

WATER ENGINEER'S REPORT

Popeyes

22 Holland Avenue

CITY OF ALBANY
COUNTY OF ALBANY
STATE OF NEW YORK

Applicant: The Parikh Network

Prepared by:

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INTRODUCTION:

Hershberg & Hershberg, Consulting Engineers and Land Surveyors, were retained by The Parikh Network (hereinafter the “Applicant”) as site engineer for the construction of a development plan to be known as Popeyes. This report is to review water supply demands for the consideration of the Department of Water & Water Supply and the City of Albany Planning Board.

DESCRIPTION OF EXISTING SITE: **PARCEL AREA**

The Applicant proposes to lease a parcel from Sayville Browning Properties, Inc. The proposed lease parcel is a 0.51 acre portion of Tax Map Parcel #76.46-5-22.



Fig. No. 1 - Aerial Photo of Existing Site

PARCEL ZONING

The site lies entirely within the MU-CU: Mixed-Use, Community Urban zoning district and a CS-O, Combined Sewer Overlay District.

EXISTING USAGE

The project area is currently occupied by a hotel and parking areas.

DESCRIPTION OF INTENDED SITE DEVELOPMENT AND USE

The Applicant proposes to build a 2,472+/- SF Popeyes restaurant with drive in service, which is a permitted use with a Conditional Use Permit required to accommodate the drive-In. The restaurant will accommodate 46 +/- seats. It is proposed to be open from 10:30 AM until 11:30 PM. There will be two shifts of employees, each with approximately 11 employees. Required parking at 1 space per 150 SF of NLA would be 17. Popeye will have 20 parking spaces available and bicycle parking for 3 bikes. Sewer and water connection will be made to utilities on Holland Avenue. This site can be considered a redevelopment site for stormwater purposes. USDO requirements for stormwater will be met.

EXISTING LEASE PARCEL COVERAGE STATISTICS

The existing lease parcel coverage statistics are as shown below.

Description	Area (SF)	Area (Acres)	% of site
Building	0	0.00	0
Pavement/Sidewalk	9,315	0.21	41.7
Pervious	13,023	0.30	58.3
Total Site	22,338	0.51	100.0

Fig. No. 2 - Proposed Lease Parcel Coverage Statistics

PROPOSED LEASE PARCEL COVERAGE STATISTICS

The proposed lease parcel coverage statistics are as shown below.

Description	Area (SF)	Area (Acres)	% of site
Building	2,472	0.06	11.1
Pavement/Sidewalk	13,108	0.30	58.6
Pervious	6,632	0.15	30.3
Total Site	22,338	0.51	100.0

Fig. No. 3 - Proposed Lease Parcel Coverage Statistics

WATER PRESSURE DATA

The static pressure in the existing 6" CIP water main within the ROW of Holland Avenue was determined at a hydrant at 41 Holland Avenue with a hydrant flow test on October 19, 2013 (see Appendix A).

WATER DISTRIBUTION SYSTEM

The existing 6" CIP water main within the west ROW of Holland Avenue as shown below. It is looped with a 12" main on the east side of Holland Avenue and is interconnected to a 12" main in the south side of Hackett Boulevard.

