CITY OF FORT LAUDERDALE

All-America City

PROJECT ADDRESS: 650 N Andrews Ave

Date request was received:10/26/2023

DRC CASE#: UDP-S23057

Project Name: 650 N Andrews Ave

IF NO DRC CASE NUMBER PROVIDED, WATER & SEWER AVAILABILITY LETTER TO BE PROVIDED UPON PAYMENT OF ENCLOSED A/R INVOICE.

*******IMPORTANT INFORMATION*******

The following analysis is only VALID FOR A PERIOD OF ONE YEAR FROM THE DATE OF ISSUANCE. After which point, a reanalysis must be conducted to ensure adequate availability for projects.

☐ Water and Sanitary Sewer Capacity Allocation Letter (Small Project) ……..$1018

☐ Modifications to small project that require capacity re-analysis……$1018

☑ Water and Sanitary Sewer Capacity Allocation Letter (Large Project) ……$2,544 (PAID)

☐ Modifications to large project that require capacity re-analysis……$2,544

☐ Revision……$0

CITY OF FORT LAUDERDALE

March 14, 2024

Blake Kidwell
Flynn Engineering
241 Commercial Blvd
Lauderdale-By-The-Sea, FL 33308

Subject: **WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER**
650 N Andrews Ave – DRC Case No. UDP-S23057
650 N Andrews Ave, Fort Lauderdale, FL 33311

Dear Blake Kidwell,

According to the information submitted, the project consists of a multi-story residential building with 257 units and 11,400 SF of retail space. The site currently contains a school for the blind and the visually impaired. There are proposed water and sewer connections to City of Fort Lauderdale (City) utilities along NE 1st Avenue. This project lies within the City's Pump Station (PS) A-21 basin and will increase the average day water demand by approximately 0.0524 million gallons per day (MGD) and the average day sewer demand by approximately 0.0361 MGD. The sewer infrastructure once Pump Station A-24 is constructed will have the capacity to support the proposed development.

The following project is the City's major initiative within basin A-21:
Project # 12605 – New Pump Station Flagler Village A-24
Estimated Construction Completion: Fiscal Year 2024

Currently, the existing sewer infrastructure does not have the capacity to support the proposed development. However, upcoming CIP project # 12605 will create Pump Station A-24 which will divide the sewer flows and will handle the increased demand in committed NAPOT to pump station A-21 as well as existing flows. Once the new pump station is constructed, this project will be discharging to pump station A-21.

Please be advised that the proposed Flagler Village Pump Station A-24 is estimated to become operational sometime during Fiscal Year 2024 provided unforeseen circumstances are not encountered. Therefore, the timeline of all improvements must be coordinated well in advance with the City. Any Master Permit will not be issued until the expanded wastewater infrastructure is fully functional.

If there are changes to the proposed development after issuance of this capacity availability letter, and/or before development permit approval has been received, the Owner or Owner's authorized representative for the subject project must submit a revised request based on the updated plans.

If, at the time of building permit application, there are changes to the proposed development that require a new development permit or an amendment to an existing development permit which result in a change of the water and sewer demand, the City shall re-evaluate the availability of capacities and a new letter shall be obtained. If sufficient capacities for the increased demand are not available at that time, the City may deny the permit application or ask the Owner/Developer to submit an alternate design for consideration prior to approval. If a development permit is not approved within one year of this letter being issued, the information contained in this letter will expire and a new letter shall be required prior to development approval.

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Should you have any questions or require any additional information, please contact me at (954) 828-5115.

Sincerely,

Chelsey Corneille, E.I.
Project Manager II

Enclosures: Water and Wastewater Capacity Analysis
cc: Alan Dodd, P.E., Public Works Director
Talal Abi-Karam, P.E., Assistant Public Works Director
Christopher Bennett, P.E., Assistant Public Works Director
Daniel Rey, P.E., City Engineer
File: Water and Sewer Capacity Letters

City of Fort Lauderdale
Public Works Department
Water and Wastewater Capacity Analysis

650 N Andrews Ave – DRC Case No. UDP-S23057
650 N Andrews Ave, Fort Lauderdale, FL 33311

PROJECT AND DESCRIPTION

The project consists of a multi-story residential building with 257 units and 11,400 SF of retail space. The site currently contains a school for the blind and the visually impaired.

