



## MEMORANDUM

**To: Elizabeth Perez, Borough Administrator**

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

**Re: December 2017 – 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:

**Intersection Improvements at Asbury Avenue & Foxchase Drive/Cannonball Drive** – The project consists of minor roadway widening at the intersection to provide dedicated left hand turn lanes and left hand turn signals on each leg of the intersection to facilitate improved movements at the intersection. The County awarded a contract to Vision Construction Group and construction is now substantially complete. The new traffic signal was activated on January 9, 2017. Minor punch list items remain to be completed.

**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 are on the agenda for the November 13<sup>th</sup> Council meeting. Due to various cost savings, the final contract amount was \$45,766.82 (4.7%) below the original contract amount. We are now in the process of closing out the project with NJDOT and obtaining final reimbursement for the grant.

#### 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 coordinating our deliverable for incorporation into the Borough’s GovPilot program. We are currently completing Phase II of the field data collection. We are also working with GovPilot on creating additional layers for the Borough.

**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 contractor will return in December to mill and pave the temporary trench repair.

**Parmly Road Outfall Repairs** – An existing stormwater outfall collapsed and caused a large void in the slope. Our office has prepared construction plans for the replacement of this outfall and the stabilization of the slope. We received NJDEP Wetlands and Flood Hazard Area permit approvals on January 23, 2017. Construction plans and specifications are complete. A contract was awarded to Your Way Construction at the May 2, 2017 Council meeting. Construction is now substantially complete and the contractor has addressed all punch list items. Final payment and project closeout was approved at the November 13<sup>th</sup> Council meeting. Due to various cost savings, the final contract amount was \$1,282.20 (2.0%) below the original contract amount.

**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 preliminary report, including recommended upgrades to address the issues, was submitted to the Borough on August 10, 2016. Our office has since completed final construction plans and specifications for the recommended improvements. Bids were opened on August 22, 2017, and the low bidder is T.R. Weniger. 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. The contractor will be digging test pits on December 6, 2017 to locate the force main and begin construction of the improvements.

**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. We have applied for a TWA Permit from NJDEP for the proposed



construction. Once the permit is approved, we can proceed with advertising the project for bids and awarding a contract.

**316 Riveredge Road Outfall Repairs** – There is an existing stormwater outfall pipe between Riveredge Road and the Swimming River that has deteriorated due to corrosion. In order to prevent any further erosion, slope failure, or collapse of the headwall, we are proposing to line the pipe utilizing a trenchless pipeline rehabilitation system. This method will save significant money compared to full replacement of the pipe, while resulting in a pipe that is in like-new condition. Informal bids were solicited for this work and the results were below the bid threshold. The Borough issued a Purchase Order to Arold Construction Company on December 4, 2017 so they may begin the work in the near future.

**2017 Tax Map Updates** – The Borough’s tax maps have not been updated since 2015. We recently updated the tax maps to include the many new developments and subdivisions that have taken place since that time. The tax maps are now available on the Borough website under the Tax Assessor’s page.

**TNSA** – The 2016 Customer Report was submitted to TNSA on February 3, 2017. 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.

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 Freight Impact Fund – FY 2018	TBD	Application due 12/19/17
NJDOT – Local Aid FY 2017, Hope Road	\$679,500	Awarded: \$185,000
Monmouth County CDBG – FY 2017	\$200,000	Pending
NJDOT – Local Aid FY 2016, Pine Street	\$486,000	Awarded: \$250,000
NJDOT – Local Aid FY 2015, Green Grove Rd	\$400,000	Denied
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
New Jersey Department of Transportation – Local Aid FY 2010	\$320,401	Awarded: \$200,000



**Completed Projects:**

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