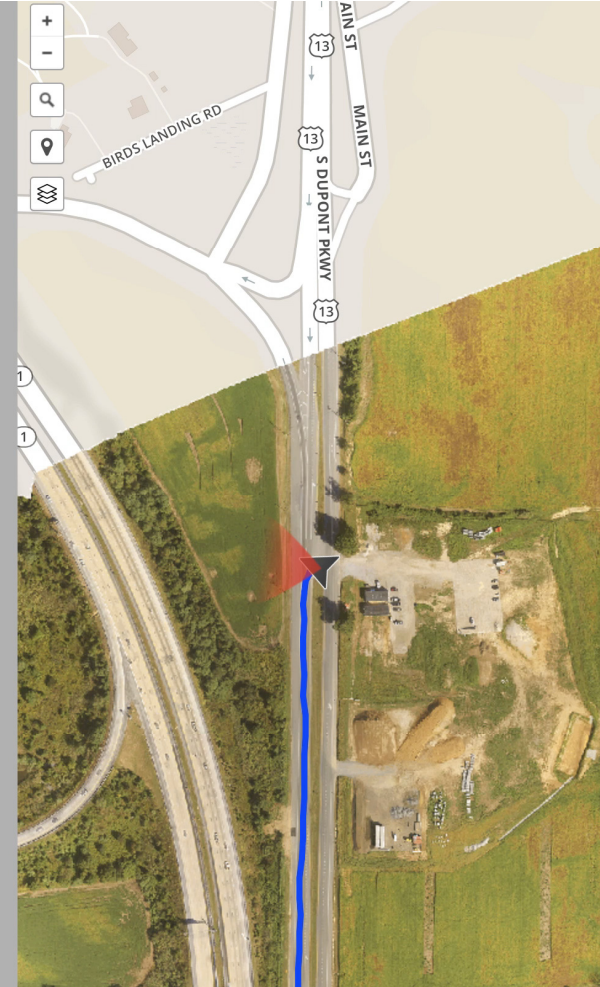
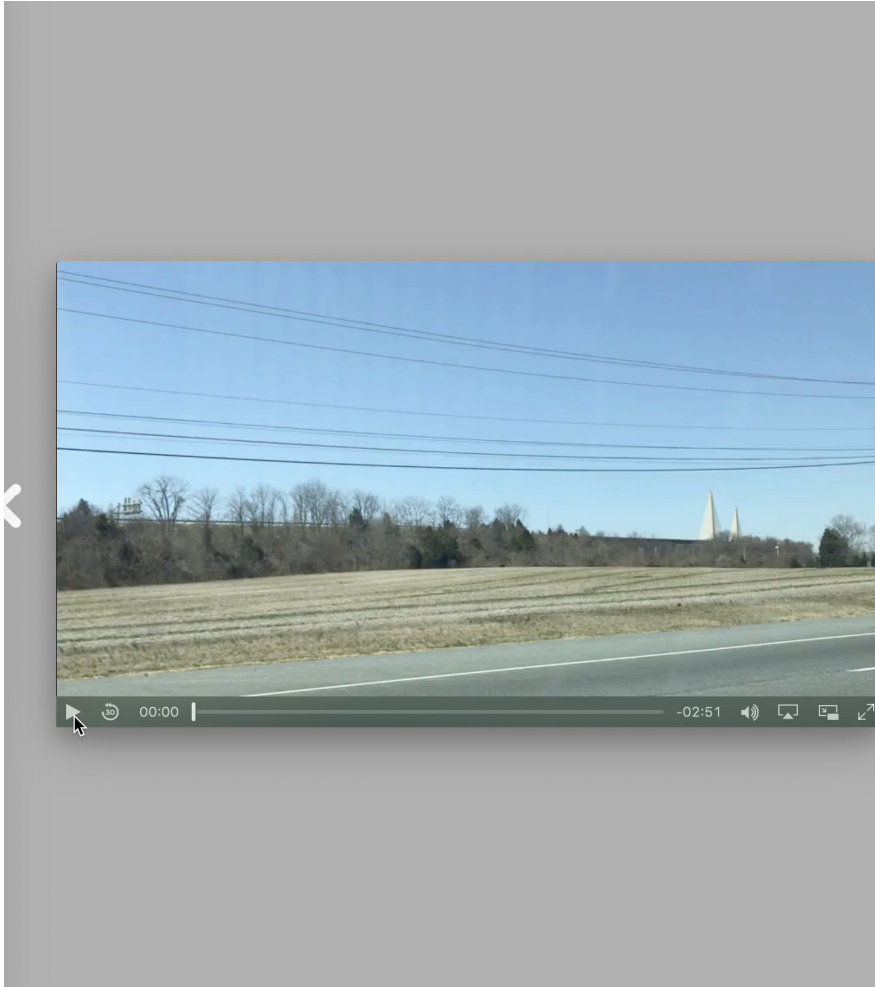


