

Your Guide To
Development
Services

OUC 
The *Reliable One*®

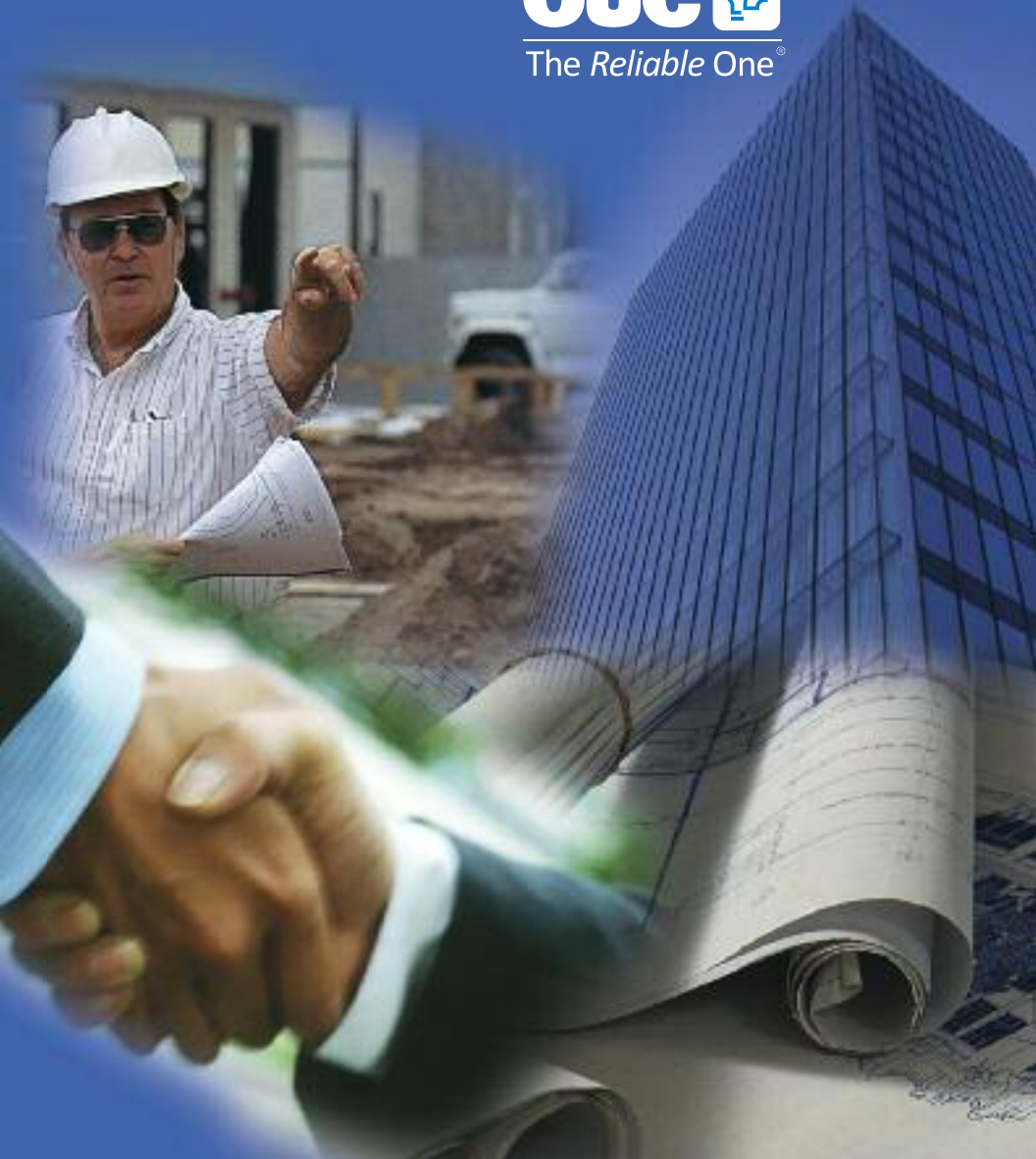


Table of Contents

	SECTION
Introduction.....	1
Project Development Process.....	2
Critical Dates for Services	3
Demolition Procedures	4
Obtaining Potable Water Service	5
Obtaining Reclaimed Water Service.....	6
Obtaining Chilled Water Service.....	7
Obtaining Domestic and Chilled Water Submetering Services.....	8
Obtaining Electric Service.....	9
Obtaining Lighting Service	10
Obtaining OUC Specifications.....	11
Meter Set Request Guidelines.....	12
Important Phone Numbers	13

The procedures and information described in this guide were OUC—The Reliable One requirements at the date of publication and are subject to change. OUC personnel should be contacted for the latest requirements in effect.

Introduction - Section 1

OUC—The Reliable One and its Development Services Department have produced this guide to provide you with the most complete and current information available to help you plan the connection of your new construction project with our utility services.

We realize that any successful development – commercial or residential – requires cooperation and scheduling among many entities, including owners, developers, consultants and contractors. To make that process as smooth as possible, this guide provides step-by-step procedures for ensuring your project’s success from the design and construction stages through the delivery of utilities.

To further assist you, OUC’s Development Services Department will assign a Project Coordinator who will serve as your initial point of contact with OUC’s engineering staff. Your Project Coordinator will help answer any questions you might have about OUC’s involvement in your project.

You can also obtain design guidelines for OUC electric and water services by visiting the OUC website at www.ouc.com in the Development Services section.

If your development project is a high density, multi-use, condo high-rise or downtown development, OUC requests that you please schedule a meeting with our department to go over your preliminary design prior to your submittal of final application for permits with the respective government agency. This will help ensure your design will meet OUC’s electric and water infrastructure requirements prior to completing the permitting process.

Our goal is to provide you with all the information you need to establish OUC services in a prompt and timely manner. At OUC, we are happy to assist you and look forward to working with you on your new development project.

Helpful contact numbers are provided on the last section of this guide.

