



MEMORANDUM

To: Thomas Fallon, CFO/Borough Administrator

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

Re: December 2020 – Engineering Report

Borough Projects:

Infrastructure

2020 Road Improvement Program – T&M was authorized at the November 12, 2019 Council meeting to prepare surveys, plans, specifications, and permits for the Borough's 2020 Road Improvement Program. The roads to be paved as part of this project include:

- Hope Road (Sycamore Avenue to Tinton Avenue)
- Alden Lane
- Wayside Terrace
- Edison Avenue
- Wyckham Road
- Danbury Road
- Plum Street
- Squankum Road (Hamilton Road to Hockhockson Road)
- Holly Drive
- Sylvan Drive
- Hartford Drive
- Executive Drive

In addition to paving the roads, significant drainage improvements are also proposed on Alden Lane, Wayside Terrace, and Edison Avenue. Drainage improvements are also proposed along a portion of Pine Brook Road near the railroad tracks to alleviate a chronic flooding issue. A continuation of the Wayside Road Sidewalk Extension is also proposed between Rutgers Drive and Valencia Drive. Plans and specifications are complete. A contract was awarded to Fernandes Construction, Inc. at the June 16, 2020 Council meeting in the amount of \$2,165,368.90, and construction began on July 15th. All work included in the original contract is now substantially complete with the exception of minor punch list items.

At the November 10, 2020 Council meeting, a \$119,905.00 change order was approved to allow for additional work beyond the original scope. The contractor has since completed the milling and paving of Avalon Drive, Heather Drive, and Braeburn Drive. The only remaining road left is Pear Street, which will be completed when the weather allows.

2018 Road Improvement Program – T&M was previously authorized to prepare plans and specifications for the Borough's 2018 Road Improvement Program. The roads to be paved as part of this project are as follows:

- Steven Avenue
- Howard Avenue
- Cross Way



- South Terrace
- Springdale Avenue
- Old Mill Road
- Marland Road
- Water Street
- Liberty Drive
- Wheeling Court
- Fox Chase Drive (Asbury Avenue to Filly Way North)

In addition, new sidewalks will be constructed along the west side of Tinton Avenue and Wayside Road to fill in the missing gaps between Water Street and Rutgers Drive. Traffic calming measures will also be added along Heritage Boulevard. Construction plans and specifications are complete. A construction contract was awarded to Earle Asphalt Company at the September 18th Council meeting in the amount of \$2,126,913.13. The Contractor began work in the Fall of 2018 and re-mobilized for the Spring on March 11, 2019.

Change Order #3 was approved at the December 17, 2019 Council meeting. The main purpose of the change order was to authorize the Water Street sewer improvements described below. Note that although the new sewer work is an additional amount of \$214,788.13, the overall change order is only for an additional \$65,827.61. This is because we have been able to work with Earle to keep the costs down and were able to limit the use of contingencies that are built into every contract for unforeseen circumstances.

All work is now complete. We are in the process of preparing the final closeout documents, which we expect to be submitted for approval in January.

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 – Phase II – Our office has prepared plans and specifications for the installation of approximately 1,000 linear feet of 8” sanitary sewer main along a portion of Water Street west of Rutgers Drive. The new sewer main will provide public sanitary sewer service for five single family homes that are currently on septic systems. The necessary TWA Permit Application Package was reviewed and approved by Two Rivers Water Reclamation Authority and NJDEP. This work will be completed under a change order to Earle Asphalt Company’s existing contract. The change order was approved at the December 17, 2019 Council meeting. The installation of the sewer main began on March 16, 2020 and is now complete, including final paving. We are in the process of final payment and project closeout with the Contractor.

Rutgers Drive and Nutmeg Court Pump Station Upgrades – Our office was authorized at the September 3, 2019 Council meeting to prepare plans and specifications for various upgrades to these two aging sanitary sewer pump stations. The upgrades will improve the overall operation and functionality of each station. The necessary plans and specifications have been completed, and a contract in the amount of \$415,000 was awarded to T.R. Weniger at the December 17, 2019 Council meeting. A pre-construction meeting was held on January 28, 2020. All construction work is now complete. Final payment and project closeout was completed at the November 10, 2020 Council meeting.



