



# TOWN OF PLYMOUTH

Department of Public Works  
Sewer Division  
131 Camelot Drive  
Plymouth, Massachusetts 02360  
Office: (508) 830-4158  
Fax: (508) 732-0238

## SEWER CONNECTION APPLICATION CHECKLIST

- Obtain a “Sewer Connection Application Form” at the Sewer Division 131 Camelot Drive. Applications can also be found on the Towns website under the Sewer Division tab
- Please read the Sewer Connection Policy before applying for a Sewer Connection.
- Complete the form, sign and date it. (It must be signed by the property Owner.)
- Bring the completed form along with a check made out to The Town of Plymouth in the amount of \$100 to the Sewer Division office. The application fee is non-refundable.
- For new construction, submit a copy of the construction plans. For remodeling existing buildings, submit before and after floor plans (non-returnable) and a copy of the Assessor’s Field Card.

- Permits will only be considered for approved building lots.
- Fees will be those in effect when the permit application is approved. Please see attached Sewer Connection Policy for Fee Schedule.
- All permits expire one year after issuance if the applicant fails to obtain a building permit unless a waiver is granted.
- Once a completed application packet is submitted to the Sewer Division office, we will review, approve or reject your application within 10 working days. Complicated applications or appeals may require more time for review. Once the review is complete, the DPW will notify you of its determination. Upon approval, you will have 90 days to pay all the fees and pick up your permit at the Sewer Division office.
- Restaurants and other establishments where food is prepared or where wastes contain grease in excessive amounts or any waste, sand or other harmful ingredients which can be discharged and are connected to the wastewater system, shall be provided with a suitable trap or separator. Such traps shall not be required for private living quarters or dwelling units. All traps or separators shall be of a type and capacity approved by the DPW and shall be located to be readily accessible for cleaning and inspection. Grease traps shall have a minimum depth of 4 feet and a minimum capacity of 2,000 gallons and shall have sufficient capacity to provide at least a 24-hour detention period for the kitchen flow. Kitchen flow shall be calculated in accordance with 310 CMR 15.00 (Title V). Grease traps shall be provided with a minimum 24-inch diameter manhole frame and cover to grade over both the inlet and outlet. Grease traps shall be inspected monthly and shall be cleaned when the level of grease is 25 percent of the effective depth of the trap or at least every three months. The owner shall provide written evidence to the Department that all traps are being cleaned and inspected at least every three months.



# TOWN OF PLYMOUTH

Department of Public Works  
Sewer Division  
131 Camelot Drive  
Plymouth, Massachusetts 02360  
Office: (508) 830-4158  
Fax: (508) 732-0238

JONATHAN BEDER  
Director of Public Works

GARY FRIZZELL  
Wastewater Manager

## SAMPLE SEWER FLOW CALCULATIONS

Sewer Connection Fees are based on 310 CMR 15.00 Title 5 wastewater flows. This document provides a summary of how to calculate wastewater flows based on Title 5 criteria. Attached is an excerpt from 310 CMR 15.203 – System Sewage Flow Design Criteria, which provides wastewater design flows for various categories of use.

1. Identify Title 5 flow category in 310 CMR 15.203
2. Identify the flow in gallons per day (gpd) for the appropriate Title 5 flow category
3. Identify the corresponding number of Title 5 Units for the project
4. Calculate the wastewater flow as follows:

$$\text{(Gallons Per Day/Title 5 Unit) X (\# of Title 5 Units) = Wastewater Flow (in Gallons Per Day)}$$

*For new construction on a buildable lot within the sewer service area, the applicant should provide flow calculations based on Title 5 flows as illustrated in the following examples:*

### **Example 1:**

The applicant proposes to construct a 3-bedroom single-family dwelling on a buildable lot within the sewer service area.

Title 5 flow category = Residential, Single Family Dwelling  
Title 5 flow for Residential, Single Family Dwelling = 110 gpd/bedroom  
# of Title 5 Units = 3 bedrooms

$$\text{Wastewater Flow: ( 110 gpd/bedroom ) X ( 3 bedrooms ) = 330 gpd}$$

### **Example 2:**

The applicant proposes to construct a 50-seat fast food restaurant on a buildable lot within the sewer service area.