OUC Services

OUC provides the following services within the City of Orlando:

- **Electric**
- **Potable Water**
- **Reclaimed Water Meter Installation**
- **Outdoor Lighting Services**
- **Chilled Water Services and Metering**
- **Indoor Lighting Services**

OUC provides the following services in parts of unincorporated Orange County:

- **Electric**
- **Potable Water**
- **Outdoor Lighting Services**
- **Chilled Water Services and Metering**
- **Indoor Lighting Services**

OUC provides the following services in the St. Cloud area:

- **Electric**
- **Outdoor Lighting Services**
- **Chilled Water Services and Metering**
- **Indoor Lighting Services**

OUC provides the following services in parts of unincorporated Osceola County:

- **Outdoor Lighting Services**
- **Chilled Water Services and Metering**

Project Phase	Developer Activities	OUC Responsibilities
Project Planning and Initiation	<ul style="list-style-type: none"> • Land Acquisition • Financing • Zoning/Permitting • Hire Engineer/Contractors 	<ul style="list-style-type: none"> • Provide Letter of • Service Availability
Engineering, Design and Estimating	<ul style="list-style-type: none"> • Review Design Guide lines at www.ouc.com • Plan Development • Permit Applications • Initial Review by Permitting Authority • Send Plans to OUC Development Services • Approve Easements Agreement • Pay OUC for Temporary Power and Water Services • Pay OUC for Infrastructure Additions and Inspections • Submit Address Sheet 	<ul style="list-style-type: none"> • Review Preliminary Plans When Applicable • Receive Final Plans • OUC Team Assigned to Project 30 Working Days of Receipt of Plans • Initiate Project Tracking • Engineer Contacts Customer Within 15 working days of Receipt of Plans • Generate Easements Agreement • Generate Infrastructure Cost and Process Payment
Construction	<ul style="list-style-type: none"> • Water Pipe and Electric Conduit System Installation • Comply with OUC Specifications • Obtain DEP Approval • Request Inspections by Permitting Agencies 	<ul style="list-style-type: none"> • Project Tracking • Support Project Schedule • Provide Temporary Power and Water (if available) • Inspect for OUC Specification Compliance • Install Permanent Electric Equipment
Service Initiation	<ul style="list-style-type: none"> • Provide Official Address Sheet/Service Address • Pass Inspection by Permitting Agencies • Pass OUC Inspections • Request Service • Activation 	<ul style="list-style-type: none"> • Set Meters • Turn On Service • Initiate Billing

OUC Critical Dates

Date needed or completion expected. Dates obtained during pre-construction meetings.

ELECTRIC:

Dates	Temporary Construction Power
_____	1. Request for temporary electric service (Customer)
_____	2. Installation of temporary metering facilities (Customer)
_____	3. Installation of temporary electric service (OUC)
_____	4. Electrical Inspection Clearance (Customer)
_____	5. Temporary meter set (OUC)
	Permanent Power
_____	1. Request for permanent electric service (Customer)
_____	2. Electric conduit system design layout (OUC)
_____	3. Conduit system installation start (Customer)
_____	4. Conduit system installation complete (Customer)
_____	5. Conduit system accepted (OUC)
_____	6. Construction schedule (2 weeks process) (OUC) (see Note 1)
_____	7. Construction start (OUC)
_____	8. Construction complete (OUC)
_____	9. Electrician's work complete (Customer)
_____	10. Inspection clearance by city/county (Customer)
_____	11. Request OUC account setup (Customer)
_____	12. Permanent power need date (Customer)

WATER:

Dates Temporary Water Service for Construction

- _____ 1. Request for temporary water service (Customer)
(See Note 2)
- _____ 2. Plan showing service location and meter size (Customer)
- _____ 3. Water services installation and meter set (OUC)

Permanent Water Service

- _____ 1. Final Engineering Plans Submitted (Customer)
- _____ 2. FDEP application submission completed (Customer)
- _____ 3. Water services and inspection cost letters submitted (OUC)
- _____ 4. Submit payment for inspection and water services (Customer)
- _____ 5. Water pre-construction meeting (OUC)
- _____ 6. Construction start (Customer)
- _____ 7. FDEP clearance (Customer)
- _____ 8. Water services (domestic/irrigation/reclaimed/fire) (OUC)

LIGHTING:

Dates

- _____ 1. Conduit layout for OUC lighting needed (OUC)
- _____ 2. Lighting conduit system installed (Customer)
- _____ 3. Lighting conduit system inspected (OUC)
- _____ 4. Schedule installation of cable, poles, etc. (OUC)
- _____ 5. Start installation of cable, poles, etc. (OUC)
- _____ 6. Energize lighting services (OUC)

Note 1: After the conduit system is installed and accepted by OUC, allow 2-3 weeks for OUC to start construction. Customer must allow OUC sufficient time to install the required cables and transformers. This will enable OUC to provide electric service in a matter of days after OUC receives the final electrical inspection, assuming the customer has contacted OUC Commercial Services to order the meter installation.

Note 2: Permanent water service can be provided prior to construction; however, metered water service can be temporarily provided from a public fire hydrant in the vicinity of your project. Construction projects and other activities that need water service for a limited time period can benefit from this service.

Demolition Service

General Information

Demolition is the first step necessary to prepare a site for construction. Site preparation includes the removal of existing buildings and the utilities connected to them. All requests for demolition will be through Development Services Department.

It is the responsibility of the customer to obtain all required approvals from the local government agency before a demolition takes place. A demolition process cannot proceed until the party responsible for the OUC utilities accounts has contacted Development Services to turn off all services. The customer needs to request removal of OUC services at east twenty (20) working days prior to the demolition process. OUC is not responsible for injuries and/or damages to persons and structures as a result of the demolition project.

Disconnection of Services

The customer is responsible for:

- Submit a complete demolition permit application from the local government agency
- Ensure that the responsible party contact OUC to turn services off
- Provide addresses of dwellings to be demolished
- Provide all electric and water meter numbers
- Provide type of dwelling to be demolished:
 - a. Single Family
 - b. Duplex
 - c. Apartment Complex
 - d. Condominium
 - e. Commercial Property
- The word DEMO must be marked/painted on the structure, and be visible from the street
- Indicate the removal of the following services:
 - a. Water Meters
 - b. Water Fire Protection
 - c. Pad-Mounted Transformers
 - d. Public and/or Private Streetlights
- Physical disconnection of underground secondary cables at the pad-mounted transformer. Customer must contact **OUC's Standby Services** at **(407) 434-4111** to have access to transformer.

House Moving

A House/Building move entails the relocation of such dwelling from one location to another. The customer must obtain a House Move permit from the required local government agency. If the building is located within OUC's Service Territory, the customer is required to contact OUC Development Services for coordination.

A Route Sheet with information such as loaded height, width, move time

and details of the route must be provided. OUC engineers will determine if there is any OUC equipment along the route that may have to be temporarily relocated in order to accomplish this move. OUC will notify you in writing of any charges for relocating equipment and/or providing an OUC escort during the move. OUC cannot sign off any moving permit until these charges are paid. After payment is received, OUC will require a minimum of 48 hours advance notice before the move.

How to Obtain Potable Water Service:

General

All applications for new water service will be through Development Services Department. The developer, coordinating with OUC, will design the water facilities, including mains, domestic and irrigation services, and fire protection services as necessary. The design will take into account main sizes necessary to maintain the integrity of OUC's distribution system.

