

PROJECT ADDRESS: 1007 E Las Olas Boulevard

Date request was received:4/10/2024

DRC CASE#: UDP-A24025

Project Name: 1007 East Las Olas

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
- ☒ Modifications to large project that require capacity re-analysis.....\$2,544
- ☐ Revision.....\$0

September 25, 2024

Dennis Shultz
Flynn Engineering Services
241 Commercial Boulevard
Lauderdale-By-The-Sea, FL 33308

Subject: **WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER**
1007 East Las Olas – DRC Case No. UDP-A24025
1007 E Las Olas Boulevard, Fort Lauderdale, FL 33301

Dear Dennis Shultz,

According to the information submitted, the project consists of constructing a new 87-room hotel, 17-unit condominium and 5,330 sf restaurant. The proposed water connections to City of Fort Lauderdale (City) utilities will utilize a 6-inch water main along SE 10th Terrace. The sewer connection will utilize the proposed 8-inch gravity sewer line along SE 10th Terrace to connect to existing sanitary sewer manhole 5367 (SSMH-5367). This project lies within the City's Pump Station (PS) A-8 basin and will increase the average day water demand by approximately 0.0260 million gallons per day (MGD) and the average day sewer demand by approximately 0.0179 MGD. The existing water and sewer infrastructure has the capacity to support the proposed development and no improvements are needed. The existing gravity line connected to SSMH-5367 is made of vitrified clay pipe (VCP). A closed-circuit television video (CCTV) of this pipe must be taken before and after construction to ensure the integrity of the pipe and manhole is not affected.

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.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Igor Vassiliev', with a stylized, cursive script.

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

1007 East Las Olas – DRC Case No. UDP-A24025
1007 E Las Olas Boulevard, Fort Lauderdale, FL 33301

PROJECT AND DESCRIPTION

The project consists of the construction a new 87-room hotel, 17-unit condominium and 5,330 sf restaurant.

DESCRIPTION OF EXISTING UTILITIES

Water: The site is currently served by a 6-inch water main along SE 10th Terrace, east of the project site. See Figure 1.

Wastewater: The site will be served by the proposed 8-inch gravity sewer extension along SE 10th Terrace to connect to existing sanitary sewer manhole SSMH-5367. See Figure 2.

Pumping Station: The site is served by PS A-8 which is located along SE 8th Avenue.

SUMMARY OF ANALYSIS AND REQUIRED ACTION

The existing water and sewer infrastructure has the capacity to support the proposed development. No improvements are required, however, CCTV of the existing gravity sewer line connected to manhole SSMH-5367 must be taken before and after construction to ensure the integrity of the system.

