

# Making a New Connection to Public Sewer

## 1. Application

Woodbridge Township does not offer a contractor service to undertake new sewer connections. The developer should arrange for a contractor to do the work, and for a Township Inspector to inspect the connection during construction and upon completion. Woodbridge Township recommends that a suitably qualified and experienced contractor be used.

**Connections to Public Sewers shall preferably be made using in-line junctions or saddles. The integrity of the public sewer must be maintained at all times.**

## 2. Methods of Connection

### a) Connection to Public Sewer Pipe by Oblique (Y-Piece) Junction

Oblique junctions shall be 'flexible'. Rigid joints will not be permitted. Flexible couplings must comply with the requirements of Woodbridge Township 'Specification for flexible couplings for gravity sewer and drainage pipes'. Oblique junctions shall be the same material as the existing public sewer and be placed in the direction of flow at a 2/10 o'clock position on the existing public sewer. The connection must be at least 8" from a collar or spigot. Connections to the public sewer should generally be made using oblique junctions. A junction is inserted into the line of the public sewer after a section of the existing pipework has been cut out and removed. Jointing is by means of a repair coupling at each side of the junction pipe.

### b) Connection to Public Sewer Pipe by Saddle

The use of saddles to clay or concrete sewers is acceptable where the public sewer diameter is three increments larger than the connection diameter, e.g. a 12" dia. public sewer can only be connected to by a 4" dia. Saddle (see table below). Saddle connections must be positioned at 10 o'clock or 2 o'clock and at an angle of 45 degrees to the direction of flow. A single hole in the Public Sewer must be made by diamond core drilling. Saddles shall be the same material as the existing public sewer and positioned at 2/10 o'clock position on the existing sewer section clock face.

### Junction or Saddle

Woodbridge Township only allows the use of a saddle connection when the public sewer is at least 3 pipes sizes larger than the lateral (connection) to be connected. In all other circumstances a junction should be used. The table below shows if a junction or saddle may be used for various public sewer and lateral combinations:

		PUBLIC SEWER (dia. in inches)							
Lateral (dia. in inches)		4	6	8	12	18	21	24	27
	4	JN	JN	JN	SA	SA	SA	SA	SA
	6		JN	JN	JN	SA	SA	SA	SA
	8			JN	JN	SA	SA	SA	SA
	12				JN	JN	SA	SA	SA
	15					JN	JN	SA	SA
	18					JN	JN	JN	SA

**JN** = Junction

**SA** = Saddle

### **c) Connection to Public Brick Sewers (Including Flat Slab Tops)**

The orifice for the new connection should be made by carefully core drilling or removing bricks from the side of the sewer, preferably within the top third. Where applicable, the top slab may be temporarily taken off to aid this process. The connection should not be made by attempting to core drill the top slab.

### **d) Connection to Existing Public Manholes**

This is not the preferred method of connection. The existing manhole may not be able to accommodate the new connection. If the existing manhole is found to be unsuitable for connection then the connection proposals will have to be revised. If the manhole is suitable, the new pipe shall be connected in such a manner that the soffit levels of the existing and new pipes are the same. Where the existing manhole has a preformed invert, then the invert of the connection should be formed and made good in granolithic concrete as required. Pipes in manholes should not be plastic. If it is impractical (due to corresponding pipe levels) to connect into the existing manhole at the same soffit level as the existing public sewer, then a backdrop arrangement may be constructed outside the manhole chamber to 'Sewers for Adoption'. Internal back drops are rarely accepted and may only be considered upon application, in which case they should be ductile iron. Detailed drawings and method statements must be submitted for express written approval.

### **e) Connection to Public Sewer by New Inspection Chamber**

This is only permitted up to a depth of 7 feet and not in public highway. Polyvinyl chloride (PVC) or rectangular pre-cast concrete inspection chambers in accordance with attached approved list of manufacturers may be used where not in highway. Concrete surround shall be provided to inspection chamber where subject to vehicle loading (e.g. driveways). For depths in excess of 4 feet a restricted access opening of 12 inches diameter (or 12"x12"square) shall be used.

### **f) Connection to Public Sewer by New Manhole**

This is primarily for larger drainage schemes. Manholes shall be Pre-cast concrete ring. Manhole covers shall be ductile iron and appropriate strength for the area. Back drop connections (if applicable) shall be external and to 'Sewers for Adoption'.

## **3. Sewer Works Authorization**

Where Sewer Works Authorization is required (for other methods of connection on the application form), the following information is required:

- a) a plan drawing indicating the proposed works and location
- b) a section detail drawing indicating the proposed works
- c) the start and end date of the proposed works including working hours
- d) the person to contact in relation to the proposed works including telephone numbers and e-mail address
- e) a method statement and risk assessment for the proposed work. Please state the obvious hazards (e.g., to health safety and environment) and how these will be mitigated against. Include how flow is to be managed, if applicable (e.g. details of pump types, flow rate, bagging type and lengths.) Please include details of escape set breathing apparatus and lifting and gas monitoring equipment.
- f) Copies of valid confined spaces training certificate for all staff that will be undertaking the work.

#### **4. Health and Safety**

Sewers including manholes and trenches into which a sewer can vent are hazardous places and need special safety precautions. Your attention is drawn to the 'Confined Space Regulations. Agreement to the Works by the Township of Woodbridge should not be taken as confirmation that your proposed method of working complies with these documents or represents a safe system of work. No person should enter a manhole on the public sewerage system without having had the appropriate Confined Space entry training. They must have all necessary safety equipment and ensure that they comply with all relevant health and safety requirements.

#### **5. Discharges to Public Sewer**

Drainage shall not be discharged recklessly. The necessary checks must be undertaken. To avoid pollution and potential penalties, foul water shall only be disposed of to foul or combined water sewers. Surface water shall not be disposed of to foul sewer. Disposal of surface water can have a significant impact on sewer flooding.

#### **6. Locating Existing Sewers and Services**

It is the responsibility of the developer to confirm feasibility and identify existing sewer and services positions on site. This work should be undertaken by a competent contractor.