All mains and facilities to be deeded to OUC to own and maintain shall be installed within the public right-of-ways or on appropriate easements. OUC will consider owning and maintaining water facilities on private property with appropriate easements when they are advantageous to the integrity of OUC 's system.

Before a new service can be provided by OUC, the developer must provide to OUC appropriate approvals from the Fire Department, Department of Environmental Protection (DEP), local government agencies or any other authority whose approval is required by law. Please refer to the design guidelines for water service prior to submitting final application for permits. The Design Guidelines are located at www.ouc.com *under Your Business, then Development Services, then Design Guidelines.*

Water Infrastructure Installation Options

Typically, the developer is responsible for installing the water distribution system, standard metered and nonmetered services. All material and installation must meet the specifications of OUC. All construction must be performed under the inspection of OUC and in compliance with OUC's approval plan.

OUC may choose whether the developer or OUC installs water facilities. The developer must coordinate with OUC Water Engineering Department as to which alternative to choose.

Developer Installs Option

- The developer installs the water distribution system, connects to an existing water main and installs service lines and curb stop. All per OUC specifications and under OUC inspection.

- Only OUC Approved Tapping Contractors are permitted to tap OUC water mains. OUC Water Engineering Department can provide the list of contractors.
- New Water Facilities will be deeded to OUC
- OUC installs meter and meter box

OUC Installs Option

- OUC installs complete service which includes the connection to the water main, service line, curb stop, the meter and meter box Please refer to Section 12 for additional information to obtain an OUC Water Distribution Construction Manual.

Water Infrastructure Installation Cost

The developer is required to pay 100% in advance for the installation cost for new water facilities as designed. Such costs include:

- The costs to connect to the existing distribution system. These costs include all labor, equipment and materials necessary to provide a suitable tap. If installation is done through the “Developer Installs” option, this cost must be paid to an OUC Approved Tapping Contractor
- Inspection fees required by OUC
- All costs associated with bacteriological testing and clearance by DEP as determined by OUC
- Other related fees if applicable

Standard Metered Service Cost

Metered service cost includes a connection charge, meter charge, and a System Development Charge (SDC). The developer is required to pay this fee in advanced.

Connection Charge

OUC will provide a service line capable of serving the size of the meter installed. The connection charge is the cost to furnish and install all appurtenances from the distribution main to and including the meter and meter box (“OUC Installs” Option). If the developer installs the service line and curb stop to OUC specifications, and at OUC’s request, only the applicable portions of this charge are collected.

System Development Charges (SDC)

The SDC is designed to recover a portion of the amount of investment required for water system facilities caused by growth. This charge is assessed on all new metered connections that create additional demands on the system, and any existing meter connections that have a significant increase in flow as determined by OUC. This charge is applied based on the associated customer capacity requirements, which is measured in Equivalent Residential Connections (ERCs). The ERC concept defines all other uses as either a percentage or multiple of the estimated single-family water use.

Any inquires regarding the most current fees should be directed to Development Services **407.236.9651**.

Residential Water Meters

Residential Water Metered service cost includes the connection charge, the meter cost and the residential SDC fee. The developer is responsible for the required backflow device.

If reclaimed water facilities are installed, then OUC is responsible for installing the required backflow device at an additional cost.

Commercial Water Meters

Commercial Water Metered service cost includes a connection charge, a meter and the respective commercial SDC fee. The developer is responsible for the required backflow prevention device.

New Water Infrastructure Acceptance

Water facilities installed by the developer will be deeded to OUC after installation. OUC will own and maintain the water facilities up to and including the meters and/or OUC's Fire Service control valve. All portions of the installed water system will be fully guaranteed against material defects or improper workmanship for one year from written acceptance by OUC. Any repairs made by OUC during this warranty period will be charged to the developer. The warranty will be extended for one year on all repairs.

Portable Metered Service (Fire Hydrant Meter):

Metered water service can be temporarily provided from a fire hydrant anywhere a permanent water meter is not available. Construction projects and other activities that need water service for a limited time period can benefit from this service.

The customer is required to set up an account at the OUC Gardenia Service Center located at 3800 Gardenia Avenue, Orlando, Florida. The portable meter can be picked up at the same location. A deposit fee is due at the time of application. In addition to completing the financial arrangements, the customer will be asked to provide the following information:

- Exact location of the fire hydrant to be used (Address, or cross street names, and on which side of the street.)
- Name and telephone number of a project contact person.

Fire Flow Test

If a customer needs to obtain a fire flow test and pressure information from any OUC-owned hydrant, the customer is required to schedule an on-site appointment by calling the Water Distribution Dept at **407.434.2530**. There is a nominal fee for performing the test.

Before calling for a test, the customer must know the address for which the pressure information is needed or the location with respect to a cross-street if there is no known address.

Process for Obtaining New Water Services - General Checklist:

The Customer is responsible for:

1. ____ Design of On-Site Water Facilities in compliance with OUC (Refer to the Design Guidelines at www.ouc.com) _____
2. ____ Material Specifications (Refer to OUC's **Water Distribution Construction Standards Manual**) _____
3. ____ Breakdown of Total Flow Requirements in GPM _____
4. ____ Provide OUC with Approved Civil Plans Showing Fire Protection, Domestic and Irrigation Services _____
5. ____ For Residential Multi-Family dwellings, submit number of units and number of bedrooms per unit. _____
6. ____ Acreage to be Irrigated _____
7. ____ Installation and Testing of Back Flow Prevention Devices _____
8. ____ Provide OUC with 15-foot Corridor Easement for Mains, Services and Fire Hydrants _____
9. ____ Payment of Inspection Fees to OUC Development Services _____
10. ____ Approved Pipeline Contractor (Developer Installs Option) _____
11. ____ Schedule Pre-Construction meeting (Developer Installs Option) _____
12. ____ Provide OUC a Guaranty of Performance (Developer Installed Facilities) _____
13. ____ Approval from Appropriate Fire Department _____

- 14. ____ Approval from Appropriate Local Permitting Authority _____
- 15. ____ Approval from Appropriate Local Permitting Authorities _____
- 16. ____ Provide Development Layout and Address Sheet to **OUC Development Services** _____

Prior to Setting Water Meters, Developer Must Provide the Following to OUC Water Engineering and Technical Services.