Hope Road Truck Restriction Study – The Borough has received numerous complaints and concerns over the number of trucks travelling along the portion of Hope Road between Sycamore Avenue and Tinton Avenue, and would like to enact a Commercial Motor Vehicle (CMV) restriction along this road. As a result, our office is in the process of completing a detailed traffic study and report to submit to NJDOT for review and approval. The goal of the study is to enact an enforceable 4-ton weight limit for all CMV's along this portion of Hope Road. Traffic counts were taken the week of August 3, 2020 for use in the traffic study. Historical crash reports have also been obtained from the Police Department and reviewed. We are now in the process of preparing the necessary reports, plans, and supporting documentation to submit to NJDOT for review.

Shrewsbury Avenue Pump Station Upgrades – Our office was authorized at the June 16, 2020 Council meeting to prepare plans and specifications for various upgrades to this aging pump station. Site improvements such as new retaining walls, driveway, and security fencing are also proposed. Design is now 95% complete. We anticipate construction costs to be included in the Borough's 2021 budget and construction to begin in the Spring.

TNSA – The 2019 Customer Report was submitted to TNSA on February 5, 2020. 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.

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, evaluations, and recommendations. The Borough Council and the Library Board have since decided to work with an architect on necessary building renovations and to apply for potential grant funds through the New Jersey Library Construction Bond Act for the building improvements. The grant application was recently released by the State, with a due date of April 6, 2020. The Library Board and their architect have submitted the grant application to the State.

Parks

Traditions Park Improvements – Our office was authorized at the April 7, 2020 Council meeting to prepare surveys, plans, specifications, and permits for the Traditions Park Improvements project. The development of this previously vacant parcel will consist of two basketball courts, two tennis courts, six pickleball courts, a playground and swing set, a parking lot, and associated drainage, landscaping, and lighting improvements. All plans and specifications are complete. A contract was awarded to Shore Top Construction at the August 11, 2020 Council meeting in the amount of \$1,146,600.00 and clearing of the property began the week of September 14, 2020. The contractor has since completed all clearing, rough grading, drainage infrastructure, electric service, curbs, sidewalks, paving/color coating/stripping of the tennis/pickleball/basketball courts, parking lot preparation and base course paving, sports courts light poles, parking lot light pole foundations,



and 95% of the playground equipment. Final paving and other miscellaneous improvements remain, some of which are weather dependent. Grand opening is expected in Spring 2021.

Hockhockson Park Playground – The prior playground equipment was in a state of disrepair and in need of replacement. Our office worked to quickly prepare plans and informal bid documents for new playground improvements. A Purchase Order was awarded to Precise Construction for the necessary site work. State contracts were utilized and awarded to MRC Recreation and RubbeRecycle for the playground equipment and rubber safety surface. With the exception of one swing, all work is now complete. We anticipate the swing to be installed in the coming weeks.

2021 Park Improvement Program – Our office was authorized at the December 1, 2020 Council meeting to prepare surveys, plans, specifications, and permits for the Borough's 2021 Park Improvement Program project. This project will consist of various improvements to Sycamore Recreation Complex, Liberty Park, Riverdale West Park, and Hockhockson Park. Our office's initial focus is on Sycamore Recreation Complex. The goal is to have new pavilion and restroom structures constructed in the former tennis court area for use in the Summer of 2021. Survey and basemaps have since been completed and preliminary design is underway. Work will begin on the remaining three parks in early 2021.

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 2021 – Shrewsbury Ave Sidewalks	\$470,240	Awarded \$265,000
Monmouth County CDBG – Fox Chase Sidewalks	\$192,230	Not Selected
Monmouth County Open Space Grant – FY 2019	\$250,000	Awarded \$200,000
NJDOT – Local Aid FY 2020, Hope Road – Ph II	\$637,251	Awarded \$215,000
NJDOT – Local Aid FY 2019, Hope Road – Ph I	\$955,520	Awarded \$325,000
Monmouth County Open Space Grant – FY 2018	\$250,000	Awarded \$250,000
NJDOT – Local Aid FY 2018, Fox Chase Blvd	\$641,472	Not Selected
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	\$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:

Shark River Road Truck Restriction Study
Sanitary Sewer Pump Stations Cellular Dialer Conversions
Parks & Recreation 5-year Capital Plan
2019 Tax Map Updates
Heritage Boulevard Pump Station Improvements



Hockhockson Park Field Upgrades
Hope Road Drainage Repairs
310 Riveredge Road Outfall Repairs
Water Street Sanitary Sewer Improvements
Borough Hall Curb & Sidewalk Replacement
Hance Park Playground Improvements
Tinton Avenue Pump Station Improvements
2016 Road Improvement Program
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