Figure 1 – City Water Atlas

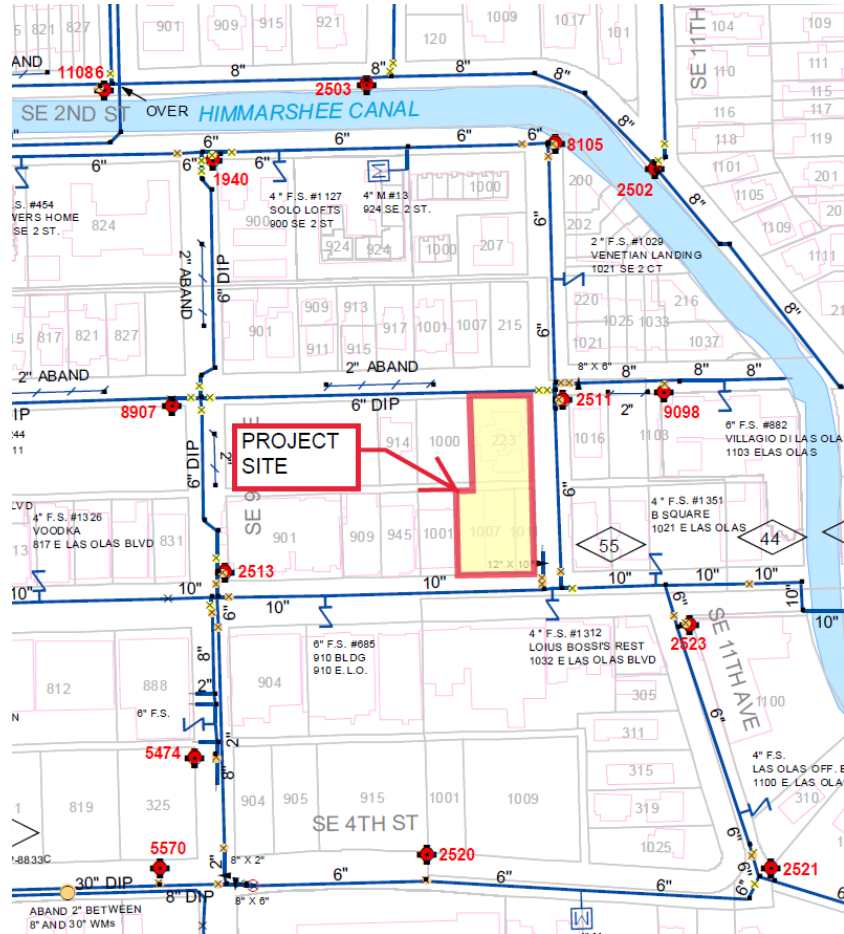
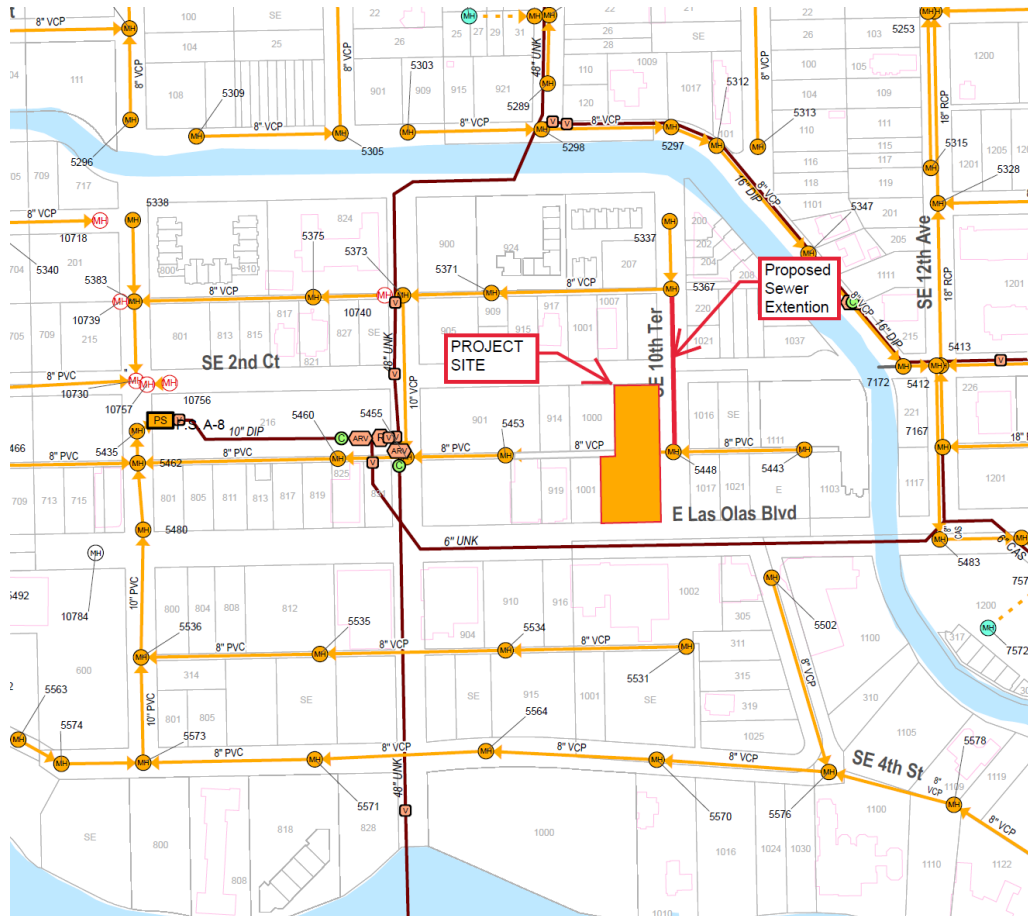