- 17. ____ DEP Certification of Clearance Letter _____
- 18. ____ Project “As-Built” Drawings _____
- 19. ____ Project List of Material Quantities and Cost Breakdown _____
- 20. ____ Executed Easement, Guaranty of Performance, Deeded Improvements _____

Prior to Setting Water Meters, Customer Must Provide the Following to OUC Development Services

For Commercial Applications

- 21. ____ Provide Addresses, Suite of Unit Numbers _____
- 22. ____ Submit Payments and Completed Billing Form _____

For Residential Applications

- 23. ____ Submit address sheet of residential subdivision with lot numbers and street addresses _____

Please refer to Section 13 for additional information on Residential and Commercial Meter Set Requests

How to Obtain Reclaimed Water Service:

All applications for installing new reclaimed water infrastructure will be through the City of Orlando Waste Water Department. The customer is responsible for coordinating with the City of Orlando Waste Water Department the design and installation of the reclaimed water facilities, including mains and reclaimed services. The City of Orlando owns, operates and maintains all reclaimed water facilities.

All applications for installing and providing reclaimed water meters will be through OUC Development Services. OUC installs and provides reclaimed water meters and meter boxes within the City of Orlando limits.

OUC installs up to a two (2) inch reclaimed meters. For reclaimed meter installation greater than two (2) inch services, the customer shall coordinate its installation with the City of Orlando. OUC still shall provide the reclaimed meter.

For reclaimed water availability, and reclaimed water design and construction specifications inside the City of Orlando limits, the customer should contact the City of Orlando's Waste Water Department at 407.246.2213.

For reclaimed water availability and reclaimed water design and construction specifications outside the City of Orlando limits, the customer should contact Orange County Utilities at 407.254.9680.

New Reclaimed Water Infrastructure Acceptance

Reclaimed water facilities installed by the customer must be inspected and accepted by the City of Orlando before customer requests reclaimed meters from OUC.

Reclaimed Metered Service Cost

The customer is required to pay the metered service costs fee in advanced to OUC. All other costs pertaining to installation of reclaimed facilities and inspection should be arranged with the City of Orlando Waste Water Department.

Residential and Commercial Reclaimed Meters

Metered service cost includes a connection charge, the meter and the meter box.

Process for Obtaining Reclaimed Water Services - General Checklist

The Customer is responsible for:

1. ____ Design of On-Site Reclaimed Water Facilities compliance with the City of Orlando _____
2. ____ Provide OUC with Approved Plans Showing Reclaimed Water Services with location and size of Reclaimed Meters _____
3. ____ Approval and Acceptance of Reclaimed Water Facilities by the City of Orlando _____

Prior to Setting/Providing Reclaimed Water Meters, Customer Must Provide the Following to OUC Development Services

For Commercial Applications

4. ____ Provide Addresses, Suite or Unit Numbers _____
5. ____ Submit Payment and Completed Billing Form _____

For Residential Applications

6. ____ Submit address sheet of residential subdivision with lot numbers and street addresses _____

Please refer to Section 13 for additional information on Residential and Commercial Meter Set Requests

How to Obtain Chilled Water Service:

OUCooling provides chilled water service for air-conditioning to large commercial and high-density residential complexes inside and outside OUC electric & water service territories. This innovative and reliable service enables property owners to outsource the production of chilled water for their air-conditioning needs, eliminating the cost of chiller equipment operation and maintenance.

By entering into a Chilled Water Service Agreement with OUC, developers will avoid the upfront capital costs of the chillers and maximize saleable space by reducing mechanical room space requirements.

The availability of chilled water service varies. Applications for OUC chilled water service may be made through OUC Development Services or directly to OUCooling.

Chilled Water Services Design Information

The customer must contact OUCooling at the earliest stages of project development (schematic phase) for design review and construction coordination. The customer will be required to submit MEP, Civil Utility, and Architectural drawings including a site plan showing finished grade elevation, proposed location of mechanical/pump room, and building elevations.

The customer is responsible for designing, constructing, and operating the building HVAC chilled water system including the determination of the air conditioning load (tonnage). The building chilled water system and piping arrangement must be designed to ensure proper functionality and compatibility with the OUC Chilled Water System and chilled water metering.

Please refer to Section 12 for additional information to obtain an OUC Chilled Water Design Information, Construction, and Connection Requirements.

Chilled Water Infrastructure Installation

OUCooling will typically install chilled water supply and return piping from the existing OUC Chilled Water System located in the Right-of-Way to the nearest point on the customer's property line. The customer will be required to install the remaining piping into the building to the chilled water pump room. OUCooling will install the chilled water metering equipment inside the building chilled water pump room. OUCooling will review each project to determine feasibility prior to entering into an Chilled Water Service Agreement.

OUCooling requires specific construction schedule information and construction coordination in order to ensure timely delivery of chilled water service. The customer must instruct its contractor to integrate the required OUC chilled water construction activities into the building construction schedule.

New Chilled Water System Acceptance

The customer is responsible for the pre-operational chemical cleaning and flushing of the entire building chilled water system piping including the branch piping to individual fan coil units, air handlers, instrumentation connections, valves, drains, vents, and dead end runs prior to the initiation of chilled water service by OUC. This procedure is necessary to ensure the proper operation of the building chilled water system and to prevent contamination of the OUC chilled water system and metering equipment.

After the system is cleaned and flushed with clean potable water, the customer must submit documentation certifying the cleanliness and treatment for review and acceptance. This documentation must be prepared by a qualified chemical cleaning/treatment contractor.

OUC District Chilled Water System Operating Parameters

Special consideration must be given to ensure that the building chilled water system is designed and constructed to operate with the following typical parameters:

- OUC Chilled Water Supply Water Temperature (39 – 42 deg F)
- Differential Temperature of 15 deg F
- OUC Chilled Water Supply Pressure (varies by District, contact OUCooling)

OUC strongly recommends the use of high quality HVAC hydronic components to ensure the building chilled water system performs as required and is compatible with the OUC Chilled Water System.

Please contact OUCooling to determine the requirements for your project.

OUC Chilled Water Metering Equipment

OUCooling will furnish and install the Chilled Water Master BTUH Meter. The customer is required to provide adequate space and conditions for all equipment provided and maintained by OUC. The customer is required to install and provide electric power to the metering equipment including power for any auxiliary equipment required for the building design.

The Chilled Water Master BTUH Meter and required auxiliary equipment will vary depending of the elevation of the proposed building compared to the elevation set point established for the OUC Chilled Water System in a particular District. This is due to the pressure exerted on the OUC system from the water column of the building chilled water return riser. Below are the typical arrangements:

Standard Chilled Water Master BTUH Meter

This arrangement is used when the elevation of the highest point in the building chilled water system is less that the highest elevation specified for the OUC District. The equipment includes a flow meter, temperature sensors, control valve and a “Control Package” computer. The metering equipment is connected to the OUCooling chiller plant via a fiber optic link.

