



**PROJECT ADDRESS: 407 N Andrews Avenue** 

Date request was received:6/18/2025

DRC CASE#: UDP-S22029

**Project Name: Artspark Lofts** 

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)	\$1,018
☐ Modifications to small project that require capacity re-analysis	\$1,018
☐ Water and Sanitary Sewer Capacity Allocation Letter (Large Project)	\$2,544
☑ Modifications to large project that require capacity re-analysis	\$2,544
☐ Revisions	\$0





August 26, 2025

Brian Alvarez KEITH 301 E Atlantic Blvd Pompano Beach, FL 33060

Subject: WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER

Artspark Lofts – DRC Case No. UDP-S22029 407 N Andrews Avenue, Fort Lauderdale, FL 33301

Dear Brian Alvarez,

According to the information submitted, the original approved project consisted of 287 residential units and 2,000 square feet (SF) of office space. Water and sewer capacity was committed to this project under the same DRC case number UDP-S22029. Modifications to the original project include the addition of 14 units and a change of use to 1,914 SF of restaurant space. There are proposed water connections to City of Fort Lauderdale (City) utilities along North Andrews Avenue and sewer connections along the alley west of the project site. This project lies within the City's Pump Station (PS) A-21 basin and will increase the average day water demand by approximately 0.0037 million gallons per day (MGD) and the average day sewer demand by approximately 0.0026 MGD. The existing water and sewer infrastructure have the capacity to support the proposed development and no improvements are needed.

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 results in a change in 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.

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

Sincerely,

Alejandra Simon Project Manager II

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Enclosures: Water and Wastewater Capacity Analysis

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





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

Artspark Lofts – DRC Case No. UDP-S22029 407 N Andrews Avenue, Fort Lauderdale, FL 33301

# **PROJECT AND DESCRIPTION**

The project consists of the addition of 14 residential units to the previously committed flows of 287 units and a change of use to 1,974 SF or restaurant space.

### **DESCRIPTION OF EXISTING UTILITIES**

**Water:** The project currently proposes to utilize the 16-inch water main along North Andrews Avenue for water service and fire hydrant connections. Water design standards deem water mains of 16-inch in diameter and greater to be transmission lines and not appropriate for water service connections. The current utilities available to the project for service connections are the 4-inch water main along North Andrews Avenue and the 4-inch water main along NW 4<sup>th</sup> Street. Neither line would be suitable for the installation of a fire hydrant as proposed in the water and sewer plans. The City atlas, as shown on Figure 1, depicts the main along NW 4 Street as a 6-inch pipe, however field notes state that the water main is at least partially a 4-inch main. Pipe dimensions should be verified in the field. The hydraulic analysis for this project's proposed demand and fire flow requirements was completed using the 4-inch water main along North Andrews Ave and the existing fire hydrants along NW 4<sup>th</sup> Street.

**Wastewater:** The site is currently served by a 10-inch gravity sewer main along the alley to the west of the project as shown on Figure 2.

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

#### **SUMMARY OF ANALYSIS AND REQUIRED ACTION**

The existing infrastructure has the capacity to support the proposed development, no improvements are needed.



Figure 1. City Water Atlas

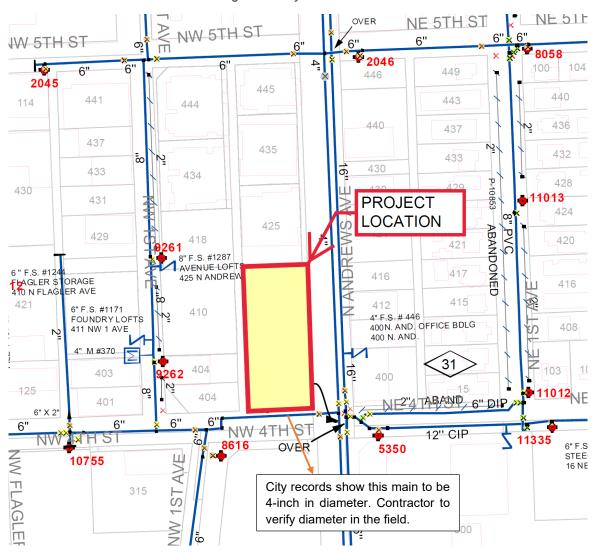
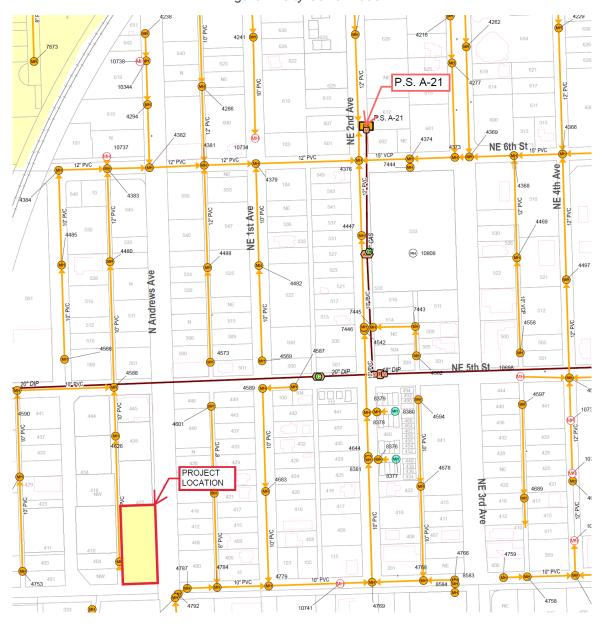




Figure 2. City Sewer Atlas







#### **WATER CAPACITY ANALYSIS**

**Requested Demand:** Based on the applicant's site plan and building use information, the estimated additional average day potable water demand is approximately 0.0037 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.