Figure 2 – City Sewer Atlas



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 26059 gallons per day (GPD), which equates to 0.0260 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 6-inch water main along SE 10th Terrace. The InfoWater hydraulic model was analyzed to determine the impact of this project on the existing 6-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 38.12 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 0.0260 MGD, the required production would be 44.05 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.

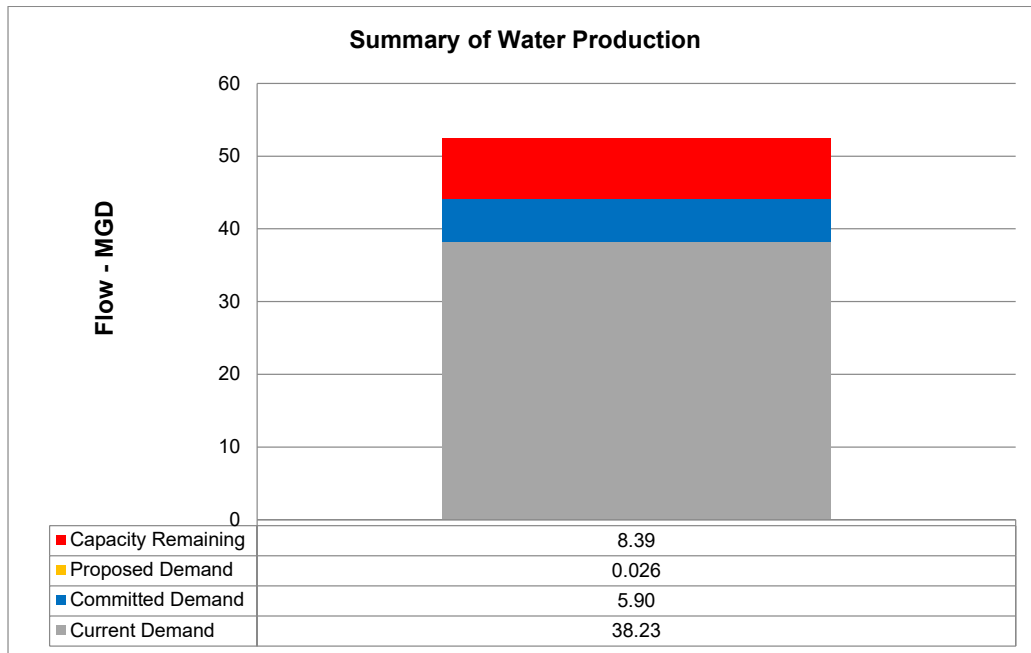


Figure 3

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 17937 GPD, which equates to 0.0179 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 the 8-inch gravity sewer extension along SE 10th Terrace to connect to existing sanitary sewer manhole SSMH-5367. 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-8 has a duty point of 1000 gallons per minute (GPM) and has a Nominal Average Pumping Operating Time (NAPOT) of approximately 3.90 hours per day. Based on projected sewage flows, the pumping run times would increase approximately 18 minutes per day. Additionally, there are other committed flows from proposed developments within the PS A-8 basin resulting in 35.99 minutes of additional runtime. PS A-8 will have a NAPOT of 4.79 hours once the proposed developments are complete, less than the recommended average of 10 hours per day. See Figure 4 below.