The flow meter is an insertion type turbine meter that requires 10 pipe diameters of straight run upstream and 5 pipe diameters of straight run down stream. This requirement along with the location of a bypass, control valve, and pressure reducing valves will affect the space requirements and piping design of the customer system.

Chilled Water Master BTUH Meter with Pressure Reducing Valve

This arrangement may be used when the elevation of the building is higher than the highest elevation specified for the OUC District, but the column height pressure is below 120 psig. The equipment includes Pressure Reducing Valves (PRVs), flow meter, temperature sensors, control valve, and a “Control Package” computer. The use of PRVs will affect the available OUC chilled water supply pressure.

Chilled Water Master BTUH with Heat Exchangers

If the elevation of the highest point of the building chilled water system results in a pressure on the OUC chilled water system greater 120 psig, physical de-coupling will be required. This is accomplished by the use of 2 – 60% capacity plate and frame heat exchanges with 2 – 60% OUC supply side booster pumps. The equipment also includes a flow meter, temperature sensors, control valve and a “Control Package” computer.

The supply and installation of heat exchangers is dependent upon the terms and conditions of the Chilled Water Service Agreement.

The heat exchanger design required by OUC consists of equipment that has a significant operating weight and space requirements.

Chilled Water Master BTUH Meter Electronics aka “Control Package”

The “Control Package” computer is a Siemens DDC applicable to all master BTUH meter configurations. This equipment is strictly for the monitoring and control of the OUC metering equipment. It requires 110 volt ac on a clean/dedicated circuit. Customer chilled water pumps VFDs must be mounted at least 10 feet away from the “Control Package” computer.

Please refer to Section 12 for additional information to obtain OUC Chilled Water Design Information, Construction, and Connection Requirements.

OUC Chilled Water Submetering

OUC provides chilled water submetering services for individual units or tenant spaces downstream of the chilled water master BTUH meter. With a separately executed Chilled Water Metering Agreement, OUC can provide the submeters, meter reading, and billing services. Please refer to Section 8 of this Guide for additional information to obtain this service.

Submetering consists of conventional domestic water meters on individual fan coil units and are used in conjunction with the Chilled Water Master BTUH Meter for allocation of the chilled water costs. The submeters are installed and insulated by the customer. The customer may also be required to purchase the meters depending on their use.

Customer Supplied Equipment

The customer is responsible for providing, installing, operating, and maintaining all equipment required to distribute chilled water and cooled air within the building. This includes chilled water distribution pumps and their VFDs.

Please contact OUCooling to review the required equipment for your project.

Process for Obtaining Chilled Water Services - General Checklist

The Customer is responsible for:

1. ____ Contact OUC Cooling early in the schematic design phase of the project. Provide air condition load (tonnage) estimate, MEP, Civil, and Architectural Drawings including site plan. Continue coordination of design through issue of construction documents. _____

2. ____ Provide construction schedule including need date for chilled water service. _____

3. ____ Execute an OUC Chilled Water Service Agreement and OUC Chilled Water Submetering Agreement (If applicable). OUCooling cannot begin any procurement or construction activity until an Agreement has been executed by both parties. _____

4. ____ Coordinate construction activities with OUC. _____

5. ____ Establish Chilled Water Billing Account(s) with OUC. The customer's contractor usually establishes the initial billing account until building turnover. _____

6. ____ Clean and Flush the Entire Building Chilled Water System Piping and submit certification documentation. _____

7. ____ Provide Addresses, Suite, and/or Unit Numbers for submetering if applicable. _____

How to Obtain Electric Service:

General

OUC Electric Distribution Engineering Department will approve the availability of service, point of delivery and service characteristics for new commercial and residential development. Refer to the Design Guidelines for Electric Service prior to submitting final application for permits. The Design Guidelines are located at www.ouc.com under Your Business, then Development Services, then Design Guidelines. The owner/developer must contact Development Services at the earliest possible opportunity in the electrical design stage to ensure that appropriate accommodations of OUC electrical facilities are suitable to the project.

OUC Electrical Engineering requires specific construction schedule information and construction coordination in order to ensure timely deliver of electric service.

Overhead Service

Residential and Commercial

OUC provides the service to the weatherhead, including the connections at the weatherhead for commercial and residential buildings. All facilities beyond the connection at the weatherhead belong to the customer. The customer shall supply a suitable point of attachment for the overhead service.

Underground Service

OUC offers underground electric distribution facilities in lieu of overhead facilities for residential and commercial development with the financial assistance of the owner/developer.

OUC Electric Distribution Engineering Department will design the most economical underground distribution system compatible with existing and planned facilities. The location of all equipment including transformers, switchgear, manholes and pullboxes will be specified as part of the underground electric system design.

The customer shall provide OUC with suitable space at a mutually acceptable location to accommodate the necessary facilities required to supply power to the project. Space requirements will vary dependent of the project's load requirements.

The customer shall provide final engineering plans as approved by the government agency and must include the following details:

- Property Lines
- Topographic Lines
- Landscape plan
- Easement to be dedicated
- Paved areas (i.e. streets, parking and driveway locations)

- Drainage (i.e. storms drains, retention areas)
- Existing and proposed utilities (i.e. water, sewer, reclaimed, gas, electric telephone and TV cable)
- Legal property description
- Total load requirements and service main size (Power Riser diagram)

Residential Subdivisions

OUC will furnish and install the primary conductor, transformers, switchgear, meters and the associated primary terminations for subdivision development (5 or more houses on contiguous lots) and new single-family residences. OUC will furnish and install the electrical service (lateral) to the line-side connections of the meter base. The owner/developer furnishes and installs all of the primary and secondary conduit system, the transformer and switchgear pads, primary pull boxes, secondary junction boxes and approved meter bases. Installation will be to OUC specifications with the inspection performed by an OUC inspector. The owner/developer will provide OUC with a standard easement to OUC specifications.

The owner/developer shall provide electrical requirements and locations for additional services other than the residential lots themselves. Services include but are not limited to:

- Lift stations
- Trash compactors
- Irrigation controllers
- Fountains
- Pools
- Signage/lighting
- Clubhouse
- Recreational areas

Other Residential Development

In apartment, condominium, and townhouse development, OUC will furnish and install the primary conductor, transformers, switchgear, meters and associated primary termination. The owner/developer furnishes and install all of the primary and secondary conduit system, the transformer and switchgear pads and pull boxes. Installation will be to OUC specifications with the inspection performed by an OUC inspector. The owner/developer will provide OUC with a standard easement to OUC specifications. The owner/developer furnishes and install all secondary facilities including meter bases approved by OUC.