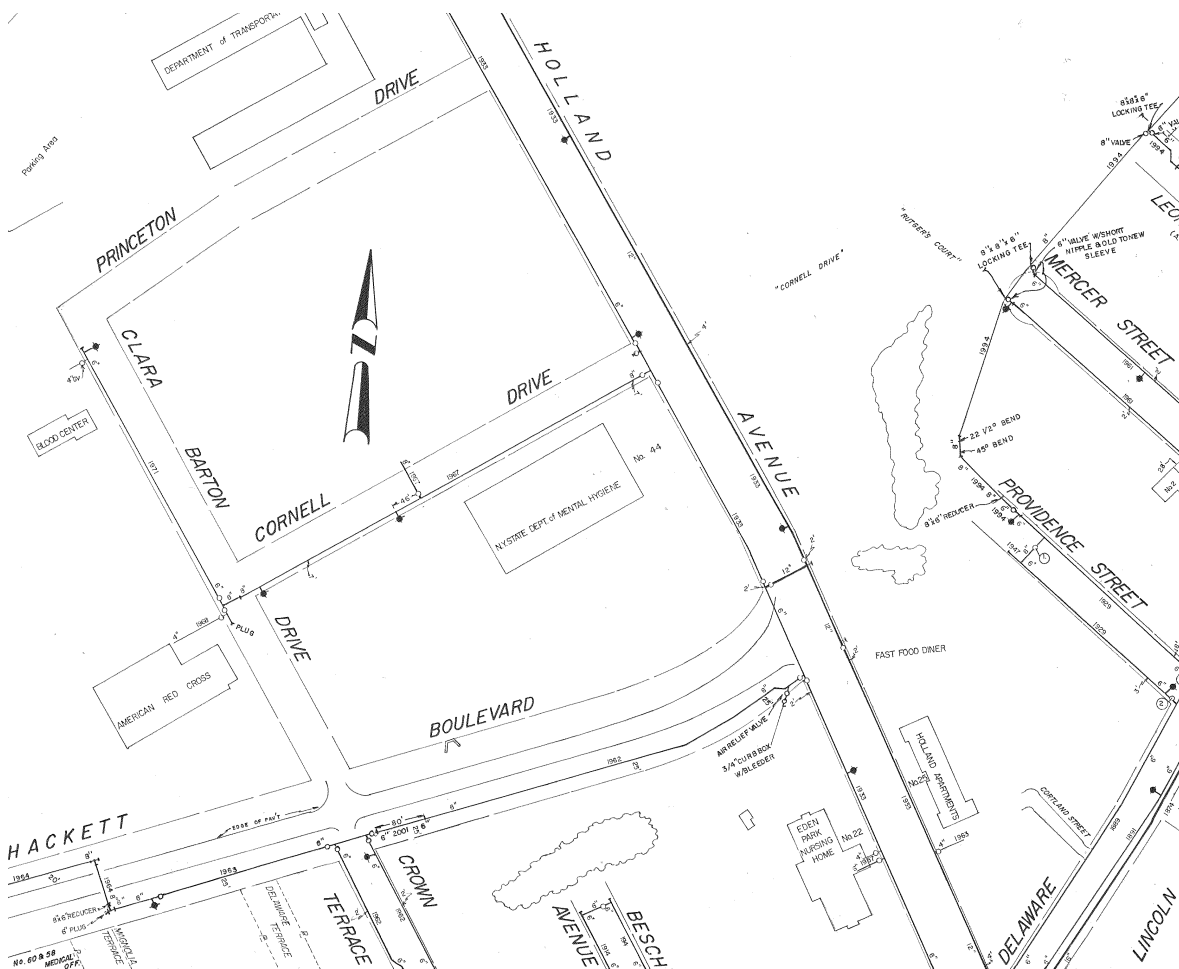


Fig. No. 4 - Portion of Water Atlas Sheet 109

WATER DEMAND

To compute the required water demand, the *New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 5, 2014)*¹ is used to compute the Sewer Generation which is equivalent to Potable Water Use. The Average Daily Flow is based upon 25 GPD per seat and 500 GPD per drive through lane. This results in an estimated 1,650 GPD of potable water use, an average flow of 1.15 GPM. Peak water rate is estimated at 400% of average flow or 4.58 GPM.

POTABLE WATER USE 22 Holland Avenue

<u>Use</u>	<u>Unit</u>	<u>Value</u>	<u>Sewage Generation Per Unit per day(GPD)</u>	<u>Daily Sewage Generation (GPD)</u>
Fast Food Restaurant	Seat	46	25	1150
	Drive Through Lane	1	500	500
TOTAL ESTIMATED WATER USE				1650
NET ESTIMATED WATER USE				1650
Average Daily potable water use in GPM		1.15		
Peak Potable Water in GPM		4.58		

1) Source: NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS. MARCH 5, 2014 Pg. B-20

Fig. No. 5 – Water Demand

IMPACT ON WATER SYSTEM

The total water treated in 2019 at the Feura Bush Water Filtration Plant was 6,473,227,216 gallons. The daily water production averaged 17,734,869 gallons, with maximum daily production of 22,272,288 gallons. The capacity of this treatment plant is 32,000,000 GPD. The increase in potable water demand is 1,650 GPD represents an insignificant portion of (0.00099%) of the average daily water production.

FIRE PROTECTION

The new buildings will not be equipped with an automatic sprinkler system. A 1½ water service is proposed. Backflow preventor, meter and valve will be provided as required.

CONCLUSION:

There will be no negative impact on the City of Albany's Water System.



Prepared by:

A handwritten signature in black ink, appearing to read "D. Hershberg", written over a horizontal line.

HERSHBERG & HERSHBERG
Daniel R. Hershberg, P.E. & L.S.

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APPENDIX A
FIRE HYDRANT TEST

25 Holland Avenue

FIRE FLOW CALCULATION SHEET

Hydrant No. Unnumbered
Location 41 Holland
Date 10/9/2013

Static Pressure (Ps) PSI 66

Residual Pressure (Pr)
PSI 60

Observed Flow (Qf)
GPM 1250

Ps-Pr PSI 6

Ps-20 PSI 46

Factor Ps-
Pr/Ps - 20 0.1304
Factor $^{.54}$ 0.3329

Computed Values
[Q at 20 PSI - GPM](#) 3755

Static Pressure, Residual Pressure and Observed flow provided by
AWB