Section 1D Diamond Materials





Section 1D Drive Thru videos





Section 1D Ramp construction





Section 1D US13 NB Left Turn Lane





Section 2A Allan Myers





US301 Levels Pit Mitigation Site – Borrow source for Section 3 and 2A

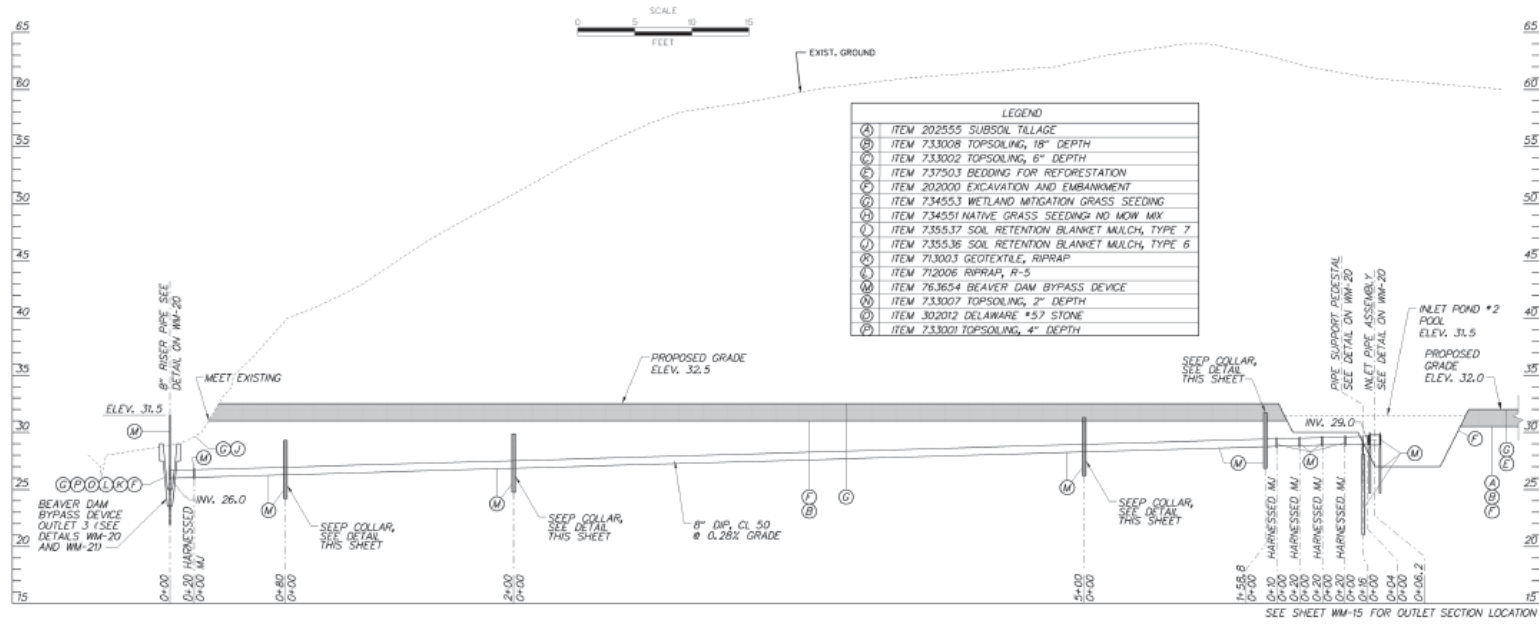




US301 Levels Pit Mitigation Site – Beaver Dam Bypass

SECTION H-H - LOW FLOW OUTLET CHANNELS

SEE SHEET WM-17 FOR OUTLET SECTION LOCATION



DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

SCALE AS NOTED

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT T2008H303	BIDD# NO.
COUNTY NEW CASTLE	DRAWN BY MRS
	CHECKED BY JTR