Commercial

OUC furnishes and installs the transformers, switchgear, primary conductor and other necessary primary material. The owner/developer furnishes and installs the transformer and switchgear pads, transformer vault rooms, primary and secondary conduit systems, and meter bases to OUC specifications with the inspection by an OUC inspector. All secondary facilities including secondary lugs, spade extensions and connections at the transformer are the owner/developer's responsibility. The owner/developer must provide OUC a general easement on his property and within buildings for placement and maintenance of the facilities as needed.

For secondary underground services from an overhead pole line, the owner/ developer is responsible for furnishing and installing the entire service lateral installation including all conduit, conduit riser, weather-head, conductor and meter base to OUC specifications.

In cooperation with the owner/developer, OUC will designate the location of pad-mounted transformers and switchgear, and the route of primary voltage conductors.

Relocations

Any proposed development in conflict with existing OUC electric facilities must be identified during design stages of the project to insure an orderly adjustment or relocation of the facilities in question. The owner/developer will be responsible for all costs incurred to effect the modifications required. OUC reserved the right to maintain its facilities in place until these conditions have been satisfied and must be given sufficient time to construct or rebuild its facilities.

Temporary Electric Service for Construction

Temporary services are provided for construction purposes. If facilities have to be temporarily extended to provide the service drop, the owner/developer is required to pay, in advanced, the cost of the extension. These costs are determined by Electric Engineering and include all labor, overhead and non-salvageable material costs associated with the installation and removal of the facility, excluding the cost of the service drop itself.

Please refer to the OUC Electric Metering Installation Requirements Manual for specifics relating to metering requirements.

Please refer to Section 12 for additional information to obtain an OUC Electric Distribution Construction Specifications.

Process for Obtaining Electric Services - General Checklist

The Customer is responsible for:

- 1. ___ Design of On-Site Electric Facilities (Refer to the Design Guidelines at www.ouc.com) _____
- 2. ___ Material Specifications (Refer to OUC's **Electric Distribution Standards and Specifications**) _____
- 3. ___ Provide OUC with the Following Information: _____
 - a. ___ Project Schedule, Including the Power and Conduit System Installation Need Dates _____
 - b. ___ Electrical Voltage, Total Load and Demand Requirements _____
 - c. ___ Main Disconnect Size _____
 - d. ___ Approved Plans: _____
 - e. ___ Utility Site Plan _____
 - e. ___ Power Riser Diagram _____
 - e. ___ Landscape Plan w/Storm Water Retention _____
 - e. ___ Site Lighting Plan _____
- 4. ___ Provide OUC Standard 12-foot Easement (or as Specified by the OUC Engineer) _____
- 5. ___ For **Underground Service**, Furnish and Install: _____
 - ___ Primary & Secondary Conduit Systems _____
 - ___ Secondary Conduit System (for Commercial and Multi-family buildings) _____
 - ___ All Secondary Facilities (for Commercial and Multi-family buildings) _____
 - ___ Transformer Pads (and/or Vaults) _____
 - ___ Primary Pull Boxes/Manholes _____
 - ___ Secondary Junction Boxes _____
 - ___ Approved Meter Bases (Refer to OUC's **Electric Metering Installation Requirements**) _____

- ____ Street Light Conduit & Junction Boxes _____
- 6. ____ For Overhead Service, Furnish and Install All Facilities Beyond the Connections at the Weatherhead _____
- 7. ____ Approved Licensed Electrical Contractor _____
- 8. ____ Compliance with All OUC Specifications _____
- 9. ____ Permit from Appropriate Local Permitting Authority _____

Prior to setting Electric Meters Customer Must Provide the Following to OUC Development Services

- 10. ____ Provide Addresses, Suite or Unit Numbers _____
- 11. ____ Submit Payments for:
 - a. ____ OUC Line Extension Costs _____
 - b. ____ OUC Construction & Material Cost _____
 - c. ____ Temporary Electric Service _____
- 12. ____ Request for Final Inspection and Clearance from Local Permitting Authority _____
- 13. ____ Account Creation and Request Meter Installation _____

Please refer to Section 13 for additional information on Residential and Commercial Meter Set Requests.

How to Obtain OUConvenient Lighting

General

OUConvenient Lighting provides complete outdoor lighting services for a wide spectrum of commercial and residential applications - from industrial parks to residential developments inside and outside OUC electric boundaries. Offerings include traditional streetlights, highly efficient optical systems for parking lots and elegant residential lampposts. All initial applications for lighting services will be made through OUC Development Services.

With an executed Agreement, OUC designs, purchases, and installs the lighting system which includes setting the poles, installing the fixtures, providing and pulling the cable, and making connections to OUC transformers.

Upon installation of the lights, OUC will own and maintain the lighting system over the term of the Agreement. The customer pays OUC back for the capital investment, fuel, energy, and maintenance of the lighting system on their monthly utility bill during the term of the Agreement.

Public Lighting

OUConvenient Lightning designs and installs outdoor lighting services for governmental agencies inside OUC electric boundaries. Public lighting includes streetlights for public local and major roadways, and non-gated residential communities.

MSTU and MSBU Lighting Services

MSTU or MSBU arrangements can be established for residential subdivisions that do not have gates. Customers who prefer MSTU or MSBU lighting programs must coordinate with the respective local government agency. The customer is responsible for working directly with the local government agency to determine the type of light fixtures and poles desired for the community.

The local agency submits to OUConvenient Lighting a Governmental Agency Street Light Request Form (SLRF) for OUC to facilitate the design, and installation of the lighting system. . The customer is responsible for installing the conduit system, junction boxes, and bases. In addition, the local agency is responsible for setting up an account for billing the investment, energy and maintenance of the system.

Within the City of Orlando boundaries only, the customer can choose an OUC decorative light fixture and pole over the standard streetlight offered. The customer must execute an Agreement with OUC for the difference between the selected pole and fixture and the standard streetlight offered by the local agency.

Private Lighting

OUConvenient Lighting designs and installs private lighting services inside and outside OUC boundaries. Private lighting includes gated residential subdivisions, commercial parking lots and garages, ball fields and site lighting.

Small Projects

Small projects consist of up to four streetlight fixtures. The customers can request up to four streetlights in areas where OUC power poles and overhead lines are available. The customer must pay up front to OUC the installation of the overhead wire, poles and fixtures. In addition, the customer is responsible for setting up an account for billing fuel, energy and maintenance of the lighting system.

