

Board of Supervisors

Robert "Bob" Thomas, Jr., Chairman

Laura A. Sellers, Vice Chairman

Meg Bohmke

Jack R. Cavalier

Wendy E. Maurer

Paul V. Milde, III

Gary F. Snellings

C. Douglas Barnes

Interim County Administrator

Infrastructure Committee AGENDA

February 7, 2017 @ 1:30 p.m.
ABC Conference Room, Second Floor

Committee Members: Paul Milde, III, Meg Bohmke; Jack Cavalier

Agenda Item	
	Introduction ❖ Welcome
1.	Election of Committee Chairman
2.	Transportation Matters a) TAP Fees Update – probable award and rollover for \$81K for Northern TMA b) Smart Scale update c) Transfer of RSTP/CMAQ funds from Butler Road to Enon d) DRPT update regarding the DC2RVA e) Volkswagen Consent Decree Settlement and potential funding
3.	Utilities CIP update
4.	State Code sections regarding Well Testing and the authority provided
6.	Next Scheduled Meeting – March 7, 2017
	Adjourn



FY2018 Transportation Alternatives Program (TAP) Update

- Prior to the November 1, 2016 TAP application deadline, the County submitted an application for the Onville Road sidewalk project, per the Board's direction, requesting \$440,000 in TAP funds.
- FAMPO recently indicated that this project will most likely receive the full, requested amount because the Fredericksburg District had only two applications submitted to VDOT – one from the County and the other from Gloucester County.
- The Fredericksburg District currently receives \$1M per each fiscal cycle and the TAP fund request from both of these applications was less than \$1M combined.
- In addition to the \$1M the Fredericksburg District receives from the TAP, FAMPO receives approximately \$81K from the TAP for an area known as the Fredericksburg Transportation Management Area (TMA).
- Within the FAMPO region, only projects that fall within a portion of North Stafford are eligible to receive these TMA funds.
- FAMPO has indicated that if a portion of the \$1M the Fredericksburg District receives is not awarded due to lack of projects, VDOT will allocate this funding elsewhere in the Commonwealth.
- Therefore, FAMPO is proposing to not request VDOT to allocate these \$81K FAMPO TMA-TAP funds onto the Onville Road sidewalk project and instead encourages the County to apply for these funds for the next fiscal cycle.
- The FAMPO TMA-TAP funds cannot be lost by not allocating them this year. The funds for FY18 would rollover to FY19 totaling approximately \$162K for the County to apply towards another eligible project located within the Fredericksburg TMA.
- No action is required from the Infrastructure Committee on this agenda item.

Smart Scale Update

- Prior to the September 30, 2016 Smart Scale application deadline, the County submitted four applications to compete for two Smart Scale funding sources – High Priority Projects Program and District Grant Program.
- The four projects that were submitted by the County were as follows listed in order of priority:
 - Route 1/Enon Road Intersection and Roadway Improvements;
 - Route 1/Eskimo Hill Road/American Legion Road Intersection Improvement;
 - Butler Road Widening; and
 - Decatur Road Reconstruction.
- All submitted applications were screened through the VTrans2040 Multimodal Transportation Plan (VMTP) and were found to meet an identified need in the VMTP, therefore qualifying them to be scored and eligible for potential Smart Scale funding.
- Upon recent discussions with FAMPO, staff has learned that none of these four projects scored well enough to be funded under VDOT's recommended funding scenario to the Commonwealth Transportation Board (CTB) for the State wide High Priority Projects list.
- FAMPO has indicated that they will investigate in further detail the reasons why the higher prioritized County projects did not score well enough to receive Smart Scale funds. Staff is assisting FAMPO in this endeavor.
- The Commonwealth believes there may be some calculation errors; therefore, some scores may be revised.
- FAMPO has set up a special Task Force committee to discuss Smart Scale issues and to assist the State in finding solutions to this year's scores and improve the process for future years.

