



181 WEST HIGH STREET  
SOMERVILLE, NJ 08876

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TRAFFIC IMPACT STATEMENT  
FOR  
ACCESS SELF-STORAGE

297 DAVIDSON AVENUE  
BLOCK 502.1, LOTS 45.01 & 46.01  
TOWNSHIP OF FRANKLIN  
SOMERSET COUNTY, NEW JERSEY

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TRAFFIC ENGINEERING  
PARKING STUDIES  
HIGHWAY DESIGN  
DOT ACCESS PERMITS  
MUNICIPAL CONSULTING

## INTRODUCTION

A Site Plan application is being filed with the Franklin Township Planning Board by Franklin Storage, LLC to develop a new 3-story, self-storage facility with 120,750 square feet of gross floor area. Dolan & Dean Consulting Engineers, LLC (D&D) has been retained by the applicant to prepare this Traffic Impact Statement for the proposed self-storage facility.

The subject property is designated as Lot 45.01 and 46.01 in Block 502 along northbound Davidson Avenue in Franklin Township, Somerset County. The site is currently vacant.

The site will be accessed via one full-movement driveway on the southern portion of the property. A total of 6 parking spaces are proposed on site along with 24 storage spaces for larger vehicles.



## EXISTING TRAFFIC CONDITIONS

### EXISTING ROADWAY CONDITIONS

As mentioned, the site is located along Davidson Avenue on the southbound side between the intersections with Pierce Street to the north, and New Brunswick Road to the south.

Davidson Avenue is a local roadway under municipal jurisdiction and is classified as an urban collector roadway. Davidson Avenue has a general northeast-southwest orientation originating at New Brunswick Road to the south and proceeding north to its terminus at Easton Avenue. In the site vicinity, Davidson Avenue provides one lane per direction of travel. Along the site frontage, no shoulders are provided, and the posted speed limit is 45 miles per hour.

Opposite the site is an office building occupied by SHI international which has a driveway that aligns opposite the proposed site driveway. Currently there are separate left and right egress lanes from the office driveway. Additionally, a separate left ingress lane is provided on southbound Davidson Avenue.



## PROJECTED TRIP GENERATION

The potential traffic generation from any use is directly related to the type, size, and characteristic of the use itself. The specific location of a particular use may also affect trip generation such as volumes of passing street traffic, and competing uses. Lacking specific site operational data, trip generation projections are customarily made using estimates as compiled by the Institute of Transportation Engineers (ITE) in Trip Generation Manual, 10<sup>th</sup> Edition, 2017 for uses that closely resemble the anticipated operation.

Within the most recent edition of the Trip Generation Manual are traffic generation rates specifically for “Mini Warehouse” which are defined as self-storage facilities. Daily and peak hour trip generation estimates were developed utilizing the proposed total building area. Shown on Table I is the projected trip generation for the proposed self-storage facility as developed using ITE rates.

TABLE I  
ESTIMATED TRIP GENERATION  
PROPOSED 120,750 SF SELF STORAGE FACILITY

Time Period	Enter	Exit	Total
Morning Peak Hour	7	5	12
Evening Peak Hour	10	11	21
24-Hour Weekday	91	91	182
Saturday Peak Hour	22	15	37
24-Hour Saturday	117	118	235

As shown, peak hour activity associated with the development will be low. The peak hour volumes are well below “significant” which is defined as 100 or more peak hour trips in the State Highway Access Management Code. It is also noted that the ITE Manual of



Transportation Engineering Studies recommends that traffic impact studies be performed for developments that will generate 100 or more peak hour trips.

In addition, through consultation with the applicant, on-site traffic activity is anticipated to operate at volumes lower than those projected using ITE data. Similar facilities under the Access Self-Storage brand tend to see approximately 100 total vehicle trips in a 24-hr period, and a maximum of 6 vehicle trips in any given hour.

The low trip generation associated with the new storage facility will have virtually no impact on the adjacent roadway network and will not create the need for any off-tract improvements or on-site impact mitigation.



## SITE ACCESS, CIRCULATION AND PARKING

A review has been made of the site plans prepared by The Reynolds Group, Inc. The following comments address the site circulation scheme, sufficiency of the proposed parking supply, and overall access to the site:

- Site access will be provided via a full-movement driveway on the southern portion of the property. The driveways and on-site circulation will provide sufficient maneuvering area for larger vehicles that could be attracted to the self-storage facility that typically consist of van and/or smaller moving vehicles (i.e. U-Haul) or “box” trucks.
- The parking calculations were based on a requirement of 1 space for every 5,000 square feet of building area, which equates to a requirement of 25 spaces. According to the 5<sup>th</sup> Edition of the ITE Parking Generation Manual, a supply of 12 spaces would be appropriate. The development proposes parking supply of 6 spaces for everyday use of the facility and 24 spaces for vehicle storage.
- With the exception of one ADA-compliant spaces, the regular surface parking spaces are proposed a 9-foot wide by 18-foot long car parking spaces, as well as 10-foot wide by 30-foot deep and 10-foot wide by 40-foot deep spaces for the storage larger vehicles to be served by 24-foot aisles. These dimensions are consistent with current design practice, particularly for low turnover spaces.



## CONCLUSIONS

In summary, it is evident from this review of projected traffic generation, that the proposed self-storage facility will not create a negative impact on the local roadway network, or hinder existing on-site conditions.

Given the nature of the site use as a “storage” or warehouse-type building, the proposed self-storage facility will operate with unique characteristics that would generate minimal traffic on both a daily and peak hour basis and will not create a negative impact on the local roadway network. Due to only modest traffic increases associated with the proposal, no changes in off-site operating conditions are anticipated. Traffic attracted to the site will not contribute to any off-tract congestion or unfavorable conditions.

The site has been designed to provide a sufficient number of dedicated parking spaces for the use. Ample on-site circulation is proposed, and the site has been designed to provide safe and efficient access and circulation with prudent and reasonable driver behavior.

