ACCURATE ENGINEERING, PC

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SANITARY SEWER SYSTEM ENGINEERS REPORT

Block 11.06, Lot 11.01 – 11 Bunker Hill Road Block 20.01, Lot 16.01 – 3523 Route 27 Township of Franklin, Somerset County, New Jersey July 21, 2021

A. A. Site Location

This design report has been prepared to describe the impacts of the proposed sanitary sewer system for the proposed construction of eight (8) single family dwellings Block 11.06, Lot 11.01 (11 Bunker Hill Road) and Block 20.01, Lot 16.01 (3523 Route 27) in Franklin Township, Somerset County, New Jersey. The report is intended to be reviewed in conjunction with the Preliminary and Final Major Subdivision Plans prepared by Accurate Engineering, PC. The subject properties encompass 4.03+ acres and currently consist of two (2) tax lots located in the R10B, Single – Family Residential District. The site is located on the west side of Bunker Hill Road and the north side of Route 27.

B. Total Proposed Design Flows

The required flows for the proposed eight (8) single family, residential dwellings (3-4 BR) subdivision are based on the waste water flow data provided in the NJDEP Table shown in section N.J.A.C.7:14A-23.3. The anticipated waste water flows have been calculated as follows:

Average Daily Flow (ADF)
Residential Sewer Discharge
3 Bedroom Residential Unit or greater = 300 GPD or (0.21 GPM) – Per Unit
8 Proposed Units = 300 GPD x 8 Units = 2,400 GPD or (1.68 GPM) – Total

Residential Sewer Discharge
Peak Daily Flow (PDF) = (3 x ADF)
PDF = (3 x 0.21 GPM) = 0.63 GPM - Per Unit
PDF = (3 x 1.68 GPM) = 5.04 GPM - Total

Total Design Flow
Residential Sewer Discharge
Design Flow = (2.5 x ADF)
Design Flow = (2.5 x 0.21 GPM) = 0.53 GPM – Per Unit
Design Flow = (2.5 x 1.68 GPM) = 4.20 GPM – Total

C. Proposed Sanitary Sewer Facilities

The project proposes to extend a new 8 inch PVC sanitary sewer from an existing manhole located in Brookside Drive to the proposed roadway in front of the proposed dwellings. Further information regarding the proposed connection and construction is shown on the accompanying plans and details. The proposed water system components shall be constructed to comply with all applicable rules and regulations of Franklin Township.

D. Conclusion

All sanitary sewer and appurtenances have been designed in accordance with the New Jersey Department of Environmental Protection Regulations with regard to minimum slopes, velocity, type of pipe, etc., and will flow less than half full at two and a half times the average daily flow.

The aforementioned components of the proposed sewer system for the development are in accordance with applicable requirements of Franklin Township, Residential Site Improvement Standards and the New Jersey Department of Environmental Protection Agency and will adequately serve the proposed development.

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Professional Engineer

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