Large Projects

Large projects consist of five or more light fixtures. Customer must execute an OUC Lighting Agreement to take advantage of the OUConvenient Lighting Program. This program begins with taking the developer through the selection, purchase and installation phase of the lighting system (and then works with the Property Owners Association (POA) or Home Owners Association (HOA)) to maintain the system over the term of the Agreement.

Before a new lighting service can be provided by OUC, the customer must provide to OUC final and approved civil engineering plans depicting other utilities, landscaping, roadside, parking lot curves, and driving services.

OUC is responsible for providing a photometric analysis and a conduit layout for the lighting system in accordance to the provided civil engineering plans.

The customer may install or opt to have OUC install the conduit system based on OUC's designed conduit layout. All lighting facilities must be installed within the public right-of-ways or on appropriate easements.

All material and installation must meet the specifications of OUC. All construction must be performed under the inspection of OUC and in compliance with OUC's conduit layout.

OUC is responsible for setting the poles, installing the fixtures, providing and pulling the cable, and making connections to OUC transformers.

Please refer to Section 12 for additional information to obtain an OUConvenient Lighting Construction Manual.

Additional Services Offered

Besides installing new lighting system, OUConvenient Lighting can retrofit existing fixtures to new light sources or higher-output units.

The Customer/Developer is Responsible for:

1. Choosing Pole and Fixture Design Styles _____
2. Provide OUC with the Following Information:
 - a. Material Specifications (if the lighting product is not part of the OUC product line) _____
 - b. Project Schedule, including the Conduit System Installation and Power Need Dates _____
 - c. Approved Plans:
 - Utility Site Plan _____
 - Landscape Plan w/Storm Water Retention _____
 - Site Lighting Plan (if not being provided by OUC) _____
 - d. Blanket Easement for OUC Lighting Facilities _____
3. For **Underground Service**, Furnish and Install:
 - Roadside/Parking Lot Curves Complete _____
 - Driving Services at Grade Level _____
 - Islands Used for Lighting Complete _____
 - Secondary Lighting Conduit System (if not being installed by OUC) _____
 - Streetlight Junction Boxes (if not being installed by OUC) _____
 - Pole Bases (if required) _____
4. Approved Licensed Electrical Contractor _____
5. Compliance with All OUC Specifications (**Refer to OUC Convenient Lighting Construction Manual**) _____
6. Payment, if required, to **OUC Development Services** for Lighting Construction & Material Cost _____

OUC is Responsible for:

1. ____ Provide and Install:

a. ____ Secondary Lighting Conduit System
with Streetlight Junction Boxes
(if not being provided by the
Customer/Developer)

b. ____ All Secondary Cables and
Terminations

c. ____ All Streetlight poles and fixtures,
according to contract

d. ____ Maintenance and operation

Obtaining OUC Specifications:

Specifications	Description	Located at
Water Construction Standards	<ul style="list-style-type: none"> • General Guidelines for the Design, Construction and Installation of Water Facilities 	<ul style="list-style-type: none"> • OUC Water Distribution Standards and Specifications Section, Call 407.434.2535
Water Detail Sheet	<ul style="list-style-type: none"> • General Specifications for Water Facility Installations • General Material Specifications • Service Line Details • Restrained Joint Standards • Blow-Off Details 	<ul style="list-style-type: none"> • Water Engineering and Technical Services Division, Call 407.434.2557
Backflow Prevention Device Specifications	<ul style="list-style-type: none"> • Approved Devices and Installation Requirements 	<ul style="list-style-type: none"> • Cross Connection Control, call 407.434.2535
Guaranty of Performance	<ul style="list-style-type: none"> • Agreement Between OUC, Developer and Contractor for Installation and Warranty of Water Facilities 	<ul style="list-style-type: none"> • www.ouc.com Your Business> Development Services> Online Forms and Docs
Deeded Improvements	<ul style="list-style-type: none"> • Lists Property with Cost Value Conveyed to OUC (Water Facilities) 	<ul style="list-style-type: none"> • www.ouc.com Your Business> Development Services> Online Forms and Docs

<p>Chilled Water Design and Construction Standards</p>	<ul style="list-style-type: none"> • General Guidelines for the Design, Construction and Connection of Chilled Water Services 	<ul style="list-style-type: none"> • OUCooling Division, call 407.434.2647
<p>Chilled Water Submetering</p>	<ul style="list-style-type: none"> • Chilled Water Submetering Installation Requirements 	<ul style="list-style-type: none"> • OUCooling Division, call 407.434.2647
<p>Electric Metering Installation Requirements</p>	<ul style="list-style-type: none"> • Basic Project Procedures and Requirements for Electric Meter Installation • Meter Base Requirements • Service Entrance Specifications 	<ul style="list-style-type: none"> • www.ouc.com Your Business> Development Services> Online Forms and Docs
<p>Multiple Electric Meter Installation Procedures</p>	<ul style="list-style-type: none"> • Procedures for Multi-Tenant Buildings 	<ul style="list-style-type: none"> • www.ouc.com Your Business> Development Services> Online Forms and Docs
<p>OUConvenient Lighting Construction Manual</p>	<ul style="list-style-type: none"> • Construction Standards for Lighting Installation 	<ul style="list-style-type: none"> • OUConvenient Lighting Division, call 407.434.4430
<p>Electric and Water Rates</p>	<ul style="list-style-type: none"> • Lists OUC Commercial and Residential Electric and Water Rates 	<ul style="list-style-type: none"> • www.ouc.com Your Business> Your Electric Rates AND Your Business> Your Water Rates

Meter Set Request Guidelines

Prior to installing meters, customers must provide a deposit to cover all applicable charges for the services requested. The deposit shall be an amount equal to an estimated two-month average billing periods for all requested services. The deposit may be in the form of cash, a surety bond, or an irrevocable letter of credits.

Prior to ordering meter sets with OUC, the customer is responsible for:

- Submit new addresses to Development Services
- Apply for permits from the local authority agency
- Ensure permit clearances have been submitted to OUC

Addresses should be submitted 3-5 weeks prior to service request to allow sufficient time to establish customer account and billing information.

Customer must contact the respective OUC Department to request metered services depending of the type of the application and development. Customer can make a meter request by contacting the department via phone or via e-mail as follows:

Development Services

Office: 407.236.9651

Fax: 407.423.9129

E-mail: developmentsservices@ouc.com

Commercial Services

Office: 407.423.9018, press option # 3

Fax: 407.423.9129

E-mail: commercialsvcs@ouc.com

Residential Services

Office: 407.423.9018, press option # 2

Fax: 407.236.9629

E-mail: customerservice@ouc.com

St. Cloud Customer Service

Office: 407.957.7373

Fax: 407.957.2486

E-mail: stcloudservice@ouc.com

Services within the City of Orlando and Unincorporated Orange County Areas

The following sections provide the application type and the department the customer will need to contact to request a meter set.

