



MEMORANDUM

To: Michael Skudera, Borough Administrator

From: Thomas P. Neff, P.E., P.P., C.M.E., Borough Engineer

Re: April 2018 – Engineering Report

State Projects:

Garden State Parkway Interchange 105 Improvements – The Phase 1 segment of the project is complete with the new traffic patterns in operation as of late May 2015. Phase 2 of the project consists of a new GSP southbound local lane exit onto Wayside Road approximately opposite Stavbro Lane. In addition to the exit and traffic signal onto Wayside Road, the Turnpike Authority proposed significant intersection improvements at Wayside Road and Pine Brook Road. The Turnpike Authority awarded a \$20.1M contract to Earle Asphalt Company and the work is currently underway. The contractor has completed the installation of new traffic signals at the intersection of Pine Brook Road and Wayside Road, curb and sidewalk improvements, and surface course paving. A new traffic signal at the intersection of the new exit ramp and Wayside Road was activated on February 1, 2017. Portions of Wayside Road will be re-paved in the Spring of 2018. The substantial completion date for the entire project is June 19, 2018.

County Projects:

2017 Resurfacing Program – The County has awarded a contract to Black Rock Enterprises, LLC for the resurfacing of numerous roads throughout the County. A pre-construction meeting was held on July 31, 2017. The contractor anticipates construction to begin on or around August 15, 2017. The contract completion date was originally set at December 1, 2017. However, the completion date has been extended to the Spring of 2018. The following roads within Tinton Falls will be resurfaced. All work will be performed at night.

- Asbury Avenue (from 800 feet east of Essex Road to Route 66) - to be completed Spring of 2018
- Wayside Road South (Shafto Road to Green Grove Road) – Complete
- Swimming River Road (Grant Court to Route 537) - Complete

Borough Projects:

Roadway

2016 Road Program – A contract in the amount of \$968,000.00 was awarded to Stavola Construction Co. on August 9, 2016 for the 2016 Road Improvement Program. Work consists mainly of pavement reconstruction and concrete curbs and ADA ramps where necessary. The roads included with this program are:

- Pine Street – Received \$250,000 NJDOT Municipal Aid Grant
- Hamilton Street (Pinebrook Road to Stavbro Lane)
- Surrey Lane
- Acorn Drive
- Tracy Place
- Chestnut Court
- Apple Orchard Drive
- Department of Public Works Complex

All paving and punch list work is substantially complete. The final payment to the contractor and final change order was approved at the November 13th Council meeting. Due to various cost savings, the final contract



amount was \$45,766.82 (4.7%) below the original contract amount. All closeout paperwork has been submitted to NJDOT for final grant reimbursement.

Infrastructure

Borough Wide Infrastructure Mapping – The current sanitary and storm sewer mapping was prepared and last updated in 1995. Over the last 20 years, the Borough has experienced significant development growth, especially in the 'South End'. We are in the process of mapping sanitary and storm sewer infrastructure using Geographic Information System (GIS) standards and equipment. This process will digitize the Borough infrastructure asset for use by DPW, Planning and Zoning, and Construction Departments. The information will be available to field personnel on mobile devices to facilitate the use of dynamic mapping tools and geospatial locating of structures. We are currently working with DPW to complete Phase II of the field data collection.

Water Street Sanitary Sewer Improvements – The Borough does not currently have any sanitary sewer infrastructure in Water Street between Tinton Avenue and Marissa Lane. There are a number of homes in this area currently serviced by private septic systems. Toll Brothers recently installed a new 8" PVC sanitary sewer main down an emergency access road toward Water Street as part of the Regency at Trotter's Pointe development. We have prepared plans and specifications for the installation of a new 8" sewer main down a portion of Water Street to provide service for a number of homes. The Borough Council awarded a contract to Messercola Excavating at the August 8, 2017 Council meeting for this work. Construction of the new sewer main and service laterals is now complete. The adjacent residents have been notified that they may connect to the new sewer. The contractor will return in the Spring of 2018 to mill and pave the temporary trench repair.

Tinton Avenue Pump Station Upgrades – The Borough asked T&M to conduct a preliminary analysis and evaluation of the pump station and associated force main to determine possible causes for three force main breaks over the last four years. We completed a number of tests and measurements and believe that the failures are related to trapped air and column separation. Our office has since completed final construction plans and specifications for the recommended improvements. Bids were opened on August 22, 2017. A contract was awarded to T.R. Weniger at the September 5, 2017 Council meeting, and a pre-construction meeting was held on September 29, 2017. All construction is now substantially complete. We are in the process of closing out the contract with the contractor. We anticipate the final contract to be \$2,975 below the original contract amount.

Heritage Boulevard Pump Station Upgrades – Over the last few years, there have been a number of instances of the downstream manhole closest to this pump station surcharging. The pump station equipment is also reaching the end of its anticipated life expectancy. Our office has completed plans and specifications to update the pump station equipment. We will also remove the gravity manhole and sewer main and replace it with a force main out to Cannonball Drive. Final plans and specifications are complete and ready for bidding. However, the Borough DPW recently asked T&M to look into adding additional work to this contract. DPW would like to convert the pump station alarm dialers for all stations in the Borough from landline to cellular service. We are currently pricing out the options for the Borough.

