

GENERAL NOTES:

- CAUTION! Underground utilities present - contractor to exercise extreme caution when excavating.
- Contractor shall verify invert of existing cleanout prior to construction and report same to Engineer.
- Gravity sanitary sewer pipe shall be PVC SDR-26 unless otherwise noted.
- All non-public water and sewer facilities shall be owned and maintained by the owner/developer.
- Potable water and fire protection service shall be provided by the City of Orlando.
- Sanitary sewer service shall be provided by the City of Orlando.
- Fire protection shall be provided via hydrants; a building sprinkler system will be incorporated into the proposed building.
- If required, a fire hydrant shall be installed and in service prior to the accumulation of combustibles.
- Per the National Fire Protection Association, NFPA-1, 16.4.3.1.3: Where underground water mains and hydrants are to be provided, they shall be installed, completed, and in service prior to construction work.
- Connections into the existing water main shall be via wet tap. Excavation, backfill, and surface restoration shall be the contractor's responsibility.
- Private fire lines and hydrants shall be installed only by a Florida State Certified Fire System Contractor.
- All newly installed water distribution mains and service laterals shall be color coded blue.
- Fire department access roads shall have an unobstructed width of not less than 20 ft. The driving surface shall be maintained during all phases of construction and (FFPC-1-18.2.3.5.2) must be an all-weather driving surface capable of supporting a 32-ton emergency vehicle.
- There will be no gates across the project driveways or in the project parking lot.
- The center of a hose outlet shall be not less than 18-inches above final grade.
- The proposed installation of fire department connections shall have a sign posted meeting the requirements of 8.17.2.4.7 Signs. 8.17.2.4.7.1 Each fire department connection to sprinkler systems shall be designated by a sign having raised or engraved letters at least 1 in. (25 mm) in height on plate or fitted reading service design — for example, AUTOSPKR., OPEN SPKR., AND STANDPIPE. 8.17.2.4.7.2 A sign shall also indicate the pressure required at the inlets to deliver the greatest system demand.
- All underground fire mains shall be installed in accordance with NFPA 24, 2016 edition, "Standard for the Installation of Private Fire Service Mains and Their Appurtenances".
- Wastewater and reclaimed water service construction and materials shall comply with the "City of Orlando Engineering Services Manual, 5th Edition".
- Contractor shall field verify all existing utilities at all points of connection to, and at all areas of conflict with OUC mains prior to commencement of construction.
- Avg. Daily Potable Water Demand per F.A.C. 64E-6: (10 practitioners x 250 gpd/practitioner) + (30 employees x 15 gpd/employee) = 2,950 gpd.
- Refer to Architectural Plans, sheets P100A and E100A for fountains' plumbing and electrical requirements.
- Total irrigable acreage = 0.39 Ac.; weekly irrigation flow = 26,160 gallons; maximum flow rate = 25 gpm.

SANITARY SEWER MANHOLE
RIM=100.31'
INV.S=90.40'
INV.N=90.42'
INV.E=90.41'
(8"PVC)

SANITARY SEWER MANHOLE
RIM=100.31'
INV.SW=89.67'
INV.N=89.74'
INV.E=89.73'(8"PVC)

SANITARY SEWER MANHOLE
RIM=100.31'
INV.S=88.98'(12"PVC)
INV.E=89.02'(8"PVC)

City of Orlando Wastewater Calculation (Water Conserv II service area):
0.08 g/sf/day x 18,431 sf = 1,475 gpd.

FIRE HYDRANT CALCULATIONS:

- Building Type (IBC/IFC) = Type II-B
- Building will be sprinkled.
- Per NFPA Table 18.4.5.1.2, 18,441 sq.ft. building with Type II-B (or Type III (200) (Unprotected Ordinary) per NFPA), requires a fire flow of 3,000 gpm for 3 hours. Application of 75% reduction = 750 gpm . Thus the needed fire flow is 1,000 gpm for 3 hours.
- Per NFPA Annex I Table 1.3, one fire hydrant is required (one exists).

OUC Water Engineering Notes (Rev. 11/20/23):

The developer/customer shall accomplish all water main and service work through the point of service/control valve and water meters and deed to OUC. OUC will own and operate up to and including the OUC point of service/control valve and meters only. The required work shall be performed per current OUC guidelines. OUC Water Distribution Standard Specifications and OUC Water Distribution Material Specifications and water detail sheet under OUC inspection. The developer/customer must contact OUC Inspection at 407-649-4428 to schedule a pre-construction meeting prior to any water construction.