DESCRIPTION OF EXISTING UTILITIES

Water: The site is currently served by an 8-inch water main along NE 1st Avenue, east of the project site. See Figure 1.

Wastewater: The site is currently served by a 10-inch gravity sewer main to the east of the project site along NE 1st Avenue. See Figure 2.

Pumping Station: The site is served by PS A-21 which is located along NE 2nd Avenue.

SUMMARY OF ANALYSIS AND REQUIRED ACTION

Currently, the existing sewer infrastructure does not have the capacity to support the proposed development. However, upcoming CIP project # 12605 will construct Pump Station A-24 to handle the committed NAPOT as well as some of the existing flows. Once pump station A-24 is constructed, this project will be within Basin A-21. The proposed PS A-24 shall be constructed and on-line prior to the proposed development seeking a Master Permit. The demand for this proposed development will not exceed the City's NAPOT standard of 10 hours for PS A-21. Therefore, PS A-21 can support the demand of this project.

Figure 1 – City Water Atlas

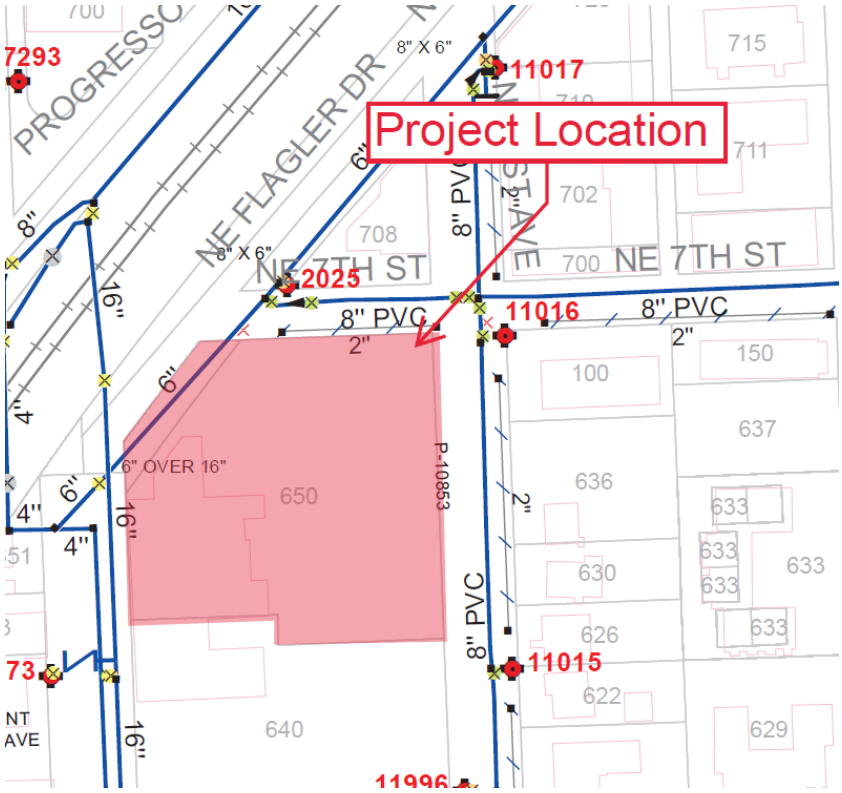
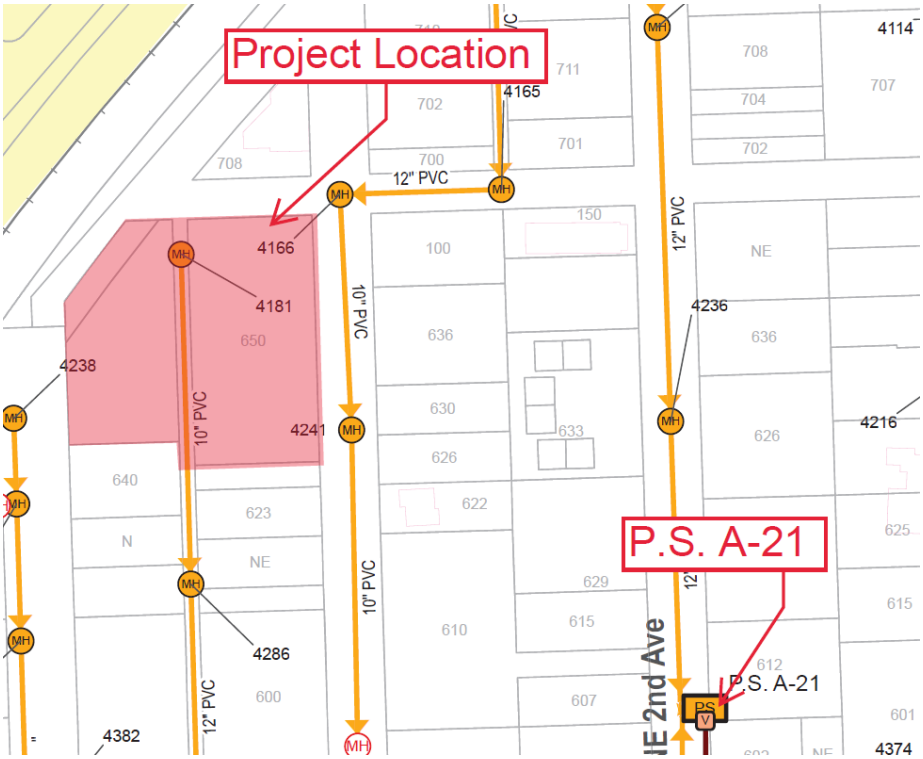


