

1 Water System Impact Analysis

Office	75	1. Avg day demand = Title V/2 + 10% unaccounted for losses 2. Max day demand = 3x average day
Service Bay	gp/1000sf	
Public Park Toiler	150 gpd/bay 5 gpd/person	

General Notes:

Note: 314 CMR 7.00 Sewer Extension and Connection Permit Program flows are not available (or are the same as 310 CMR 15.00 flows) for all uses.

Building 2 is a modular building used primarily for storage. While listed as having 96 gallons per day of flow, the building is expected to consume a negligible amount of water. Building 4 will not have water and sewer services. This building is used only for landscape material storage. For all other buildings that provide equipment storage, a Service Bay flow rate was used as the most compatible usage classification. However, the turf facility is not expected to generate sewage or consume water at a rate that approximates this use. It should be substantially less. Additionally, Building 1 is a replacement of the existing maintenance building that is 7,200 square feet in size. The net deduct in waste and water generation by the removal of 7,200 sf is not reflected in the water consumption table.

The Equipment Service Center will be located on the site of the existing maintenance building and will reuse the current service tap.

The Comfort Station will seek a 1" service tap off of the existing water main in Brookside Road.

The turf facility project will require the installation of a 6" water main with a new tap at the 12" water main located in Forest Street. The 6" ductile iron line will be used to provide domestic and fire protection for the building.

A hydrant flow test is scheduled with the Wellesley Water department to confirm adequate flow exists for the project. In conversations with Joe Doherty, Wellesley Water Department, water availability should not be an issue for this project. In 2005, when the Clubhouse project was proposed, a hydrant located at the intersection of Forest Street and Wellesley Avenue yielded a flow rate of 840 gallons per minute (gpm) at a static pressure of 80 pounds per square inch and a residual pressure of 70 pounds per square inch. The resultant flow calculation is 2,200 gpm at 20 psi. This flow rate will be acceptable to service the building without the need for a fire pump.

A new fire hydrant is proposed in the vicinity of the turf care facility and is shown on the Proposed Utility Plan.

As calculated, the project may generate 1,361 gallons per day and should not have a negative impact on the municipal system. The actual water usage should fall well below the 1,361 gallons per day as calculated.