



## MEMORANDUM

**To:** Mayor Gerald M. Turning, Sr.

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

**Re:** July 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 now 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. The substantial completion date for the entire project is June 19, 2018; however, the contractor anticipates all work to be complete before the end of this summer.

**Pine Brook Road Railroad Crossing** – Conrail has awarded a contract to Tracks Unlimited for the replacement of the railroad crossing on Pine Brook Road next to the intersection with Park Road. A pre-construction meeting was held on June 29, 2017. The contractor anticipates to begin construction on August 21, 2017, weather depending. Construction is anticipated to last three days. A full road closure and detour will be implemented.

### 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. The Contractor recently returned to complete the asphalt walkway along Asbury Avenue.

### Borough Projects:

#### Roadway

**2016 Road Program** – A contract 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 now substantially complete. We anticipate final payment and project closeout to be completed in the near future.

#### 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. We recently received NJDEP TWA Permit approval for the project. The project will be advertised for bids on July 12, 2017, and bids will be opened on July 27, 2017.

**Parmly Road Outfall Repairs** – An existing stormwater outfall has 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.

**Tinton Avenue Pump Station Force Main Evaluation** – 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. The recommended improvements have been included in the 2017 Budget. Our office is now in the process of completing construction plans and specifications for the recommended 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 is in the process of preparing 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.

**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.

**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.

<b>Grant Opportunity</b>	<b>Amount Requested</b>	<b>Status</b>
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