310 Riveredge Road Outfall Repairs – There is an existing stormwater outfall pipe between Riveredge Road and the Swimming River that has deteriorated due to corrosion. Based on initial findings from DPW, we had hoped that the pipe could be lined with a trenchless pipeline rehabilitation system. However, based on a more thorough video inspection with the contractor, it appears that the pipe has more damage than originally anticipated. We now believe that the entire pipe must be replaced. We are currently preparing a proposal for authorization to prepare preliminary plans for NJDEP review.

TNSA – The 2017 Customer Report was submitted to TNSA on January 31, 2018. We will continue to work with TNSA on obtaining additional reserve capacity and various other matters as previously discussed with Council and Borough Staff.

TRWRA – We continue to communicate with TRWRA regarding development at Fort Monmouth and the impacts that development will have on the sanitary sewer system.



Fort Monmouth Redevelopment – We have been meeting with FMERA regularly to review the infrastructure needs to support the redevelopment efforts.

Parks & Recreation

Hance Park Playground Improvements – The existing playground/tot lot at Hance Park is severely deteriorated and in need of replacement. T&M Associates has been asked to prepare plans for a new and improved playground at this park to be completed as Phase II of the recent Hance Park Improvements project. We have since worked with the Borough to finalize a new playground design and layout. The new playground will include new swings, slides, various climbing apparatuses, and a rubberized safety surface, as well as new benches and walkway extensions. The work will be completed using various State contracts. The Purchase Orders for this work were approved at the December 19, 2017 Council meeting. A contract for the miscellaneous site work associated with the equipment should be awarded at the April 17, 2018 Council meeting. Construction will begin in the coming months, weather permitting.

Buildings & Grounds

Library Investigation – Earlier in 2017, it was discovered that there was a mold problem at the Tinton Falls Public Library that has caused the building to be closed to the public. At the December 19, 2017 meeting, the Council authorized T&M Associates to conduct an overall evaluation and investigation of the mold issues, including the HVAC and structural systems of the building. The complete and final report was submitted to Borough Administration and Council on March 16, 2018 for their review. The report focused on indoor air quality, HVAC, structural, lead based paint, and radon tests and evaluations.

Grant Applications

T&M continues to work on identifying applicable grant funding opportunities on Federal, State and Local levels and linking those grants to various capital projects or programs in the Borough.

Grant Opportunity	Amount Requested	Status
NJDOT – Local Aid FY 2018, Fox Chase Blvd	\$641,472	Not Selected
NJDOT – Local Freight Impact Fund – FY 2018	\$460,253	Pending
Monmouth County Open Space Grant – FY 2017	\$250,000	Not Selected
NJDOT – Local Aid FY 2017, Hope Road	\$679,500	Awarded: \$185,000
Monmouth County CDBG – FY 2017	\$200,000	Awarded: \$142,486
NJDOT – Local Aid FY 2016, Pine Street	\$486,000	Awarded: \$250,000
NJDOT – Local Aid FY 2015, Green Grove Rd	\$400,000	Not Selected
NJDOT – Local Aid FY 2014, Corregidor Road	\$375,000	Awarded \$250,000
Monmouth County CDBG – Library Addition	±\$185,000	Awarded: ±75,000
Monmouth County Open Space Program	Up to \$250,000	Awarded: \$250,000
NJDOT – Local Aid FY 2012, Heritage Blvd – Ph II	\$491,000	Awarded: \$225,000
NJDOT – Local Aid FY 2010	\$320,401	Awarded: \$200,000

Completed Projects:

- 2017 Tax Map Updates
- Parmly Road Outfall Repairs
- 2015 Park Improvement Program
- Riveredge Road and Woodland Manor Pump Station Upgrades
- Hance Avenue and Heritage Boulevard Pump Stations Emergency Generator Replacement
- 2015 Road Program
- 2015 Borough Tax Map Updates



2015 Borough Map Updates
2014 Road Program
Asbury Avenue & Pine Street/Essex Road Intersection Improvements by Monmouth County
Asbury Avenue Resurfacing by Monmouth County
Hockhockson Road Bridge Replacement by Monmouth County
IT Server Room Upgrades
Sanitary Sewer Pump Station Upgrades @ Jumping Brook Road & Hance Avenue
2013 Road & Sidewalk Program
West Park Avenue Sewer Rehabilitation & Roadway Resurfacing
Open Space List Reconciliation & Recording
Municipal Complex Water Meter Installation
Third Party Electric Supplier
2012 Road Program
Apple Street & Old Farm Road Improvements
2010 Tax Map Updates
2010 Road Program
Crawford House Accessibility Improvements
Monmouth County Reclamation Center Leachate Discharge Evaluation
2010 Borough Mapping Updates
Green Grove Road Sewer Lateral Installations
Monmouth County Resurfacing of Shafto Road and Newman Springs Road
Energy Efficiency Conservation Block Grant & Direct Install Programs 2010 & 2011
Sycamore Avenue Drainage Improvements at Homestead Parkway East