

# Town of Orleans

## Sewer System FAQs

### Why is the Town being sewerred?

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The Massachusetts Department of Environmental Protection (MassDEP) has set specific water quality goals for marine waters in the Commonwealth. Nitrogen from septic systems is the primary contributor to degraded water quality in our bays and estuaries. When wastewater from a property's leaching field enters the groundwater, it flows slowly toward receiving coastal waters, regardless of where you live in Orleans. Studies have shown that an average of sixty (60) percent of the septic nitrogen must be removed from groundwater to achieve state-mandated requirements. If Orleans does not act on its own to clean up its waters, the Town could be put under an administrative order from MassDEP and could also face a lawsuit from the Conservation Law Foundation.

Orleans has also made a commitment to preserve and protect its freshwater ponds from excess phosphorous, which is primarily caused by septic system loads into our lakes and ponds. So, in addition to Orleans' commitment to cleaning up marine waters, we also expect to sewer for phosphorus removal in some sewer phases to clean up freshwater resources.

### When do I have to connect?

#### How do I find out when my property may be sewerred?

Approximately 60% of Orleans homes and businesses are planned to be sewerred over the next several decades. The 16-phase Sewer Master Plan can be viewed through this link:

[Proposed-and-Approved-Service-Areas-2023](#)

You can also look up your property using the Town's online GIS. Simply click on the link below, and when you get there turn on the Layer called Sewer Area Service Phases.

[AxisGIS - OrleansMA](#)

#### When do I connect to the sewer system?

Properties are required to connect to the sewer system after receiving a Notice to Connect. Property owners have one (1) year from the date of the "Notice to Connect" to make the connection into the sewer main in the street. The Town strongly encourages property owners to hire an engineer to develop their connection plan and submit a Connection Permit Application, as well as speak with some Town-approved, licensed contractors (drain-layers) about installing the connection as soon as possible. (See below re. "Getting Connected" and "Contacting Local Engineers")

#### Do I have a choice whether or not to connect to the new sewer service?

No. Properties in the sewer service areas are required to connect.

#### If I have recently installed a new Title 5 septic system, or will be doing so in the near term, will I still have to connect to sewer service and pay the Sewer Betterment Assessment?

Under the Board of Health Sewer Connection Regulations, the Board of Health has the authority to defer the deadline for connection for properties with a compliant septic system, subject to other requirements

<https://www.town.orleans.ma.us/DocumentCenter/View/4025/Orleans-MA-BOH-Sewer-Connection-Regs-FINAL-2022-08-10>

A deferral to connect to the sewer does not de-obligate the property owner from paying the Sewer Betterment Assessment. If you have a question about your property, the type of system serving your property, or the date of installation for that system, please call the Town of Orleans Health Department at 508-240-3700 ext. 2450 for more information.

## **Getting Connected**

### **What do the property owners need to design?**

The property owner is responsible for all work from the public sewer connection point located at the property line to their structure and any internal work that may be required (<https://www.town.orleans.ma.us/1213/Sewer-Service-Connections>).

### **Contacting Local Engineers**

A non-inclusive list of local engineers can be found on the Town website at <https://www.town.orleans.ma.us/DocumentCenter/View/2781/Engineering-Design-Firms-PDF>.

A list of Town-approved licensed contractors, known as drain-layers, can be found on the Town website at <https://www.town.orleans.ma.us/DocumentCenter/View/2782/Sewer-Installation-Contractors-PDF>

### **What type of information will I need from the Town to provide to my engineer and contractor?**

Your engineer will need to request information from the Town for the existing on-site wastewater treatment system and for the Town's sewer system at your property line. Connection standard details are also available from the Town. Your contractor will use the approved permit application and construction plans and specifications developed by the engineer.

### **Are contractor specialists ever needed to connect to the sewer?**

The answer to this question depends on the qualifications of your contractor. Connection-related work within a house generally will require a specialty plumber unless your contractor is licensed as such. Similarly, electrical work associated with a grinder pump will require a specialty electrician unless your contractor is licensed as such. You can ask your engineer about whether the contractor might need to bring on subcontractors to perform certain work and obtain related permits.

