

WATER ENGINEER'S REPORT

Northern Rivers Behavioral Health Center

58 Academy Road

CITY OF ALBANY
COUNTY OF ALBANY
STATE OF NEW YORK

Applicant: Parsons Child and Family Center

Prepared by:

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INTRODUCTION:

Hershberg & Hershberg, Consulting Engineers and Land Surveyors, were retained by Parsons Child & Family (hereinafter the "Applicant") with an address of 60 Academy Road, Albany NY 12008 as site engineer for the construction of a residential and outpatient treatment facility to be known as Northern Rivers Behavioral Health Center. This report is for the consideration of the Department of Water & Water Supply and the City of Albany Planning Board.

DESCRIPTION OF EXISTING SITE:

PARCEL AREA

The existing parcel is Tax Map Parcel #75.12-2-13.1 listed as No. 60 Academy Road. The Applicant proposed to create a new lot from No. 60 Academy Road to be listed as No. 58 Academy Road. The new lot will consist of 101,128 SF or 2.32 acres of land.



Fig. No. 1 - Aerial Photo of Site

DESCRIPTION OF INTENDED SITE DEVELOPMENT AND USE

Under the current application the Applicant is proposing to demolish the existing residential building and construct a new building for residential and outpatient treatment use. The new building will contain 20 bedrooms. The parking lot will be expanded to include parking for 39 cars including 2 handicapped parking spaces. Also included in site development is landscaping, lighting, stormwater management and utility connections.

POTABLE WATER USE

In absence of existing water records, the *New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 5, 2014)*¹ is used to compute the Average Daily Flow. Based upon 110 GPD per bed (Method 1: Typical Per-Unit Hydraulic Loading Rates) and 15 GPD per employee, 20 beds and 45 employees will generate an estimated 2,875 GPD or an average flow of 1.99 GPM. See Fig. No. 2 below. Peak existing water use is estimated at 400% of average flow or 7.99 GPM. .

Potable Water Usage
Northern Rivers Behavioral Health Center

<u>Floor/Use</u>	<u>Unit</u>	<u>Value</u>	<u>Water Use Per</u>	<u>Water Use (GPD)</u>
			<u>Unit per</u> <u>day(GPD) See</u> <u>Note 1</u>	
Residential	Beds	20	110	<u>2200</u>
Employees	Person	45	15	675
	TOTAL			2875

1) Source: New York State Design Standards for Intermediate Sized Wastewater Treatment Works, NYSDEC, March 5, 2014

2) Sewage Generation is equivalent to potable water use

Fig. No. 2 – Potable Water Usage

WATER SYSTEM

The total water treated in 2015 at the Feura Bush Water Filtration Plant was 6,668,983,544 gallons. The daily water production averaged 18,275,788 gallons, with maximum daily production of 24,202,080 gallons. The capacity of this treatment plant is 32,000,000 GPD. The 2,875 GPD peak flow represents an insignificant increase of 0.016% of the average daily water production.

The Albany Water Board maintains water service to this site by way of a 6 inch main on the west side of Academy Road constructed in 1931 as shown in an excerpt from Sheet 110 of the Water Atlas which reproduced below.