Figure 2 – City Sewer Atlas



WATER CAPACITY ANALYSIS

Requested Demand: Based on the applicant's site plan and building use information, the estimated average day potable water demand is approximately 52398 gallons per day (GPD), which equates to 0.0524 MGD. Average day water use demands are calculated by reducing the calculated max day water use demands by a factor of 1.18. The max day water use demands are calculated using the City's Guidelines for the Calculations of Sanitary Sewer Connection Fees and are based on City Ordinance No. C-19-29.

Evaluation of impact on existing distribution pipe: According to the site plan, the applicant is proposing to utilize the 8-inch water main along NE 1st Avenue, east of the project site. The InfoWater hydraulic model was analyzed to determine the impact of this project on the existing 8-inch water main.

Evaluation of impact of Permitted Water Plant Capacity: The Fiveash and the Peele Dixie Water Treatment Plants are designed to treat 70 MGD and 12 MGD of raw water respectively (82 MGD total). The total permitted Biscayne aquifer water withdrawals for these plants is limited to 52.55 MGD per the South Florida Water Management District (SFWMD) permit number 06-00123-W.

The current twelve-month rolling average production at the two plants is 36.16 MGD. The previously committed demand from development projects in the permitting or the construction stage is 5.58 MGD. Combining these figures with the demand from the proposed project of 0.0524 MGD, the required production would be 41.79 MGD. This is less than the allowable withdrawal limit of 52.55 MGD. Therefore, the water plants have sufficient capacity to serve this project. See Figure 3 below.

Recommended Water Infrastructure Improvements: No improvements required.