Transfer of Regional Surface Transportation Program (RSTP) funds from Butler Road Widening to Route 1/Enon Road Intersection Project

- After discovering that our four projects were not selected for the State wide High Priority projects within the Smart Scale program, FAMPO informed staff that there are some unallocated District Grant Program (DGP) funds available (for the Fredericksburg District only).
- The Board has designated Route 1/Enon Road Intersection and Roadway Improvements to be the top priority, which is estimated to be a \$10.1M project with a Smart Scale funding request of \$9.6M.
- The CTB member has informed us there is \$2 M available in Fredericksburg DGP and he will allocate those funds to this project if it can be fully funded.
- In order to fund this project we will request FAMPO to move RSTP and CMAQ funding from other projects that were not included in Smart Scale. One such project recommended by FAMPO is the Butler Road project that will be removed from our CIP due to lack of Transportation funds. The current allocation for Butler Road is \$2.8 M.
- We have briefly discussed with VDOT which other funds may be available and believe we can find an additional \$1.2 M in CMAQ for a total of \$6M for this project. We will continue to work with FAMPO to identify these funds and will bring a resolution to the Board on February 21, 2017 to request a transfer of the CMAQ funds.
- We will work with VDOT to refine the scope of this project to get within a \$6 M budget in order to have the \$2M DGP Smart Scale funds allocated.
- We have a resolution on the consent agenda today to transfer the RSTP funds. The FAMPO Policy Committee will consider a recommendation the transfer of the RSTP and CMAQ funds at its next meeting which is scheduled for February 27th.

DRPT Update Regarding the DC2RVA

- In January, DRPT gave a presentation to the FAMPO Policy and Technical Committees updating them on the status of the on-going DC2RVA project.
- As part of their draft Environmental Impact Statement (EIS), DRPT considered a handful of alternatives for the proposed additional third track. These alternatives included routes both through and around the City of Fredericksburg (eastern bypass concept).
- DRPT's recommendation to the Federal Railroad Administration (FRA) is to have the additional third track go through the City of Fredericksburg on the existing CSX alignment due to fewer property and wetland impacts as well as a lower cost.
- Other advantages cited are: supports expanded intercity passenger service and CSX freight service, including for Port of Virginia; consistent with the City's Comprehensive Plan; improvements address future station/platform/parking needs; project improvements would be largely within CSX-owned ROW.
- A preliminary cost estimate for these 14 miles of track work is \$493M in 2025 dollars.
- FRA is reviewing the draft, then it will be released to the public for comment over a 60-day period.
- Public hearings will be held by DRPT during the 60-day comment period for the draft EIS.
- Once the 60-day comment period ends, comments will be compiled into the draft EIS and then sent to the Commonwealth Transportation Board (CTB).
- Additional coordination with regulatory agencies, localities and stakeholders will continue to occur throughout this process.
- Once CTB approves the draft EIS it will become the Final EIS and go back to FRA for them to issue a Record of Decision.
- Funding has not been identified for this project to date.

VOLKSWAGEN CONSENT DECREE SETTLEMENT

- A Partial Consent Decree has been finalized between the United States Justice Department and the Volkswagen Corporation in October 2016 regarding settlement resulting from Volkswagen's installation and use of emissions testing defeat devices on diesel motors.
- An Environmental Mitigation Trust has been established as part of the settlement that provides funds to the states to mitigate air quality impacts of the higher 2.0 liter and 3.0 liter vehicle emissions.
- The trust establishes a process to administer the funds, a process for states and tribes to receive the funds, including the development of a mitigation plan, and the types of mitigation "actions" or projects eligible for funding under the Trust.
- Virginia's initial share of these funds is up to \$87.6 million.
- The Virginia Department of Environmental Quality (DEQ) has developed a draft state mitigation plan. The primary goal of the plan is to improve and protect ambient air quality by implementing eligible mitigation projects that will achieve significant and sustained reductions in diesel emissions and expedite deployment and widespread adoption of zero emission and near-zero emission vehicles and engines.
- The Consent Decree requires a Trustee be designated to oversee the money for all of the States and Tribes. The courts will assign a trustee in February which will begin the process. Once assigned the Trustee can make changes to the Consent Decree.
- DEQ will submit their mitigation plan to the Trustee for review. An approval process has not been identified. DEQ anticipates that Trust funds will be made available for mitigation projects by the fall of 2017 if there are no issues identifying the Trustee. Details on the competitive application or project selection process are not available yet.
- Funding priorities for categories of eligible mitigation project types include, but are not limited to:
 - Sizeable projects designed to achieve the greatest NOx emission reduction or offset for the dollar (i.e., capital cost effectiveness in dollars/ton),
 - Government and non-government entities with demonstrated experience and existing administrative and programmatic structure in place for implementing diesel reduction or offset projects,

