



August 19, 2025

Andres Salzberger Flynn Engineering 241 Commercial Boulevard Lauderdale-By-The-Sea, FL 33308

Subject: WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER REQUEST

501 Art Lofts - DRC Case No. UDP-S24025 501 SW 2nd Avenue, Fort Lauderdale, FL 33301

Dear Andres Salzberger,

According to the information submitted, the above-referenced project has been revised per the following changes:

- Residential unit reduction from 290 to 265
- Merchandising area increase from 3,070 SF to 4,687 SF
- Net service demand decrease from 225.09 ERCs to 205.86 ERCs
  - o Includes an existing use demand of 10.05 ERCs

Based on the information provided, it has been determined that the proposed development will not result in any additional water demand nor sewage flows; therefore, a Water and Sewer Capacity Availability Letter is not required.

Should you have any questions or require any additional information, please contact me at (954) 828-6073 or via email at jdfernandez@fortlauderdale.gov.

Sincerely,

J.D. Fernandez Project Manager II

cc: Brad Kaine, Public Works Director

Talal Abi-Karam, P.E., Assistant Public Works Director-Utilities

Benjamin Restrepo, P.E., City Engineer Orlando Arrom, Land Development Manager File: Water and Sewer Capacity Letters





October 1, 2024

Andres Salzberger Flynn Engineering 241 Commercial Boulevard Lauderdale-By-The-Sea, FL 33308

Subject: WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER

501 Art Lofts – DRC Case No. UDP-S24025 501 SW 2nd Avenue, Fort Lauderdale, FL 33301

Dear Andres Salzberger,

According to the information submitted, the project consists of the construction of a 290-unit condominium building with 3,070 sf of commercial/retail area. There are proposed water connections to City of Fort Lauderdale (City) utilities along SW 3<sup>rd</sup> Avenue, and sewer connections along SW 2<sup>nd</sup> Avenue. This project lies within the City's Pump Station (PS) A-42 basin and will increase the average day water demand by approximately 0.0572 million gallons per day (MGD) and the average day sewer demand by approximately 0.0394 MGD. The sewer infrastructure requires improvements to meet the increased demand of the proposed project. Master permit will not be issued for this site until the sanitary sewer system improvements are constructed, certified, and in service.

The determination of capacity availability is based upon an analysis of the City's water and sewer system models, average daily flows at the treatment plants, and previously committed flows, as of the date of this letter, in conjunction with the demand created by the proposed subject project. Availability of capacities, as calculated in the attached analysis, is not guaranteed and no existing system capacity shall be considered "reserved" for this project until development permit approval has been achieved and all fees have been paid. Once the development permit has been received for this project, the city shall reserve the necessary capacity to serve the development.

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.

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.





Should you have any questions or require any additional information, please contact me at (954) 828-5862.

Sincerely,

Igor Vassiliev, P.E. 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

501 Art Lofts - DRC Case No. UDP-S24025 501 SW 2nd Avenue, Fort Lauderdale, FL 33301

#### **PROJECT AND DESCRIPTION**

The project consists of the construction of a 290-unit condominium building with 3,070 sf of commercial/retail area.

## **DESCRIPTION OF EXISTING UTILITIES**

**Water:** The site is currently served by an 8-inch water main along SW 3<sup>rd</sup> 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 SW 2<sup>nd</sup> Avenue. See Figure 2.

**Pumping Station:** The site is served by PS A-42 which is located along SW 3<sup>rd</sup> Avenue.

# **SUMMARY OF ANALYSIS AND REQUIRED ACTION**

The proposed water infrastructure has the capacity to support the proposed development. The sewer infrastructure requires improvements to meet the increased demand of the proposed project, see Figure 3 Required Improvements. Master permit will not be issued for this site until the sanitary sewer system improvements are constructed, certified, and in service.





