

# **DRAINAGE STATEMENT**

IN CONNECTION WITH  
**PRELIMINARY & FINAL SITE PLAN**

**25 LAWRENCE STREET  
BLOCK 94, LOTS 12 & 14  
BLOOMFIELD, NEW JERSEY 07003**

PREPARED FOR:

**3X LAWRENCE, LLC  
53 LAUREL AVENUE  
CLIFTON, NEW JERSEY 07012**

PREPARED BY:

**PETRY ENGINEERING, LLC  
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NJ PROFESSIONAL ENGINEER # 36662  
AUGUST 28, 2024**

**PROJECT: #24-200**



## **EXISTING CONDITIONS**

The properties in question are designated as Lots 12 & 14, Block 94 in the Township of Bloomfield, Essex County, New Jersey. The property is commonly known as 25 Lawrence Street. Currently, it is home to a portion of the Bethel Church of Love and Praise.

Lots 12 & 14 are interior lots with frontage on Lawrence Street. The lot contains approximately 0.137 acres each for a total of 0.274 acres. The lots contain an existing structure and a portion of the Bethel Church's accessory parking. These lots contain 6,528 square feet of existing impervious surfaces.

Stormwater currently flows offsite and over land to Lawrence Street and into the municipal drainage system. The site is located within the Metropolitan Planning Area; therefore, stormwater recharge is not required. (See Attached)

## **PROPOSED CONDITIONS**

The proposed development of Lots 12 & 14 includes the construction of a residential building with associated parking. The new parking layout requires additional storm sewer structures to capture the runoff from the site. The proposed structures are to be connected into the existing municipal storm sewer system in Lawrence Street. The total amount of disturbance on these lots for all the proposed work is 15,000 square feet. The increase in impervious coverage area is 3,679 square feet.

## **CONCLUSIONS**

The disturbance on the proposed lot mentioned above is 15,000 square feet (0.34 acres) and there is 3,679 square feet of new impervious surface. As reported by The Township of Bloomfield Code § 494-2, a *Major Development* is defined as any "development" that results in the disturbance of one or more acres of land. Disturbance for the purpose of this rule is the placement or reconstruction of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. In relation to this, the proposed disturbance is less than one acre, thus, the proposed development is not a major development. With this understanding, stormwater quantity and quality measures are not to be proposed.



**STORM SEWER COMPUTATIONS  
RATIONAL METHOD - (Q=CIA)  
25 YR. STORM**

Project: 25 Lawrence Street  
Date: 08/28/24, Revised:  
By: LCD

PIPE SEGMENT															
FROM	TO	A-Incremental	C-Runoff Coef.	Ax C-Incremental	Ax C Cumulative	Tc (MIN.)	I-Rainfall Int. (in./hr)	Qp-Peak Runoff (cfs)	Pipe/Box Length (FT.)	Slope (%)	Pipe/Box Size (IN.)	Capacity (FULL) (cfs)	Velocity (Design) (fps)	Pipe Travel Time(min)	
Roof	Trench #1-2	0.086	0.99	0.09	0.09	6.0	5.80	<b>0.49</b>	83	1.0%	6" PVC	<b>0.66</b>	3.39	0.41	GOOD
Trench #1-2	MH #1-1	0.167	0.99	0.17	0.25	6.0	5.80	<b>1.45</b>	18	1.0%	15" HDPE	<b>7.02</b>	5.72	0.05	GOOD
MH #1-1	Existing Inlet				0.25	6.0	5.80	<b>1.45</b>	152	1.0%	15" RCP	<b>5.61</b>	4.57	0.55	GOOD