- Projects with verified funding (i.e., for projects that require a cost-share) or leveraged funding,
 - Projects that can be implemented within three years of the award date,
 - Projects in areas that receive a disproportionate quantity of air pollution from diesel fleets such as but not limited to ports, rail yards, truck stops, airports, terminals, and bus depots,
 - Projects located in nonattainment or maintenance areas, or areas with historical issues concerning compliance with federal standards for PM_{2.5} and/or ozone,
 - Projects located in areas with toxic air pollution concerns, and
 - Projects located in designated Federal Class I areas (Shenandoah National Park, and James River Face Wilderness).
- Categories of eligible projects:
 - On-Road Heavy Duty Vehicles
 - Non-Road Equipment
 - Locomotives (N/A to Stafford County)
 - Commercial Marine Vessels (N/A to Stafford County)
 - Light Duty Zero Emission Vehicle Supply Equipment – Up to 15%
 - Diesel Emission Reduction Act (DERA) Option

Utilities Capital Projects Update

PROJECT	Celebrate Virginia Water Tank
Description	Construction of a 1 million gallon elevated water tank on Greenbank Road in Celebrate Virginia near Banks Ford Parkway to replace the existing Berea Tank at Dominion Virginia Power.
Project Budget	\$2.5M
Completion Status	Tank was placed in service on January 30th. Site work is ongoing.
Recent Activity	The construction of the pedestal and bowl is complete and the tank is now online. Staff is working to obtain quotes from demolition companies to remove the existing Berea Tank.




Utilities Capital Projects Update

PROJECT	Sanford to Olde Forge Water Line (342 Phase II)
Description	Construction of approximately 16,000 linear feet of 30-inch diameter waterline from the intersection of Greenbank Road and Sanford Drive to the Olde Forge neighborhood.
Project Budget	\$4.6 M
Completion Status	Line is complete; minor punch list items are ongoing
Recent Activity	Waterline has been integrated into the County system



Utilities Capital Projects Update

PROJECT		AUSTIN RUN SANITARY SEWER & PUMP STATION REPLACEMENT
Description	<p>The existing pump station is near capacity and has experienced several overflows over the past five years. The equipment in the pump station is antiquated and in disrepair. The pump station is to be replaced with a state of the art screw pump system with all the appropriate piping to position the pump station adjacent to Aquia Wastewater Treatment Facility. The close proximity of the pump station to the wastewater facility will save the county a considerable amount of energy and money.</p>	 A photograph showing a large-diameter black pipe being lowered into a deep trench. A red excavator with 'Link-Belt' written on its arm is positioned at the top of the trench, lifting the pipe. Two workers in high-visibility vests are standing near the pipe. The trench is lined with concrete walls. Orange safety fencing is visible in the foreground.
Project Budget	\$5.2M	
Completion Status	March 31 2017	
Recent Activity	<p>The contractor has completed the connection under Route 1 at Aquia Creek. Sewer is currently being installed on the West side of Route 1 and the new pump station is expected to be activated in the next few weeks.</p>	



Utilities Capital Projects Update

PROJECT	Route 1 North Sewer Line
Description	Approximately 4,400 feet of 18-inch gravity sewer along and parallel to Route 1 will replace deteriorated gravity sewer This will provide additional wastewater capacity for the northern part of the county.
Project Budget	\$4.15M
Completion Status	September 2017
Recent Activity	Night work has begun and a bypass pumping system is in place.