Figure 1 - City Water Atlas







Figure 2 - City Sewer Atlas

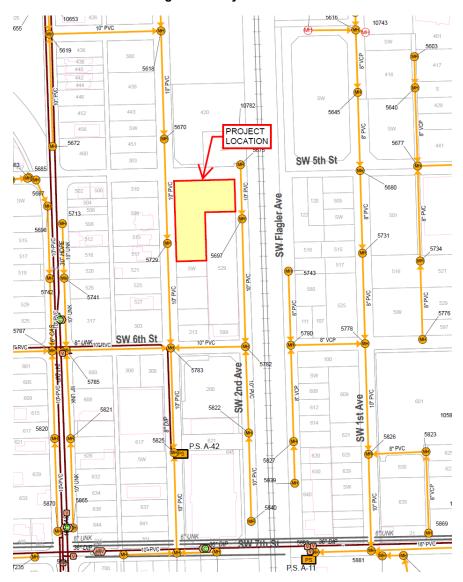
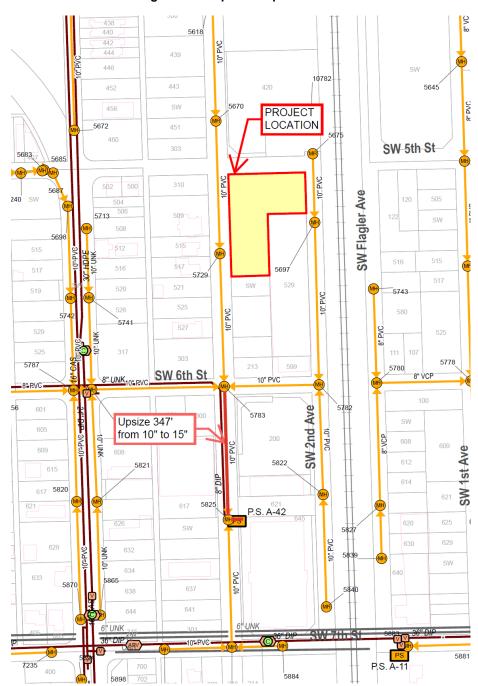






Figure 3 - Required Improvements





## **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 57225 gallons per day (GPD), which equates to 0.0572 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 SW 3<sup>rd</sup> Avenue. 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 38.25 MGD. The previously committed demand from development projects in the permitting or the construction stage is 5.90 MGD. Combining these figures with the demand from the proposed project of 0.0572 MGD, the required production would be 44.21 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 4 below.

Recommended Water Infrastructure Improvements: No improvements required.

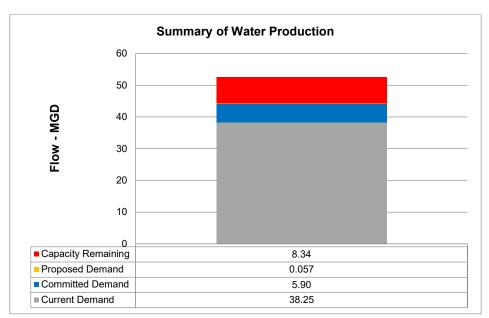


Figure 4



### **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 39390 GPD, which equates to 0.0394 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 SW 2<sup>nd</sup>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 higher than the City's governance plan threshold of 70% during peak flows. Therefore, the pipes downstream of the developments will have to be upsized to adequately serve the proposed project.

**Evaluation of impact on pumping station:** PS A-42 has a duty point of 422 gallons per minute (GPM) and has a Nominal Average Pumping Operating Time (NAPOT) of approximately 2.48 hours per day. Based on projected sewage flows, the pumping run times would increase approximately 93 minutes per day. Additionally, there are other committed flows from proposed developments within the PS A-42 basin resulting in 121.76 minutes of additional runtime. PS A-42 will have a NAPOT of 6.06 hours once the proposed developments are complete, less than the recommended average of 10 hours per day. See Figure 5 below.

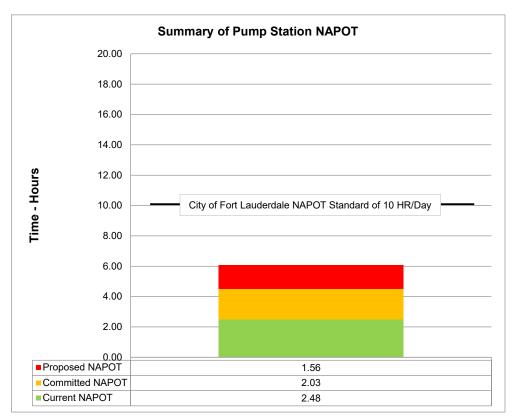


Figure 5



**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 45.19 MGD. Combining the committed flows for previously approved projects of 4.63 MGD plus the 0.0394 MGD net contribution from the project results in a total projected flow of 49.86 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 6 below.

**Recommended Wastewater Infrastructure Improvements:** Approximately 347 LF of the existing 10" gravity sewer along SW 3<sup>rd</sup> Avenue will have to be upsized to 15 inches to adequately serve the proposed development (see Figure 3). Master permit will not be issued for this site until the sanitary sewer system improvements are constructed, certified, and in service.

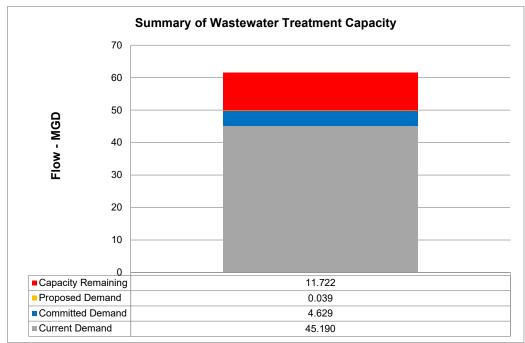


Figure 6