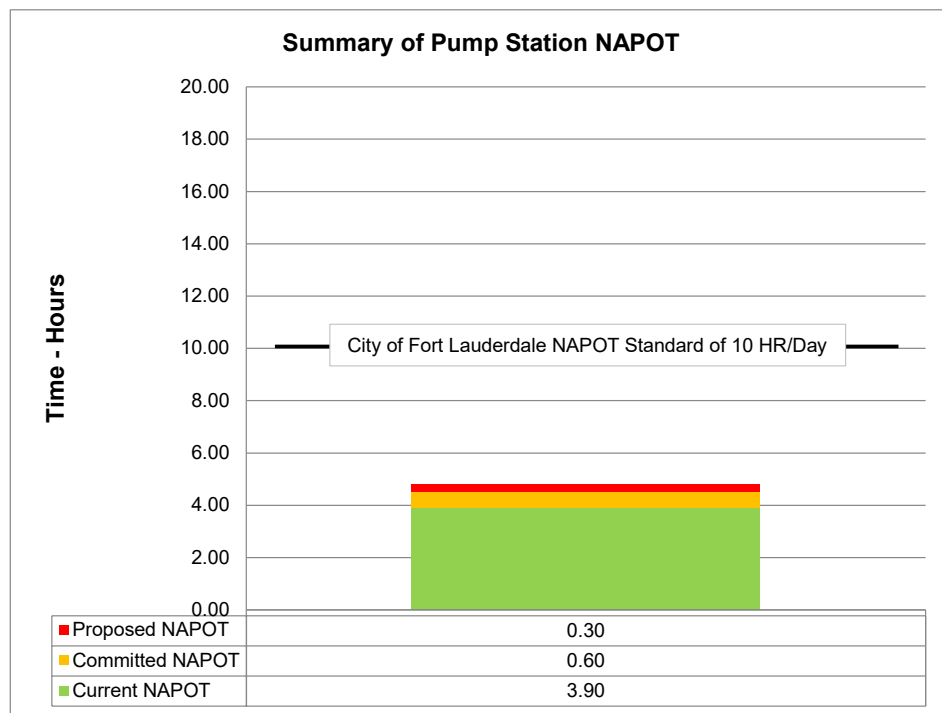


Figure 4

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 45.19 MGD. Combining the committed flows for previously approved projects of 4.63 MGD plus the 0.0179 MGD net contribution from the project results in a total projected flow of 49.84 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 are required, however, CCTV of the existing gravity sewer line connected to manhole SSMH-5367 must be taken before and after construction to ensure the integrity of the system.

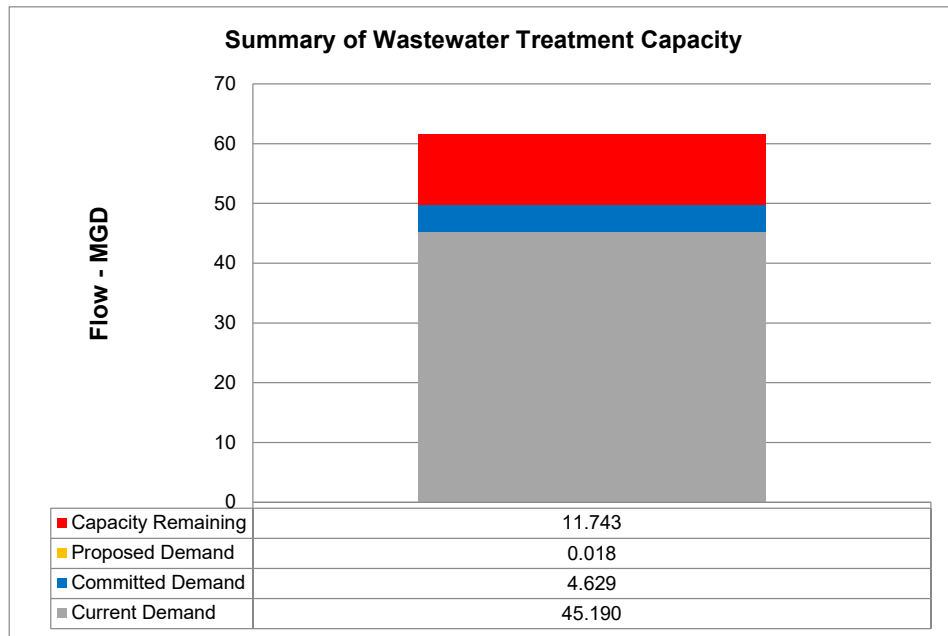


Figure 5