New Sewer Manhole



Utilities Capital Projects Update

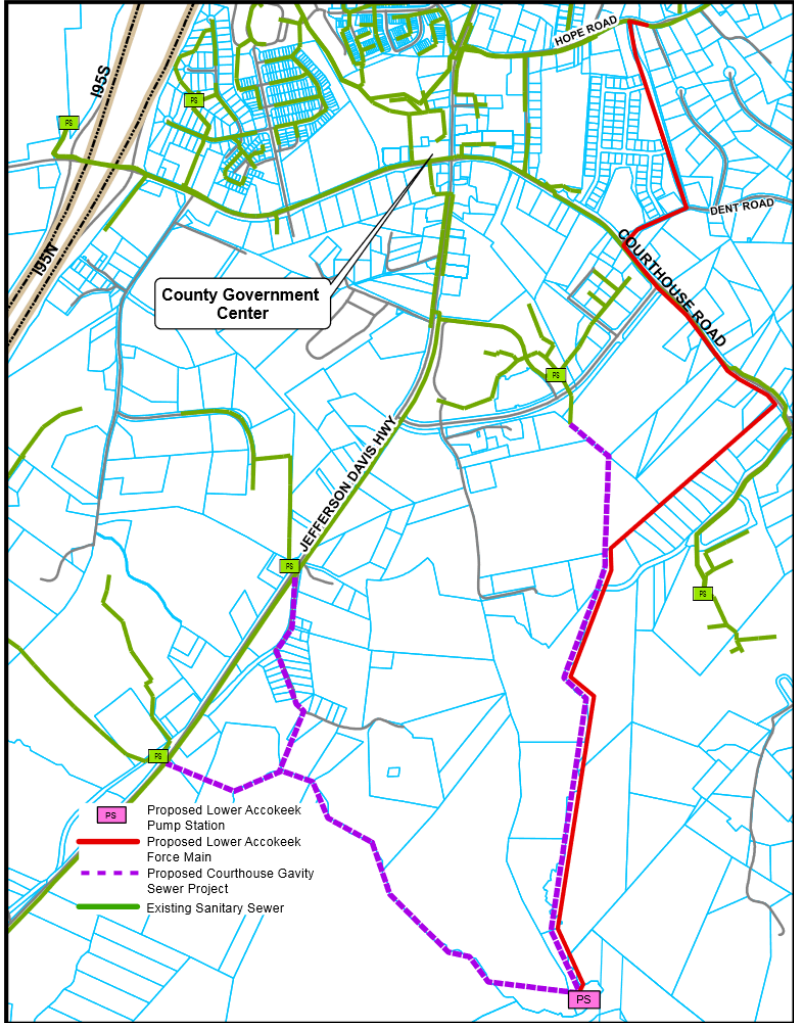
PROJECT	Butler Road Force Main Repair
Description	Approximately 250 linear feet of 30-inch fiberglass-reinforced gravity sewer pipe and a 96-inch diameter polymer concrete manhole to replace a failing section of sewer.
Project Budget	\$283,000
Completion Status	April 2017
Recent Activity	Contractor has begun site work to place new pipe and manhole.



Fiberglass Reinforced Pipe



Utilities Capital Projects Update

PROJECT	Lower Accokeek Upgrades	
Description	Adds a pump station and gravity sewer lines to serve the southeast quadrant of the Courthouse area. This will allow for growth in this area.	 <p>The map shows the project area around the County Government Center. Key roads include Hope Road, Dent Road, Courthouse Road, and Jefferson Davis Hwy. The map highlights the proposed Lower Accokeek Pump Station (PS) and the proposed Lower Accokeek Force Main (red line). It also shows the proposed Courthouse Gravity Sewer Project (dashed purple line) and existing sanitary sewers (green lines). A legend in the bottom left corner identifies these features.</p>
Project Budget	\$10.5 M	
Completion Status	FY2019	
Recent Activity	The Engineering Groupe and Stantec have been hired to provide survey and design.	