## **Sewer Connection Tie Cards**

### **What is a sewer connection tie-card? How and when do I get the tie-card for my property?**

A sewer tie-card is used by your engineer and contractor to locate the connection point between your sewer lateral (the pipe from your property's internal system to the sewer main) and the Town's sewer infrastructure. It uses distances from known features to identify the specific point without use of equipment more sophisticated than a long tape measure. The tie-card will also include information such as depth and materials. Tie-cards are generated by the Town's contractor and reviewed by the Town's engineer. Once the tie-cards are approved, they are available to property owners and their engineers. Typically a property owner's engineer will contact the Town's engineer for the tie-card prior to design for the property..

### **What work can be done prior to having a tie-card?**

Engineers can perform due diligence and start to lay out the design for your property prior to the tie-card being available. Depending on the property, it may also be possible for the engineer to start creating the design drawings. The design for your property cannot be completed without the tie-card.

## **Grinder Pumps and Generators**

### **How do I know which grinder pump is appropriate for my property? Do I need a generator or other add-ons?**

A grinder pump is necessary if your house connects to a low-pressure sewer or if there are specific conditions that prevent gravity flow. Sizing of the grinder pump will be based on several factors, including property occupancy and use, seasonality of the property, and a balance of risk (i.e. storage becoming full during a power outage) and cost. Your engineer will be able to work with you to help you make the right choice.

The Board of Water and Sewer Commissioners has pre-selected and standardized the pumping system to be purchased by the property owners and conducted a procurement process with pricing established as part of the Sewer Use Rules and Regulations. These pumping systems are described in the Property Owner's Guidebook, available on the Town's website at <https://www.town.orleans.ma.us/217/Property-Owners-Guidebook>.

Generators and other add-ons such as remote sensing are not required but you may choose to include them in your connection project. Your engineer may recommend certain add-ons based on their knowledge of your property, their design of your system, and your preferences. Talk with your engineer or electrician about how to size a generator appropriately for the electrical loads that you'd like to support with your generator if you choose to have one.

### **How are grinder pumps operated and maintained?**

After installation the grinder pumps automatically turn on when your stored wastewater reaches a specific height within the pump unit, similar to how a sump pump operates. Maintenance will vary by property, depending on what is introduced into the wastewater stream. Grinder pump owners are encouraged to review their pump's Operating & Maintenance (O&M) Manual for recommendations and limitations for what can be put down the drain, along with how to winterize the pumps and what types of conditions warrant a call to the manufacturer or service professional.

## **Abandoning a Septic System**

### **What happens to my septic system when I connect to sewer service?**

The de-commissioning and removal or filling of septic systems will be determined on a property-by-property basis. Any component that is not essential to the connection to the public sewer will have to be properly abandoned, in accordance with Massachusetts Title 5 and Orleans Board of Health Sewer Connection Regulations (<https://www.town.orleans.ma.us/DocumentCenter/View/4025/Orleans-MA-BOH-Sewer-Connection-Regs-FINAL-2022-08-10>), the methods for which are based on the type of septic component. This determination is made by the property's engineer prior to the property being connected to the sewer system.

### **How are septic systems properly abandoned?**

Septic systems are properly abandoned when they can never be used again. Typically, abandonment involves removal of the septic tank cover, breaking the bottom of the septic tank, demolishing the top three feet of the tank, and filling the tank with sand prior to surface restoration. Depending on the property, other approaches including use of flowable fill may be preferable. The drain field pipes, if your property has them, do not need to be abandoned. You can review options with your engineer for the right solution for your property and contact the Town if you have remaining questions.

### **Can I repurpose my abandoned septic tank for storm water?**

No, according to the State of Massachusetts DEP Title 5 regulations 310 CMR 15.354:

(1) Whenever the use of a system is discontinued following connection to a municipal or private sanitary sewer or shared on-site system or following condemnation or demolition of a building served by the system, the system shall be considered abandoned and any further use of the system for any purpose shall be prohibited unless, after inspection, the Approving Authority determines the system is in compliance or can be brought into compliance with 310 CMR 15.000.

## **Water Service Connections**

### **What do I do if I have a concern about the age and condition of the water line from the town water system to my home or business?**

Water service connections to the property line are sometimes replaced as part of the sewer project. All old iron pipe water services in the area of installed sewer mains have been and will be replaced from the water main to the shut-off valve located at the property line. Please call the Water Department at (508) 255-1200 to confirm the age, size and material of your private service line and steps you can take to verify its integrity. Size, age and materials of water services can also be found at <https://www.town.orleans.ma.us/DocumentCenter/View/7642/water-service-line-inventory?bidId=> which is searchable by account number.