Title 5 flow category = Restaurant, Fast Food  
Title 5 flow for Restaurant, Fast Food = 20 gpd/seat  
# of Title 5 Units = 50 seats

$$\text{Wastewater Flow: ( 20 gpd/seat ) X ( 50 seats ) = 1,000 gpd}$$

### **Example 3:**

The applicant proposes to construct a 3,000 square foot retail store on a buildable lot within the sewer service area.

Title 5 flow category = Retail Store  
Title 5 flow for Retail Store = 50 gpd/1,000 square feet  
# of Title 5 Units = 3,000 square feet

$$\text{Wastewater Flow: ( 50 gpd/1,000 square feet ) X ( 3,000 square feet ) = 150 gpd}$$

For a renovation or change in use to a structure that is already connected to Town sewer, the applicant should provide flow calculations based on additional Title 5 flows as illustrated in the following examples:

**Example 4:**

The applicant proposes to construct a 2-bedroom addition to a single-family dwelling that is already connected to Town sewer.

Title 5 flow category = Residential, Single Family Dwelling

Title 5 flow for Residential, Single Family Dwelling = 110 gpd/bedroom

# of Title 5 Units = 2 bedrooms

**Additional Wastewater Flow for Renovation: ( 110 gpd/bedroom ) X ( 2 bedrooms ) = 220 gpd**

**Example 5:**

The applicant proposes to convert a 2,500 square foot retail store in a building that is already connected to Town sewer to a 15-seat hair salon.

Existing Flow:

Title 5 flow category = Retail Store

Title 5 flow for Retail Store = 50 gpd/1,000 square feet

# of Title 5 Units = 2,500 square feet

Existing Wastewater Flow Calculation: ( 50 gpd/1,000 square feet ) X ( 2,500 square feet ) = 125 gpd

Proposed Flow:

Title 5 flow category = Beauty Salon

Title 5 flow for Beauty Salon = 100 gpd/chair

# of Title 5 Units = 15 chairs

Proposed Wastewater Flow Calculation: ( 100 gpd/chair ) X ( 15 chairs ) = 1,500 gpd

**Additional Wastewater Flow for Renovation = Proposed Flow – Existing Flow**  
**= 1,500 gpd – 125 gpd**  
**= 1,375 gpd**

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

15.203: continued

TYPE OF ESTABLISHMENT	UNIT	GALLONS PER DAY	MINIMUM ALLOWABLE GPD FOR SYSTEM DESIGN
<b>(2) RESIDENTIAL</b>			
Bed & Breakfast	per bedroom	110	440
Bed & Breakfast	per bedroom	110	
with restaurant open to public add	per seat	35	1000
Camp, resident, mess hall, washroom and toilets	per person*	35	
Camp, day, washroom and toilets	per person	10	
Camp, day, mess hall, washroom and toilets	per person	13	
Campground, showers and toilets	per site	90	
Family Dwelling, Single including, but not limited to, single family condominiums & cooperatives	per bedroom	110	330**
Family Dwelling, Multiple	per bedroom	110	***
Family Mobile Home Park	per mobile home	300	
Motel, Hotel, Boarding House	per bedroom	110	
Retirement Mobile Home Park	per site	150	
Housing for the Elderly	per one or two bedroom units	150****	
Work or Construction Camp	per person	50	
* Person in the context of 310 CMR 15.203 means an individual.			
** A system may be designed for flows of not less than 220 gpd, if a deed restriction essentially identical to the model Grant of Title 5 Bedroom Count Deed Restriction developed by the Department, is provided that limits the dwelling to two bed rooms as the term "bedroom" is defined in 310 CMR 15.002. A home office or home retail business whose only employees reside in the home, where no additional wastewater is generated other than toilet and hand washing waste, is not considered a change in the type of establishment and does not require the addition of flow for the purpose of designing the system.			
*** The number of bedrooms in a condominium shall be as specified in the Master Deed. Establishment of bedrooms in excess of the specified number shall be considered an increase in design flow. A home office or home retail business whose only employees reside in the home, where no additional wastewater is generated other than toilet and hand washing waste, is not considered a change in the type of establishment and does not require the addition of flow for the purpose of designing the system.			
**** Housing for the elderly exceeding two bedrooms per unit shall be designed based on 110 gallons per day per bedroom.			
<b>(3) COMMERCIAL</b>			
Airport	per passenger	5	150
Barber Shop/Beauty Salon	per chair	100	
Bowling Alley	per alley	100	
Country Club, dining room	per seat	10	
Country Club, snack bar or lunch room	per seat	10	
Country Club, lockers and showers	per locker	20	
Doctor Office	per doctor	250	
Dentist Office	per dentist	200	