Utilities Capital Projects Update

PROJECT	Courthouse Water Storage Tank
Description	Construction of a new 1 million gallon water tank with approximately 750 linear feet of 16-inch waterline, 300 linear feet of 12-inch waterline, and 80 linear feet of steel casing pipe by bore. This will replace the existing standpipe near Paradise Estates and Route 1.
Project Budget	\$3.8M
Completion Status	June 2018
Recent Activity	Notice to Proceed is February 6, 2017.
PROJECT	Courthouse Road Waterline Upgrade
Description	Upgrade of the existing 8" water line with a 12" water line along portions of Courthouse Road. The VDOT Contractor is to complete portions of the line within the Rte. 630 Interchange area. In conjunction with the new tank, the project will improve the hydraulic capacity for the Courthouse area and areas West of I-95.
Project Budget	\$200,000
Completion Status	Advertise for construction February 2017
Recent Activity	Expect plan approval first half of February.
PROJECT	Route 630 Interchange Betterments (VDOT)
Description	Upgrades to existing waterlines within the project limits of the new Rte. 630 Interchange Project. Will improve hydraulic capacity and availability to areas West of I-95.
Project Budget	\$100,000
Completion Status	Dependent on VDOT project schedule
Recent Activity	Negotiating with VDOT contractor regarding costs and schedule.



Utilities Capital Projects Update

PROJECT	Centreport Sewer Extension Project
Description	Construct 2,000 feet of sewer line to connect the Centreport area to the existing system. This will allow development of the Centreport area.
Project Budget	\$1.03M
Completion Status	November 2017
Recent Activity	Notice to Proceed is February 20, 2017.
PROJECT	Claiborne Run Sewer Interceptor Replacement Project
Description	Replace 2,500 feet of the existing Claiborne Run gravity sewer interceptor with a 42" line to accommodate future flows and replace a current line that is at the end of its useful life. This will reduce the amount of infiltration and inflow of groundwater to the sewer system and reduce overflows.
Project Budget	\$2.8M
Completion Status	December 2017
Recent Activity	Project has been advertised with an opening date of February 22, 2017.
PROJECT	Falls Run Force Main Replacement and Upgrade
Description	Replace 16" Ductile Iron Force Main with 30" PVC Force Main from Falls Run Pump Station in Falmouth to the Claiborne Run Sewer Interceptor at the CVS on Butler Road
Project Budget	\$3.2M
Completion Status	Plan Approval in FY18 with Construction in FY19
Recent Activity	Design of alignment is underway



Utilities Capital Projects Update

Comprehensive Water Overview – Current and FY18

Currently in Design or Construction

Smith Lake Water Treatment Plant Filters
Abel Lake Dam Spillway Improvements
Courthouse Elevated Water Storage Tank
Berea Water Tank Demolition
342 Pressure Zone Transmission Pipeline Phase 1
342 Pressure Zone Transmission Pipeline Phase 2
Celebrate Virginia Elevated Water Storage Tank
Short Extension Projects

Projects to begin next fiscal year (FY18)

Smith Lake Distribution Pump Station Upgrade
Moncure Booster Pump Station Replacement
Short Extension Projects

Utilities Capital Projects Update

Comprehensive Sewer Overview – Current and FY18

Currently in Design or Construction

- Austin Run Pump Station Replacement
- Falls Run Force Main Repair (Butler Road)
- Little Falls Run Wastewater Treatment Facility Centrifuge Replacement
- Falls Run Interceptor Phase 1 Continuation (I-95 Bore)
- Sweetbriar Force Main Replacement
- Ebenezer Pump Station Replacement
- Oaks at Stafford Pump Station Pump Station Replacement
- Route 1 North Sewer Interceptor - Lower
- Airport Business Center Sewer Extension
- Falls Run Force Main Replacement
- Old Concorde to Wayside 18" Sewer Interceptor
- Wayside to Austin Run Pump Station 18" Sewer Interceptor
- Lower Accokeek Pump Station
- Lower Accokeek 18" Gravity
- Lower Accokeek Force Main
- Lower Accokeek 8" Gravity Sewer Trunk SE