### **Where can I find the tie-card for my water service connection?**

Visit the Town's GIS website at <https://next.axisgjis.com/OrleansMA> , enter your property address and lookup under Documents for your Water Tie Card. If you don't see this document available, please reach out to the Water Department at (508) 255-1200.

### **Can a separate meter be installed for water use that does not go into the sewer system?**

Yes, a deduct meter can be requested from the Water Department to measure water usage for purposes that don't enter the sanitary sewer system, such as irrigation. The amount of water measured by the deduct meter is subtracted from the total water recorded by your primary meter. You are then billed for the sewer portion based on the lower, net amount. The deduct meter is installed at the owner's expense and all cross connections must be eliminated, and a backflow prevention device must be installed on the irrigation system before the deduct meter is installed and remain in compliance with MassDEP Regulations 310 CMR 22.22. A basic service fee

and annual backflow test may be required.

## **Special Circumstances**

### **What happens if some of the sewer connection work on my property is within a Wetland?**

As your engineer develops your plan, any Wetland Resources should be shown on the plan and the property owner/engineer can contact the Conservation Department at (508) 240-3700 Ext. 2425 to discuss the process for any review or approvals that may be needed by the Conservation Commission.

### **The engineer developing our sewer connection plan said that a complete/new topographic survey of the property would be required. Can the Town help with this?**

Professional Engineers must adhere to certain standards when they stamp any plans used for construction. If a property was reviewed by the Town for a prior project (i.e., Planning Board, Conservation Commission) there may be survey information on file. You can reach out to the Planning Dept. at (508) 240-3700 Ext, 2435 or Conservation Office at Ext. 2425.

## **Property Owner Costs and Funding**

### **How much will it cost a property owner to connect to the sewer?**

Property owner costs to connect to the sewer system will vary significantly as they depend on numerous factors including the distance between the house waste line and the sewer service stub at the property line, depth of the sewer service, relative elevation of the house waste line compared to the Town sewer, groundwater elevation, presence of ledge/boulders, offsets from underground utilities, landscaping impacts, and other restoration costs. The property owner is responsible for all connection costs. Contracts between the property owner and the engineer and contractor are private. The property owner should consider budgeting for the following services and fees associated with connection in addition to annual user charges and the sewer assessment betterment:

- Connection Permit (currently set at \$0.50/gal of average daily water use or \$250, whichever is greater);
- Board of Health Septic System Abandonment Permit (\$75);
- Engineering including plans, specifications, and permit application (on the order of \$5,000 - \$7,000); and
- Construction including all costs to connect the house waste line to the sewer service stub (including low-pressure pump systems if necessary), decommissioning the existing sewage disposal system, and restoration of property (on the order of \$5,000 - \$30,000 for a single family home).

The Town recommends that homeowners obtain several proposals for their connection from professional engineers and Town-approved drain-layers. Property owners may also choose to join with their neighbors to solicit proposals from design engineers and Town-approved drain layers to perform multiple connection designs and installations which may result in more favorable pricing.

### **Are there other costs property owners connecting to sewers will have to pay?**

Once sewer service is connected, property owners will be charged a sewer user fee on a quarterly basis, based on their water usage. Property owners are also responsible for payment of a Betterment Assessment as outlined below.

As noted above under “Grinder Pumps and Generators”, certain parcels may also require the property owner to pay for and maintain a Low-Pressure Sewage Pump System (often called grinder pumps) to move the flow from the property and into the Town’s wastewater infrastructure (gravity sewer or low-pressure sewer).

If the property has irrigation, a property owner can install a deduct meter which will enable the property owner to realize a savings for water that does not enter the sanitary sewage system. Sewer user fees are reviewed annually by the Board of Water and Sewer Commissioners. The user fees support the annual cost of running the wastewater system.