A minimum 4' clearance (including landscaping) must be maintained around meter assembly.

Domestic/fire master meter assembly will be provided by OUC at the developer/customers expense and shall be installed by the developer/customer. After payment, allow 30 days for receipt of the meter by OUC. The developer/customer shall arrange pickup from the OUC warehouse facility through the OUC inspector.

Contact OUC Inspection department for approved material and construction specifications pertaining to the installation of ductile iron pipe via directional or jack and bore method.

The developer/customer shall field verify the horizontal and vertical location of existing OUC water facilities before commencement of construction.

For water wet taps, use only OUC approved tapping contractors:

Action Industries, Inc. 352-732-6941 or 800-216-4464
Central Florida Tapping and Construction Services, Inc. 407-834-8271
Mac Tapping, Inc. 407-468-0557
Rangeline Tapping Services, Inc. 800-346-5971
Garrison Enterprise, Inc. 352-409-4742

Easements:

All on-site OUC water facilities (mains, services, meters, and fire hydrants) shall be located within a utility easement in accordance with current OUC private property guidelines. The developer is to furnish all necessary information, including legal description(s) to prepare and document this easement. Project work order numbers for the associated project shall be included on all legal descriptions provided. Water meters and fire services will not be activated until the final easement(s) have been received and approved by OUC. Any questions or comments please contact OUC Property and Right of Way department at 407-434-2158.

Connection to Existing valve

Contractor to verify location, condition and pressure test existing valve prior to connection. If valve does not hold required pressure test additional valve will be required at developers/contractor's expense. All pressure tests must be witnessed by an OUC inspector.

OUC Backflow Prevention Requirements:

Backflow devices will be owned and maintained by customer unless otherwise noted. Any questions contact OUC Backflow Prevention Department at 407-649-4428.

Domestic and Irrigation

The Developer/Customer is responsible for the required Reduced Pressure Backflow Preventer. Residential domestic backflow preventers are now required for all residential connections. Special irrigation meter assembly setups are required for all connections using OUC water for irrigation. These will provide customers a sewer credit for irrigation water.

Fire Line:

The Developer/Customer is responsible for the required Reduced Pressure Detector Check Assembly w/Monitoring meter for backflow prevention.

As - Built Drawings

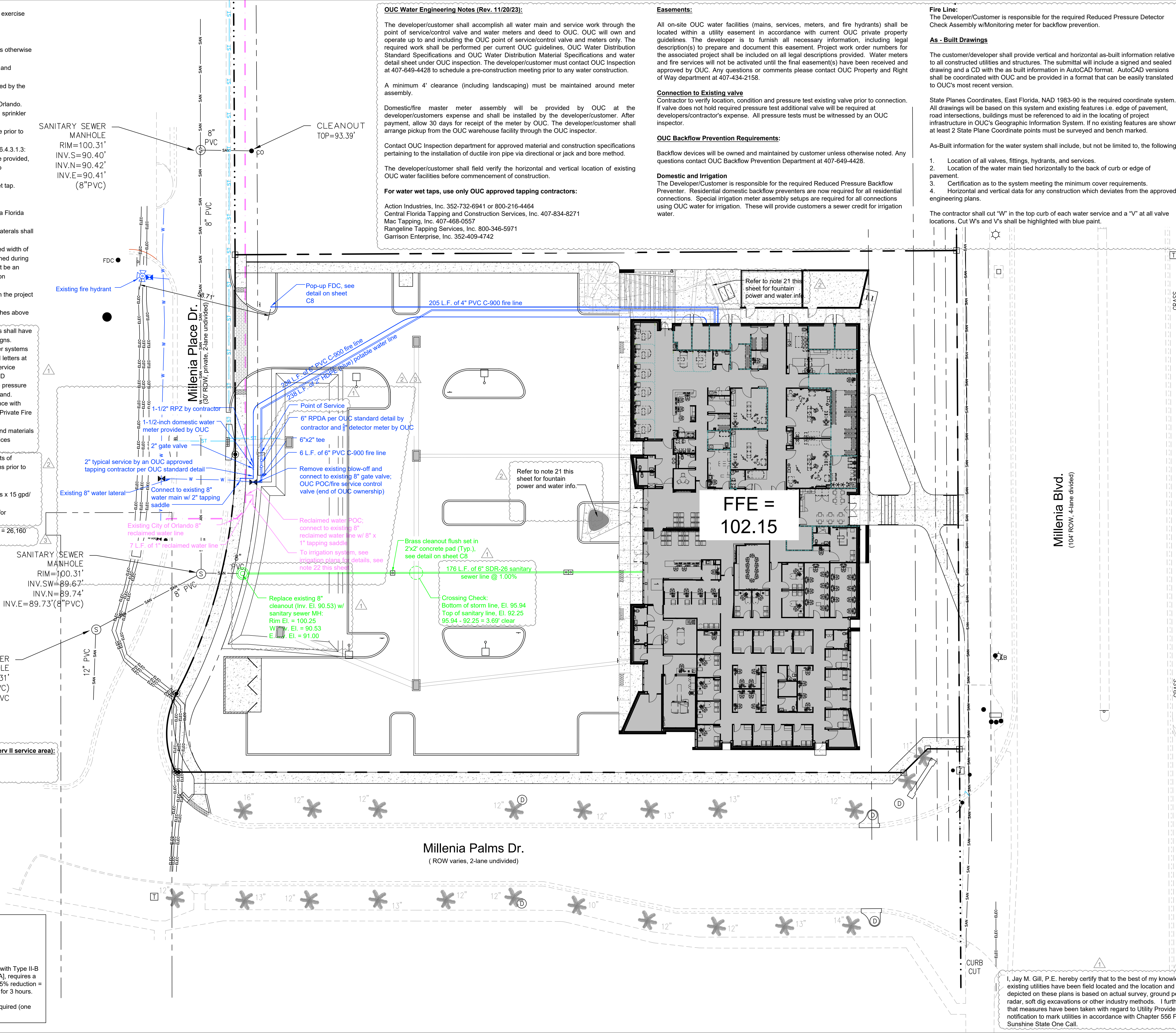
The customer/developer shall provide vertical and horizontal as-built information relative to all constructed utilities and structures. The submittal will include a signed and sealed drawing and a CD with the as built information in AutoCAD format. AutoCAD versions shall be coordinated with OUC and be provided in a format that can be easily translated to OUC's most recent version.