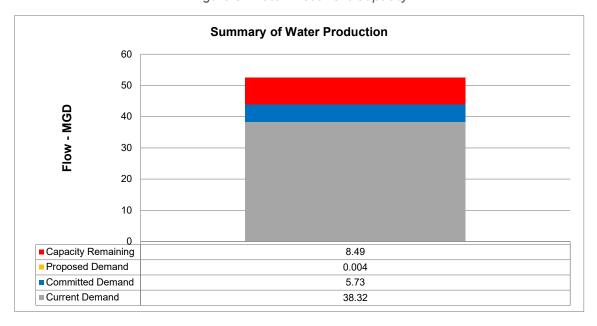
**Evaluation of impact on existing distribution system:** The project proposes to utilize the 4-inch water main along North Andrews Ave. The InfoWater hydraulic model was analyzed to determine the impact of the additional demand and fire flow requirements for this project on the water distributions system. The hydraulic simulations were completed utilizing the 4-inch water main along North Andrews Avenue and the existing fire hydrants along NW 4<sup>th</sup> Street. The existing water infrastructure has the capacity to support the proposed development.

**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 38.21 MGD. The previously committed demand from development projects in the permitting or the construction stage is 5.48 MGD. Combining these figures with the demand from the proposed project of 0.0037 MGD, the required production would be 43.70 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.



Figure 3. Water Treatment Capacity



Recommended Water Infrastructure Improvements: No improvements required.

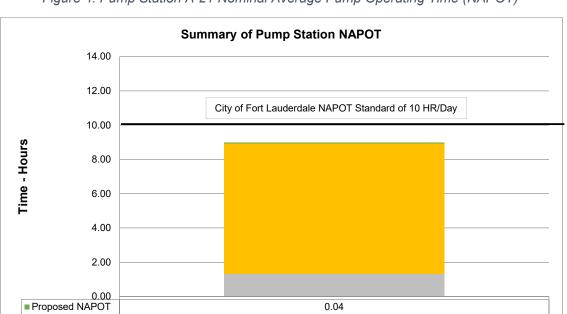


#### **WASTEWATER CAPACITY ANALYSIS**

**Requested Demand:** Based on the applicant's site plan and building use information, the estimated average day sewer use demand is approximately 0.0026 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 system:** According to the site plan, the applicant is proposing to utilize the 10-inch gravity sewer main located along the alleyway west of the project site. 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. The gravity sewer downstream of the development is adequate to serve the 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 Pump Operating Time (NAPOT) of approximately 1.33 hours per day. Based on projected sewage flows, the pump run times would increase approximately 2 minute per day. Additionally, there are other committed flows from proposed developments within the PS A-21 basin resulting in 1012.55 minutes of additional runtime. PS A-21 will have a NAPOT of 18.24 hours once the proposed developments are complete, less than the recommended average of 10 hours per day. See Figure 4 below.



7.61

1.33

Figure 4. Pump Station A-21 Nominal Average Pump Operating Time (NAPOT)

Committed NAPOT

Current NAPOT



**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 Broward County's Environmental Protection and Growth Management Department's (EPGMD) Environmental Licensing & Building Permitting Division's licensed capacity for GTL is 48 MGD-AADF (Million Gallons per Day – Annual Average Daily Flow). The annual average daily flow (AADF) to the plant is 38.89 MGD. Combining the committed flows for previously approved projects of 4.70 MGD plus the 0.0026 MGD net contribution from the project results in a total projected flow of 43.60 MGD. This is less than the permitted treatment plant capacity of 48 MGD. Therefore, the treatment plant has sufficient capacity to serve this project. See Figure 5 below.

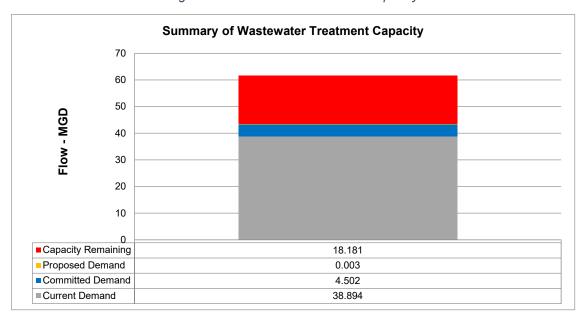


Figure 5. Wastewater Treatment Capacity

Recommended Wastewater Infrastructure Improvements: No improvements required.