## Is there any payment assistance or abatement of either the Sewer Betterment Assessment or connection costs?

1. **Betterment Deferrals** - Homeowners over 65 years of age with gross receipts from the prior year of \$40,000 or less and who occupy the bettered property as their domicile may defer payment of their betterment at two (2) percent interest until the sale of their property or settlement of their estate. Other criteria may also apply. This only applies to residential properties. Applications must be made to the Select Board within six (6) months of issuance of your betterment notice. See below "How is the Sewer Betterment Assessment paid?" for further information.
2. **Senior Circuit Breaker Tax Credit** - For persons over 65 who qualify to file for the Senior Circuit Breaker Tax Credit (Schedule CB) with their MA income tax return can include their annual betterment and interest, along with fifty (50) percent of their usage fees (up to certain limits) as expenses. Talk to a tax advisor or contact the Massachusetts Department of Revenue Tax Department at 617-887-6367 for details and information.
3. **State Income Tax Credit** – A tax credit of up to \$15,000 of your sewer hook-up costs may be claimed on your MA income tax return. You must file Schedule SC and Schedule CMS with your annual return. Talk to your tax advisor or contact the Massachusetts Department of Revenue Tax Department at 617-887-6367 for details and information.
4. **Barnstable County Community Septic Management Loan Program** also known as the Cape Cod Aquifund. This program provides zero-to-low-interest betterment loans (based on household income) to Cape Cod homeowners for sewer connection costs repayable over twenty (20) years. Eligible homeowners with a household income of less than 120% of Barnstable County's median household income can qualify for a 0% interest loan. Please contact the Program's office at 508-375-6877 or visit <http://www.barnstablecountysepticloan.org> for details and information.
5. Financial assistance opportunities can also be found on the State's website: [Title 5/Septic Systems: Financial Assistance Opportunities for System Owners | Mass.gov](#)

## What costs are eligible for Aquifund funding?

**Engineering costs:** will cover engineering costs related to sewer connection.

**Contractor costs:** will cover costs related to sewer connection.

**Restoration:** covers costs to disturbed area related to sewer connection.

**Payments:** payments are to be made to the engineers/contractors/installers directly, no payment to the property owners directly or any reimbursements of deposits or out-of-pocket expenses.

## Will my tax assessment increase when the property is connected to sewer?

No. Property assessments are based on current market value derived from actual comparable sales.

## Betterment Assessments

### What is a Sewer Betterment Assessment?

A Sewer Betterment Assessment is a method used by municipalities to recover project costs by equitably distributing applicable costs to property owners who receive the specific benefit from the project. A specific benefit is defined as an enhancement of the value or use of property due to the construction of the improvement. The municipality may assess all or a portion of the costs of the sewer system plant and facilities, including sewer mains and pumping stations. The Sewer Betterment is separate from and in addition to the costs related to connecting the property to the sewer main.

### Who is required to pay the Sewer Betterment Assessment?

The Sewer Betterment Assessment is charged to owners of properties within the sewer service area (except for properties owned by government entities which are exempt from this requirement).

## What is a Sewer Unit and how is it assigned to my property?

A sewer unit is a measure of wastewater flow that is used for assessment by the Board of Water and Sewer Commissioners to spread applicable project costs across all users based on their water use. One (1) sewer unit is equivalent to the total average daily water use over multiple years of the lowest residential use category within the sewer service area being assessed.

Properties that use more water than one (1) sewer unit will be assigned proportionally more sewer units. The number of sewer units for any residential or non-residential property shall not be less than one (1) sewer unit.

## How is the Sewer Betterment Assessment calculated?

The cost attributable to one (1) sewer unit is calculated by dividing the total cost of the wastewater system for that project phase to be paid by Sewer Betterment Assessment by the total number of sewer units in that sewer service area. The Sewer Betterment Assessment for each property is then calculated by multiplying the cost of one (1) sewer unit by the number of sewer units assigned to the property.

For example: If the project cost to be paid through betterments is \$10,000,000 and there are 10,000 sewer units then the value for a single sewer unit is \$1,000. A property that has been assigned 2 sewer units would therefore be assessed a \$2,000 betterment fee.

## Are undeveloped properties included in the Sewer Assessment Betterment calculation?

Yes. Undeveloped properties that have the potential to benefit from the project will be assessed a sewer betterment based on the same methodology.

## What costs does the Sewer Betterment Assessment include?

The Sewer Betterment Assessment represents the allocated cost of the public wastewater system as defined by the Sewer Assessment Bylaw. The Sewer Betterment Assessment does not include the private cost of connecting a property to the public sewer service located at the property line. It also does not include the cost of decommissioning the property's current on-site wastewater treatment system (the septic system).