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

15.203: continued

TYPE OF ESTABLISHMENT (3) COMMERCIAL (continued)	UNIT	GALLONS PER DAY	MINIMUM ALLOWABLE GPD FOR SYSTEM DESIGN
Factory, Industrial Plant, Warehouse or Dry Storage Space without cafeteria	per person	15	
Factory, Industrial Plant, Warehouse or Dry Storage Space with cafeteria	per person	20	
Gasoline Station with service bays	per island***** per bay	75 125	300
***** Plus flows for bays, if any			
Kennel/Veterinary Office Lounge, Tavern Marina	per kennel per seat per slip	50 20 10	500
Movie Theater	per seat	5	
Non-single family/ automatic clothes washer	per washing machine	400	
Office building	per 1000 sq.ft.	75	200
Retail Store (except supermarkets)	per 1000 sq.ft.	50	200
Restaurant	per seat	35	1000
Restaurant, thruway service area	per seat	150	1000
Restaurant, Fast Food	per seat	20	1000
Restaurant, kitchen flow [for sizing of grease trap only]	per seat	15	
Service Station [no gas]	per bay	150	450
Skating Rink	per seat	5	3000
Supermarkets	per 1000 sq.ft.	97	
Swimming Pool	per person	10	
Tennis Club	per court	250	
Theater, Auditorium	per seat	3	
Trailer, dump station	per trailer	75	
(4) INSTITUTIONAL			
Place of worship without kitchen with kitchen	per seat per seat	3 6	
Correctional Facility	per bed	200	
Function Hall	per seat	15	
Gymnasium	per participant	25	
Gymnasium	per spectator	3	
Hospital	per bed	200	
Nursing Home/Rest Home	per bed	150	
Public Park, toilet waste only	per person	5	

15.203: continued

TYPE OF ESTABLISHMENT	UNIT	GALLONS PER DAY	MINIMUM ALLOWABLE GPD FOR SYSTEM DESIGN
(4) INSTITUTIONAL (continued)			
Public Park, bathhouse, showers and flush toilets	per person	10	
Day Care Facility	per person	10	
(5) SCHOOLS*****			
Elementary School, without cafeteria, gymnasium or showers	per person	5	
Elementary School, with cafeteria but no gymnasium with showers	per person	8	
Elementary School, with cafeteria, gymnasium and showers	per person	10	
Secondary/Middle School, without cafeteria, gymnasium or showers	per person	10	
Secondary/Middle School, with cafeteria but no gymnasium or showers	per person	15	
Secondary/Middle School, with cafeteria, gymnasium and showers	per person	20	
Boarding Schools, Colleges	per person	65	

\*\*\*\*\* All schools to be served by an alternative technology approved pursuant to 310 CMR 15.280 through 15.288 shall have an equalization basin as part of the system design and have it installed prior to the treatment device.

(6) Facilities other than those listed in 310 CMR 15.203(2) through (5), and nonresidential facilities with unique design features that result in significantly different design flows than those listed above may apply to the Department for a determination of design flow using actual meter readings of established flows from existing or similar installations without the need for a variance pursuant to 310 CMR 15.410 or 15.416. Prior to making a determination the Department will consult with the local Approving Authority. For state and federal facilities, the Department may also establish system design flows other than those listed above using actual meter readings of established flows from existing or similar installations. Any design flow established by the Department pursuant to 310 CMR 15.203(6), shall be based on 200% of average water meter readings in order to assimilate maximum daily flows or on other methods determined to be appropriate by the Department.

(7) In schools, flows generated from sinks or other drains receiving wastes from science laboratories, graphics arts classrooms, or vocational school activities, including, but not limited to, automotive repair painting, or metal fabrication are classified industrial wastes and shall be directed pursuant to an appropriate permit, to a sewer, if a sewer connection is feasible and, if not, then to an industrial waste holding tank in accordance with 310 CMR 18.000 or an approved hazardous waste collection receptacle.