Water Meter Set Requests

APPLICATION	REQUEST METER FROM
Single Family Detached Homes	Commercial Services
Townhome Building – One meter per residential unit	Commercial Services
Townhome Building – One master meter per building	Development Services
Condominium/Apartment Complex – One master meter per building or entire complex	Development Services
Shopping Center/Commercial/Industrial/Offices Complexes	Development Services
Monitoring Water Meters for Fire Line Services	Development Services

Reclaimed Meter Set Requests

APPLICATION	REQUEST METER FROM
Single Family Detached Homes	Commercial Services
Townhome Building – One meter per residential unit	Commercial Services
Townhome Building – One master meter per building	Development Services
Condominium/Apartment Complex – One master meter per building, multiple buildings or entire complex	Development Services
Development's Entrance Landscaping, Parks, Landscape Common Areas	Development Services
Commercial, Retail Office Buildings Landscape Common Areas	Development Services

Electric Meter Set Requests

APPLICATION	REQUEST METER FROM
Temporary Meter (T-Pole) for Construction	Commercial Services
TUG for Concrete Block Residential Detached Single Family Homes	Commercial Services
Permanent Meter for Detached Single Family Homes	Residential Services
Permanent Meter Sets for Townhome units, Apartments/Condominium Buildings	Commercial Services (Refer to Notes below)
Permanent Meter for Shopping Center/Commercial/Industrial/Offices Complexes	Commercial Services (Refer to Notes below)

If OUC field technicians turned down the service (did not install the meter), then OUC will leave a door hanger on site indicating reason why meter was not installed. The customer is responsible to fix the problem and contact OUC again to re-schedule the meter set.

Notes

- If customer requires entrance into OUC transformer, customer must contact OUC Safety Stand-By Department at **407.434.4111** with 48 hours notice to schedule a Stand-By.
- When transformer Stand-By is completed, customer must also contact OUC Revenue Protection Service Section for electric meter sets. For projects East of Orange Blossom Trail call: **407.434.4082**. For projects West of Orange Blossom Trail call: **407.434.2539**.
- It is imperative that the meter bases are marked with permanent element resistant labeling indicating correct addresses or apartment numbers. In addition, permanent numbers must be located on or adjacent to unit doors so our Field Service Technicians can do cross checks with the project electrician or designated representative.

Services within the City of St. Cloud and Unincorporated Osceola County Areas

Electric Meter Set Requests

APPLICATION	REQUEST METER FROM
Temporary Meter (T-Pole) for Construction	St. Cloud Customer Service
TUG for Concrete Block Residential Detached Single Family Homes	
Permanent Meter for Detached Single Family Homes	
Permanent Meter Sets for Townhome units, Apartments/Condominium Buildings	St. Cloud Customer Service (Refer to Notes below)
Permanent Meter for Shopping Center/Commercial/Industrial/Offices Complexes	

If OUC field technicians turned down the service (did not install the meter), then OUC will leave a door hanger on site indicating reason why meter was not installed. The customer is responsible to fix the problem and contact OUC again to re-schedule the meter set.

Notes

- If customer requires entrance into OUC transformer, customer must contact OUC Safety Stand-By Department at **407.434.4111** with 48 hours notice to schedule a Stand-By.
- When transformer Stand-By is completed, customer must also contact OUC St. Cloud Revenue Protection Service Section for electric meter sets at **407.957.7136**.
- It is imperative that the meter bases are marked with permanent element resistant labeling indicating correct addresses or apartment numbers. In addition, permanent numbers must be located on or adjacent to unit doors so our Field Service Technicians can do cross checks with the project electrician or designated representative.

Important Phone Numbers

<i>For</i>	<i>Contact</i>	<i>By Phone</i>
Initial Contact and Project Coordination, Demolition Requests	OUC Development Services	407.236.9651
Deposits, Permanent Power for Commercial Buildings and Apartment/Townhome Buildings, Construction Temporary Power <u>in Orlando</u>	OUC Commercial Services	407.423.9018
Deposits, Permanent Power for Single Family Detached Homes <u>in Orlando</u>	OUC Residential Customer Service	407.423.9018
Deposits, Permanent Power for Commercial Buildings and Apartment/Townhome Buildings, Construction Temporary Power <u>in St. Cloud</u>	OUC's St. Cloud Office	407.957.7373
Electric Meter Requirements	Electric Metering	407.434.4057

Electrical Conduit System Inspection	OUC Electric Inspections Office	407.434.4428
Temporary De-energizing or Energizing of Transformers, Orlando and St. Cloud Areas	Underground Electric, Orlando and St. Cloud Areas	407.434.4111
Multiple Electric Meter Sets for Apartment/Townhome/Condominium Buildings and Multi-Tenant Commercial Buildings in Orlando	Orlando Revenue Protection Service	For Projects East of Orange Blossom Trail: 407.434.4082 For Projects West of Orange Blossom Trail: 407.434.2539
Multiple Electric Meter Sets for Apartment/Townhome/Condominium Buildings and Multi-Tenant Commercial Buildings in St. Cloud	St. Cloud Revenue Protection Service	407.957.7136
Permits and Inspections	City of Orlando Permitting Department	407.246.2271 407.246.3420 fax
	Orange County Building Division	407.836.5550 407.836.5510 fax
	City of St. Cloud Building Department	407.957.7386 407.957.2486 fax
	Osceola County Building Department	407.343.2225 407.343.2266 fax

Street Light Problem	OUConvenient Lighting Division	407.737.4222
Field Issues Once Service Order Is Dispatched	Service Dispatch	407.823.9150
Backflow Prevention Specifications	Cross Connection Control	407.434.2535
Map Showing Water Facilities Location	OUC Water Drafting Department	407.434.2572
Schedule Water Pre-Construction Meeting (For Developer Installs Only)	Water Distribution Inspections Office	407.434.2535
Fire Flow Test	Water Distribution Construction Department	407.434.2530
Portable (Hydrant) Meter	OUC Commerical Services	407.423.9018
City of Orlando Reclaimed Water	City of Orlando Wastewater Administration	407.246.2213
Orange County Reclaimed Water	Orange County Water Reclamation Division	407.254.9680
Chilled Water Services	OUCooling Division	407.434.2647

Developer's *Guide*



Development Services Department
100 West Anderson Street
Orlando, FL 32801

Phone: 407.236.9100 Fax: 407.423.9129
www.ouc.com