Currently in Design or Construction

- Lower Accokeek 8" Extension for Staff Hospital PS
- Lower Accokeek Rowser 10" Gravity Sewer
- Lower Accokeek Wyche Road 12" Gravity Sewer
- Route 1 North Sewer Interceptor - Hidden Valley
- Aquia Wastewater Treatment Facility Centrifuge Replacement

Projects to begin FY18

- Claiborne Run Parallel Force Main
- Claiborne Run Pump Station Replacement
- Falls Run Interceptor Phase 2
- Hilldrump Pump Station Replacement
- Hilldrump Force Main Replacement
- Aquia Creek PS Expansion
- Several Small Sewer Extension Projects

Regulations of Private Wells and Construction Permits
Infrastructure Committee Meeting
2/7/2017

- Well permitting for individual residential wells in Virginia is the responsibility of the Virginia Department of Health (VDH)
- Larger withdrawals fall under the purview of VaDEQ
- Stafford will not issue a building permit until we have a record from VDH that a well permit has been applied for
- Stafford will not issue an occupancy permit until a well has been drilled, tested for quantity and quality, and approved by VDH
 - VDH private well requirements (12VAC5-630) Adopted 2012
 - Chemical constituents within limits or treatment system installed
 - Free of bacteriological contamination
 - Well output < 3 gpm; produce and store 150 gallons per bedroom per day and deliver 5 gpm of sustained flow per connection
 - Well output \geq 3 gpm; no additional storage required
- Stafford does have the authority to require testing of water quality priory to the issuance of a building permit; however, an ordinance has not been added to our code to enable that authority.
 - § 32.1-176.5. - B. The local governing bodies of the Counties of Albemarle, Bedford, Chesterfield, Clarke, Culpeper, Fairfax, Fauquier, Goochland, James City, Loudoun, Orange, Powhatan, Prince William, Rappahannock, Stafford, Warren, and York, and the Cities of Manassas, Manassas Park, Suffolk, and Virginia Beach may by ordinance establish reasonable testing requirements to determine compliance with existing federal or state drinking water quality standards and require that such testing be done prior to the issuance of building permits.
 - If the County required testing it would be for information only and would not satisfy the VDH requirements nor allow us to deny a building permit issuance.
- In order for Stafford to enact more stringent requirements it would require authority by the state. This would require Stafford to be added to § 32.1-176.4
 - § 32.1-176.4. - A. The Board shall adopt regulations pertaining to the location and construction of private wells in the Commonwealth. These regulations shall include minimum storage capacity and yield requirements for residential drinking wells. The certified water well systems provider shall certify the storage capacity and the yield of the well on a form provided by the Department at the time the well is completed. The Department shall enforce the provisions of this article and any rules and regulations adopted pursuant thereto. However, for private wells located in the Counties of Fairfax, Goochland, James City, Loudoun, Powhatan, and Prince William and the City of Suffolk, the governing body of such county or city may, by ordinance,

establish standards which are consistent with Board standards pertaining to location and testing of water therefrom and more stringent than those adopted by the Board pertaining to construction and abandonment. However, any county or city granted these additional powers shall not require certification for drillers of monitoring wells and any recovery wells associated with such monitoring wells.

- Water Quantity standards include the following:
 - Well output < 3 gpm; produce and store 150 gallons per bedroom per day and deliver 5 gpm of sustained flow per connection
 - Well output ≥ 3 gpm; no additional storage required
- Part of the Board's legislative action was to have Stafford added to the list of County's that can have more stringent standards on water quantity testing. Bill Tabled.
- The Board does have authority to move forward with an ordinance that would require water quality testing prior to a building permit issuance. Staff can move this forward if it is the will of the Board.