## When will the Sewer Betterment Assessment be issued?

Sewer Betterment Assessments are issued by the Treasurer approximately one year after the final costs for the Town's sewer service area project are identified. For example, for the Downtown sewer service area, the Town's project was substantially complete in March of 2023 and project costs were finalized later that year. Betterment Assessments for that service area were mailed in September of 2024.

## How is the Sewer Betterment Assessment paid?

A property owner can opt to pay the Sewer Betterment Assessment all at once when notified of the Betterment Assessment, or may opt to finance the Betterment Assessment and pay quarterly installments on their property tax bill spread over thirty (30) Fiscal Years. Interest paid to the Town to finance the betterment on the tax bill is determined service area by service area – it was 0% for the Downtown Service Area (Phase 1) and is anticipated to be 0% for the Meetinghouse Pond Service Area (Phase 2). If financing is selected, a lien will be recorded on the property at the Registry of Deeds. A property owner can pay off a Sewer Betterment Assessment early without penalty. If you have additional questions, please contact the Town of Orleans Treasurer's Office at 508-240-3700 ext. 2420 for more information.

## What happens to the Sewer Betterment Assessment Lien on the property upon transfer of ownership?

The lien for the Sewer Betterment Assessment may either be transferred to the new owner of the property or paid off at the time of transfer.

## Will I be charged the Sewer Betterment Assessment even if I haven't connected yet?

Yes. The Sewer Betterment Assessment for each sewer phase is charged to the properties after completion of each phase.

## What will I be charged for a Sewer Betterment Assessment?

The value of the individual sewer betterment assessments for the Downtown (Phase 1) and Meetinghouse Pond (Phase 2) properties will reflect the Select Board's decision to pay twenty (20) percent of the project phase cost through Betterment and be based on the final project costs, updated water use information, and the property's use at the time of assessment in accordance with the Sewer Assessment Bylaw. Any vacant lots will be evaluated by the Town for their highest use as a basis for betterment. Betterment values will be made available by the Town as they are finalized.

## What were the Phase 1 Betterments?

The single sewer unit (minimum) betterment was determined to be \$5,567. Phase 1 Betterments ranged between \$5,567 - \$100,000+, based on 3-year average water use.

## What is the budgeted cost for Phase 2?

At the May 9, 2022 Annual Town Meeting, voters approved funding for the construction of Phase 2: Meetinghouse Pond Area Collection System and Pumping Station (Article 19) for a total appropriation of \$32,906,000 (prior to any grants or subsidies). This project is funded through the Clean Water State Revolving Loan Fund (SRF ID 7150-2022 Intended Use Plan) and has been awarded a 25% subsidy through the Cape & Islands Water Protection Fund.

## Adding On, Privilege Fees and Compensatory Privilege Fees

### Can I add on to my property once it is connected to sewer?

Yes. A property connected to the sewer can apply to the Board of Water and Sewer Commissioners for increased sewage flow, subject to the Town's wastewater Infrastructure capacity. The property will still need to comply with all local zoning bylaws including yard setbacks, height, and lot coverage.

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### What is a Privilege Fee?

A Privilege Fee is charged to properties not currently located within the sewer service area that may wish to connect to the system at a later date. It ensures that new connections pay their fair share of the cost of the system to have access to it. These connections are subject to approval by the Board of Water and Sewer Commissioners. Revenues from the Privilege Fees are placed in a segregated fund to be used to help pay the costs to repair and update the wastewater infrastructure.

### What is a Compensatory Privilege Fee?

A Compensatory Privilege Fee is charged to property owners located within the sewer service area who wish to increase the flow allocated to their property to expand or develop it.

## Contacts

### If I have additional questions about this program, who do I contact?

You can find information in the "Property Owner's Guidebook" and other information located on the Town's website at <https://www.town.orleans.ma.us/217/Property-Owners-Guidebook>. However, if you have a specific question, please contact the Sewer Project Coordinator, John Nelson, at (508) 240-3700 x2319 [jnelson@town.orleans.ma.us](mailto:jnelson@town.orleans.ma.us), or the AECOM Project Ombudsman at 508-237- 7161.