BORROW SITE / WETLAND MITIGATION PLAN

PROFILES	
WM-19	SHEET NO.
	820
	TOTAL SHEETS
	1256





US301 Levels Pit Mitigation Site – Completed Beaver Bypass





US301 Reforestation





Section 2A Levels Rd. Interchange



US301 Section 2
Levels Road to Norfolk Southern RR
November 2017

301-Section 2 Nov 2017

Bridges over Sandy Branch

Stormwater Management
Pond





Section 2A Bridges over Sandy Branch Tributary





Section 2A Berm and Landscaping





Section 2A Bunker Hill Rd. over US301





Section 2A Future Spur Rd

US301 Section 2
Levels Road to Norfolk Southern RR
November 2017



301-Section 2 Nov 2017

New Northbound &
Southbound US301
Permeable Treated Base
Dowel Baskets for Concrete Pavement

Future Northbound Ramp
to Spur Road





Section 2A US301 over Armstrong Corner Rd.

US301 Section 2
Levels Road to Norfolk Southern RR
November 2017



301-Section 2 Nov 2017

US301 Bridge over
Armstrong Corner Road

Armstrong Corner Road
Improvements





Section 2A US301 Connector Rd. Interchange



US301 Section 2
Levels Road to Norfolk Southern RR
November 2017

301-Section 2 Nov 2017

North Middletown Interchange
US301 Bridge over Connector Road
Roundabouts at Ramp Intersections

Connector Road to
Summit Bridge Road





Section 2A US301 - Connector Rd.





Section 2A U301 over Summit Bridge Rd.