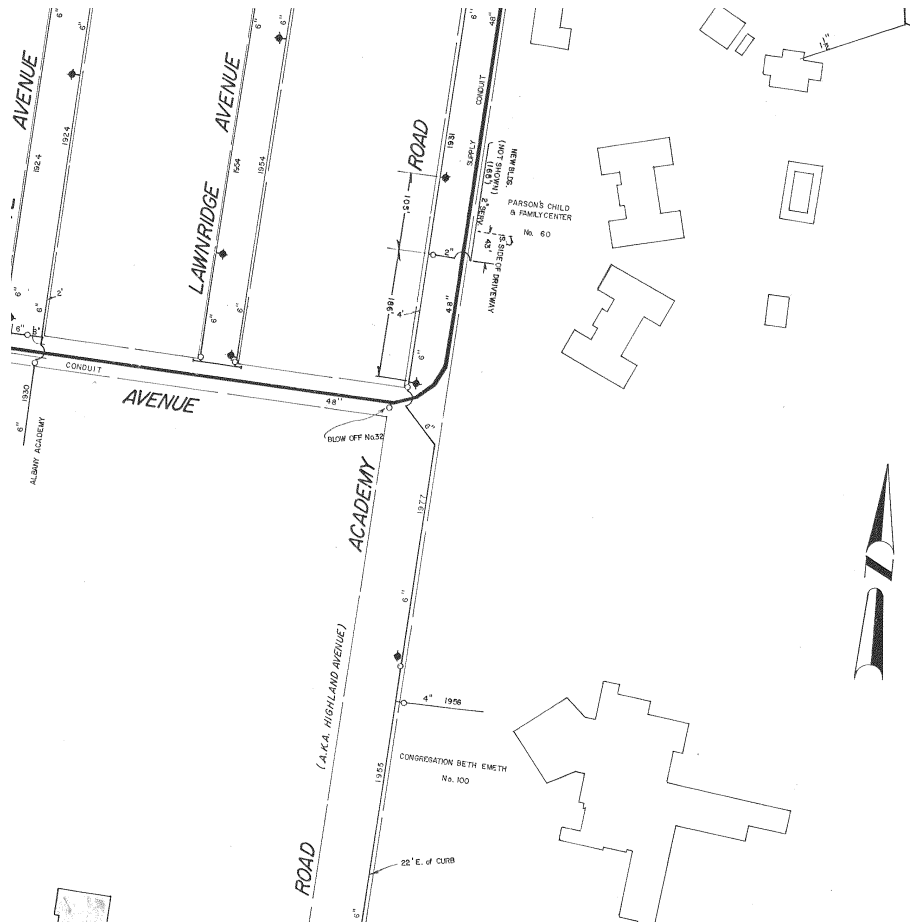


Fig. No. 3 –Excerpt from ater Atlas Sheet 110

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FIRE PROTECTION

There is a hydrant located on the opposite side of Academy Road. The proposal is to extend an 8" water main into the site via an easement to provide another hydrant interior to the site. The proposed hydrant is to be owned and maintained by Albany Water Department. The building will be fully sprinklered and the plan will be reviewed with City officials. Location of Knox boxes and Siamese connections will be coordinated with fire officials. No current fire flow test was made on this site. The Applicant will request a fire flow test prior to design of the sprinkler system.

POTABLE WATER SERVICE

A 6" DIP CL 52 water service is proposed to connect to the 8" water main extended into the site. Water meter detail and backflow preventer detail will be provided with the plumbing plans.

CONCLUSION:

It is the Engineer's opinion that this project can be served by existing public water system with no negative impact on the existing system.



Prepared by:

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

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

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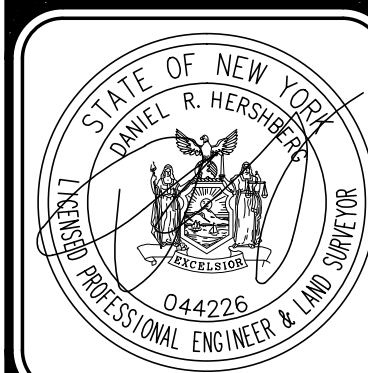
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APPENDIX A

Sheet C4- UTILITY PLAN



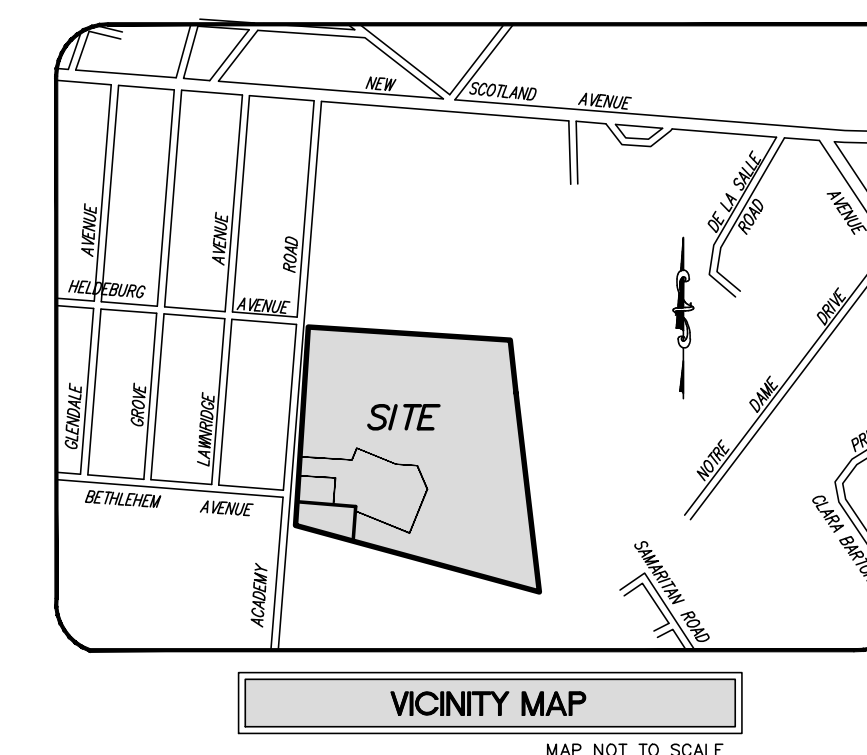
ALTERATION OF THIS
DOCUMENT EXCEPT BY A
LICENSED PROFESSIONAL
ENGINEER OR LAND
SURVEYOR, IS ILLEGAL.

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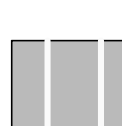
UTILITY PLAN
NORTHERN RIVERS BEHAVIOR HEALTH CENTER
PROPOSED No. 58 ACADEMY ROAD
ALBANY, NEW YORK

FILE: 170216

C4

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PROPOSED LEGEND

	PROPOSED CONTOUR
	PROPOSED CHECK DAMS
	PROPOSED SANITARY SEWER
	PROPOSED WATER SERVICE
	PROPOSED FORCE MAIN
	PROPOSED STORM SEWER
	PROPOSED CONCRETE CURB
	PROPOSED HYDRANT
	PROPOSED PAVEMENT & STRIPS
	PROPOSED CONCRETE WALK
	PROPOSED ASPHALT WALK

NOTES

1. 48 HOURS NOTICE MUST BE GIVEN TO DEPARTMENT OF WATER FOR INSPECTIONS FOR THE SANITARY, WATER AND STORMWATER UTILITIES.
2. PRESSURE AND LEAKAGE TESTING OF THE WATER MAIN SHALL BE WITNESSED BY DEPARTMENT STAFF AND ACCEPTABLE BACTERIOLOGICAL TEST MUST BE SUBMITTED AND ACCEPTED BY THE DEPARTMENT PRIOR TO FINAL OF THE NEW WATER MAIN.
3. KNOX BOX FOR PROPOSED BUILDING WILL BE LOCATED AT BUILDING ENTRANCE.