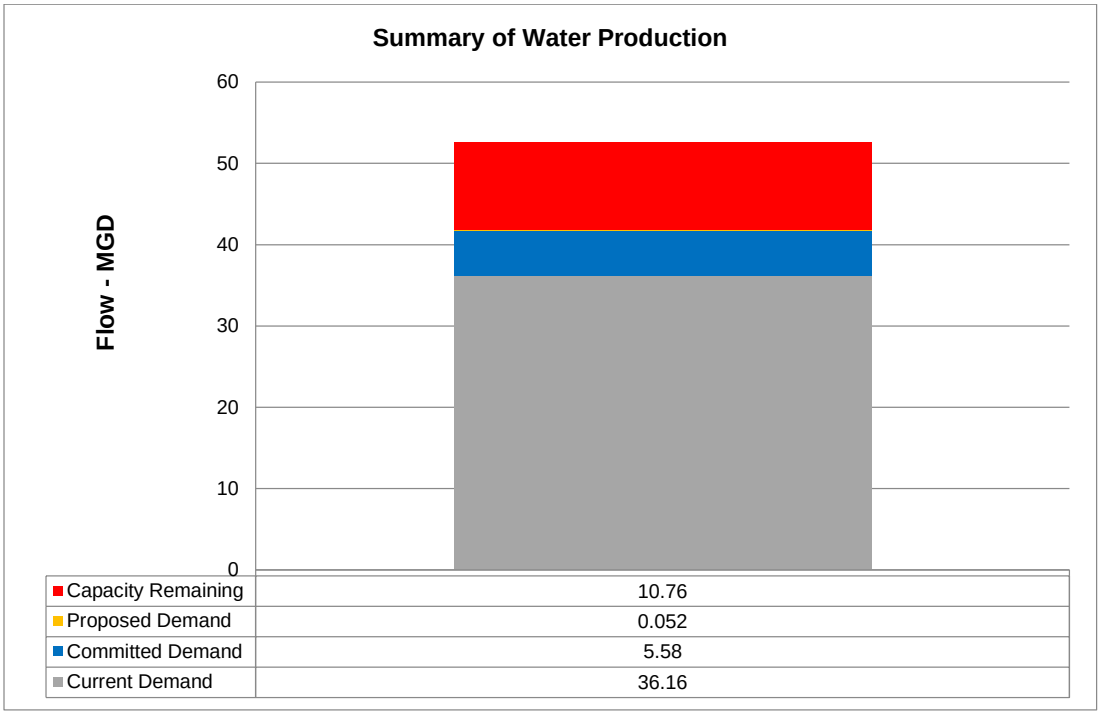


Figure 3

WASTEWATER CAPACITY ANALYSIS

Requested Demand: Based on the applicant's site plan and building use information, the estimated average day sewer use demand is approximately 36067 GPD, which equates to 0.0361 MGD. Average day sewer use demands are calculated using the City's Guidelines for the Calculations of Sanitary Sewer Connection Fees and are based on City Ordinance No. C-19-29.

Evaluation of impact on existing collection pipe: According to the site plan, the applicant is proposing to utilize the 10-inch gravity sewer main to the east of the project site along NE 1st Avenue. Accounting for existing flows and based on the tools and information available to the City staff, it has been calculated that the pipes downstream of the proposed development will flow less than the City's governance plan threshold of 70% during peak flows. Therefore, the pipes downstream of the developments are adequate to serve the proposed project.

Evaluation of impact on pumping station: PS A-21 has a duty point of 1200 gallons per minute (GPM) and has a Nominal Average Pumping Operating Time (NAPOT) of approximately 3.17 hours per day. Based on projected sewage flows, the pumping run times would increase approximately 30 minutes per day. Additionally, there are other committed flows from proposed developments within the PS A-21 basin resulting in 464.88 minutes of additional runtime. PS A-21 will have a NAPOT of 11.42 hours once the proposed developments are complete, more than the recommended average of 10 hours per day. However, the current NAPOT of 11.42 reflects the entire A-21 Basin as it is today, prior to the rerouting of the flow to the newly constructed pump station A-24. It is anticipated that A-24 will receive 1/2 of the existing flows resulting in a current NAPOT of approximately 1.59 hours. This puts the projected NAPOT at 9.83 hours. The demand for this proposed development will not exceed the City's NAPOT standard of 10 hours for PS A-21. Therefore, PS A-21 can support the demand of this project. See Figure 4 below.