Section 2A U301 over NS



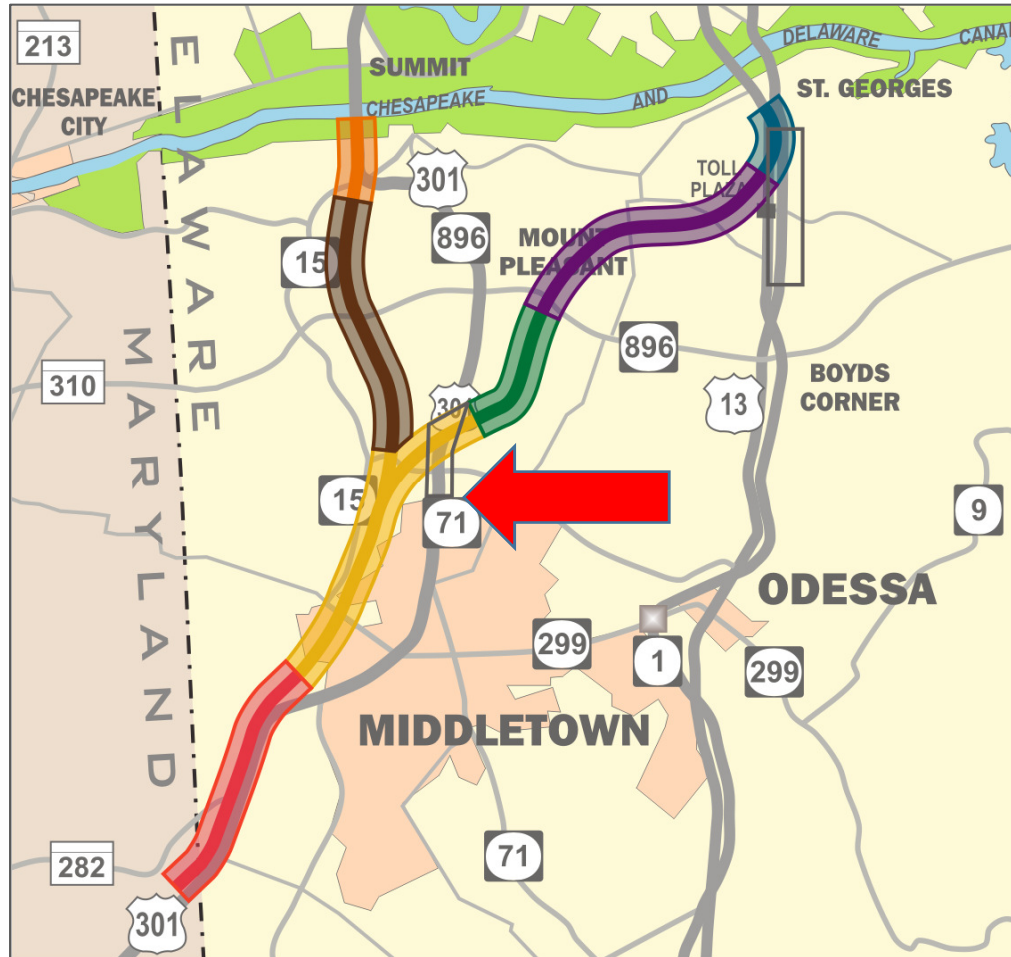


Section 2A U301 Mainline





Section 2B A-Del Construction





Section 2B Summit Bridge Rd. Roadway improvements





Section 2B Summit Bridge Rd. Roadway improvements





Section 2B Connector Road





Section 3 Greggo & Ferrara





Section 3 Temporary Crossover



301-Section 3 Nov 2017





Section 3 Strawberry Lane over US301



301-Section 3 Nov 2017





Section 3 US301 Weigh Station and Middletown Warwick Rd.



301-Section 3 Nov 2017





Section 3 US301 Mainline and Weigh Station





Section 3 US301 Temporary Crossover



301-Section 3 Nov 2017





Section 3 US301 Temporary Crossover





Section 3 US301 Levels Rd. Interchange



301-Section 3 Nov 2017





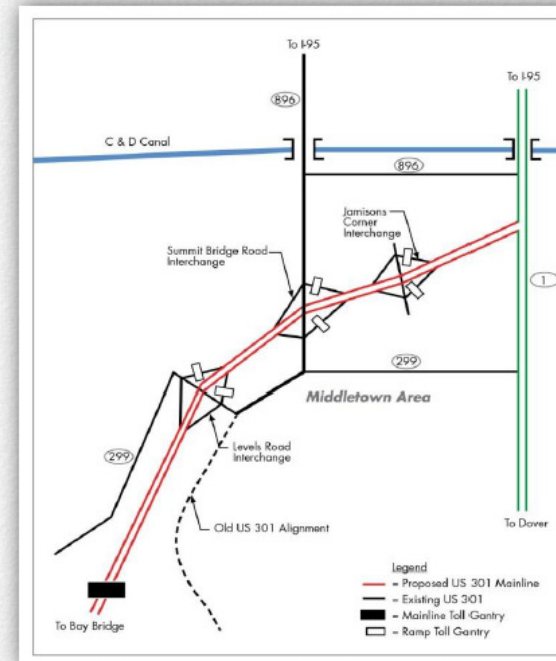
US301 Toll Infrastructure Contract – Greggo & Ferrara





US301 Toll Collection Plan

- All Electronic Tolling (AET)
- Toll Zones
 - Mainline: Northbound and Southbound
 - North of MD/DE Line
 - 2 lanes in each direction
 - Ramps
 - North-serving ramps only
 - South Middletown at Levels Road
 - North Middletown at Summit Bridge Road
 - Jamison Corner Road





Construction Informational Meetings

US 301 Mainline Project

The map shows the US 301 mainline project route through Delaware, including areas like Summit, Chesapeake, Delaware City, St. Georges, Moun Pleasant, and Middletown. Overlaid documents include:

- DRAFT ENVIRONMENTAL IMPACT STATEMENT
- FINAL ENVIRONMENTAL IMPACT STATEMENT
- Record of Decision
- APPLICATION FOR FEDERAL CREDIT ASSISTANCE
- TIA Creditworthiness Review
- Initial Financial Plan

DRAFT
NOVEMBER 2015



State Contract T200511301



Federal Highway Administration



Delaware Department of Transportation

Construction Information Meeting

December 9, 2015
Middletown Fire Hall





Questions?