State Planes Coordinates, East Florida, NAD 1983-90 is the required coordinate system. All drawings will be based on this system and existing features i.e. edge of pavement, road intersections, buildings must be referenced to aid in the locating of project infrastructure in OUC's Geographic Information System. If no existing features are shown at least 2 State Plane Coordinate points must be surveyed and bench marked.

As-Built information for the water system shall include, but not be limited to, the following:

- Location of all valves, fittings, hydrants, and services.
- Location of the water main tied horizontally to the back of curb or edge of pavement.
- Certification as to the system meeting the minimum cover requirements.
- Horizontal and vertical data for any construction which deviates from the approved engineering plans.

The contractor shall cut "W" in the top curb of each water service and a "V" at all valve locations. Cut W's and V's shall be highlighted with blue paint.



FFE =
102.15

Millenia Blvd.
(104' ROW, 4-lane divided)

Millenia Palms Dr.
(ROW varies, 2-lane undivided)

PLANENG INC

Board of Professional Engineers
Certificate of Authorization
No. 26432

Pensacola:
501 Fitzgerald Street
Pensacola, FL 32505
T (850) 444-9493

Tampa:
3737 Lake Joyce Dr
Land O Lakes, FL 34639
T (813) 962.1752

Issue / Revisions

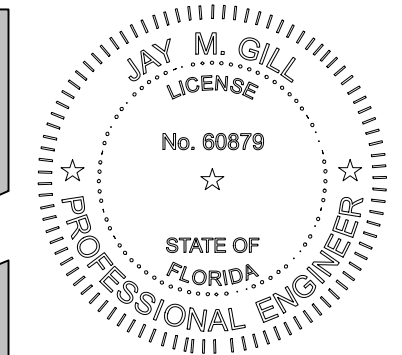
- 5-14-26, Revised per City of Orlando staff review comments.
- 7-17-26, Revised per OUC review comments; added notes for future fountains.
- 8-3-26, Revised per City of Orlando staff review comments.



Scale
1" = 20'

Deuk Spine of Orlando

PLANENG INC



Reviewed by
JMG/RMO

Plan Description
Utilities Plan

Sheet No.

C6

I, Jay M. Gill, P.E. hereby certify that to the best of my knowledge all existing utilities have been field located and the location and elevation depicted on these plans is based on actual survey, ground penetrating radar, soft dig excavations or other industry methods. I further certify that measures have been taken with regard to Utility Providers' notification to mark utilities in accordance with Chapter 556 F.S., Sunshine State One Call.