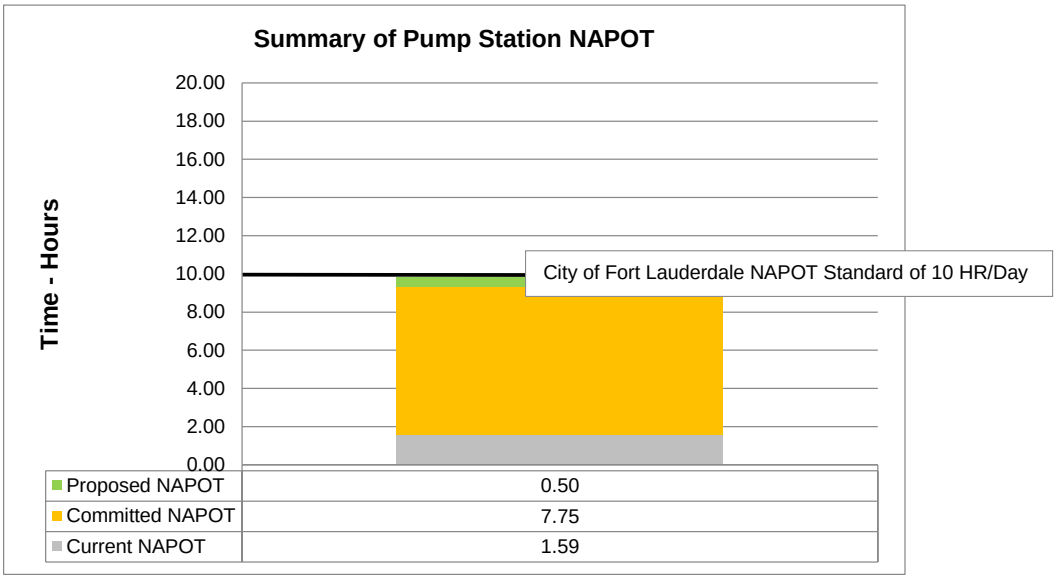


Figure 4

Evaluation of impact of Permitted Wastewater Plant Capacity: The City of Fort Lauderdale owns and operates the George T. Lohmeyer Regional Wastewater Treatment Plant (GTL), which provides wastewater treatment for the City of Fort Lauderdale. The Florida Department of Environmental Protection's (FDEP) permitted capacity for GTL is 61.58 MGD-TMADF (Million Gallons per Day – Three Month Average Daily Flow). The three-month average daily flow (TMADF) to the plant is 43.18 MGD. Combining the committed flows for previously approved projects of 4.43 MGD plus the 0.0361 MGD net contribution from the project results in a total projected flow of 47.64 MGD. This is less than the permitted treatment plant capacity of 61.58 MGD. Therefore, the treatment plant has sufficient capacity to serve this project. See Figure 5 below.

Recommended Wastewater Infrastructure Improvements: No improvements required.

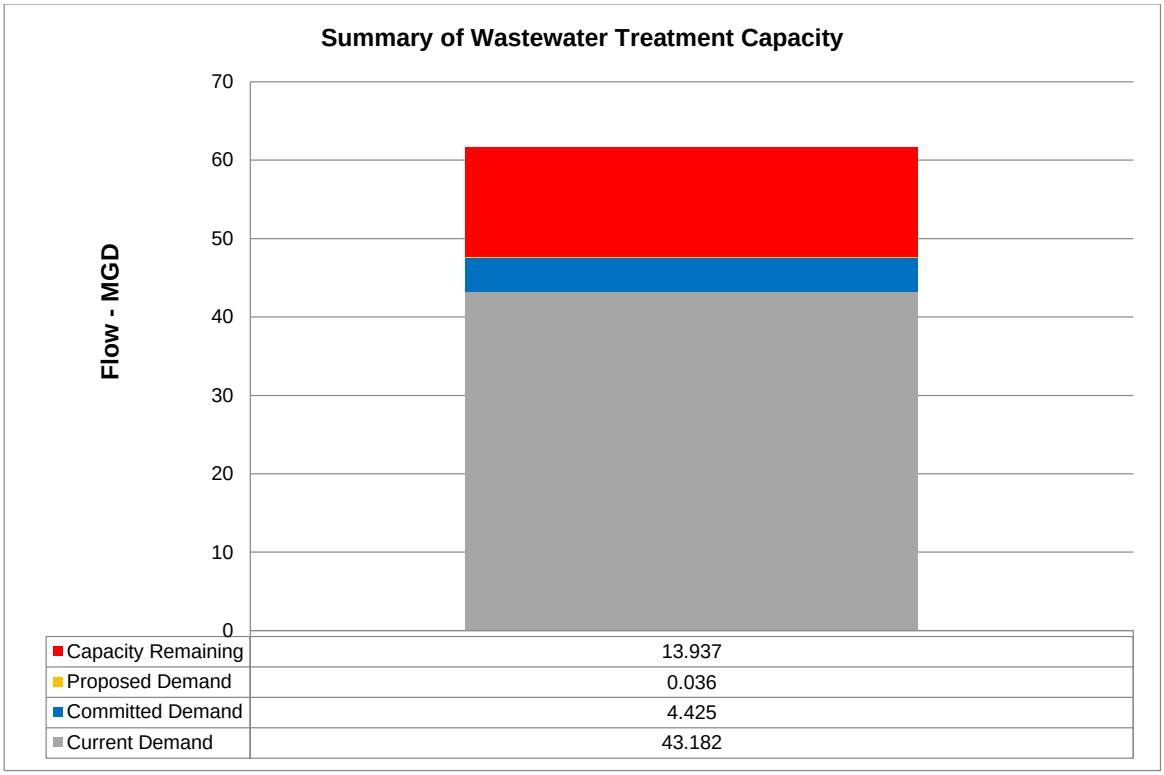


Figure 5