

City of Newton

**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
OFFICE OF THE CITY ENGINEER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449**

Ruthanne Fuller
Mayor

DATE: August 23, 2022

TO: Land Use Committee

FROM: Louis M. Taverna, P.E., City Engineer



RE: Sewer Inflow and Infiltration Mitigation Fee, REVISED – (2)
11 Florence St, Sunrise Assisted Living
Ordinance No. B-45

The City Engineer has calculated the sewer infiltration/inflow mitigation cost for this project. See calculations below. The total mitigation cost for the assumption of low flow fixtures throughout the project is \$415,590. This calculation includes the reduction of the proposed total sewer flow of the proposed development by the estimated existing sewer flow. This calculation of proposed sewer flow (in gallons per bedroom per day) is consistent with recent previous sewer flow calculations for other assisted living developments in Newton.

Sewer Ordinance No. B-45 states the following: For projects subject to a special permit, the City Council, for good cause shown, may abate in whole or in part the infiltration/inflow mitigation fee for a particular dwelling, building, or project.

Waiver request:

- a) *The expected impact of the development on sewer infiltration/inflow.* The development will propose to add an average of 6,525 gallons per day to the existing city sewer system. The existing sewer flow from the site is estimated to be 1,638 gallons per day. The city's sewer system in this area flows downstream to the sewer interceptor system along Charles River, where it discharges into the MWRA's interceptor sewer.
- b) *Whether infiltration/inflow mitigation has previously been conducted in the general area and to what extent.* This project lies in sewer area 7. Sewer area 7 and the surrounding sewer areas have undergone substantial work related to sewer infiltration/inflow removal, as part of the city's sewer capital improvement program.
- c) *Whether the abatement will benefit the health and well-being of the public and is reasonably in the best interest of the city.* At the request of the Planning Department, an abatement of 75% of the infiltration/inflow mitigation fee, based on low flow fixtures, is recommended by the City Engineer. This would allow the remaining 25% of the fee, or \$103,897 to be used toward the design and construction of sewer improvements in upcoming sewer project areas. The developer should consider dedicating the abated amount of the fee, or \$311,693, towards other mitigation purposes, as recommended by the Planning Department.

Calculation of sewer infiltration/inflow mitigation:

Proposed Sewer Flow:

Studio rooms, 55 units x 65 gal/1 bed = 3,575 gpd

1-bedroom units, 26 units x 65 gal/1 bed = 1,690 gpd

2-bedroom units, 14 units x 90 gal/2 bed = 1,260 gpd

Total = 6,525 gpd

Existing Sewer Flow:

Existing property flow = 1,638 gpd based on water meter data averaged

Net flow = (6,525 gpd – 1,638 gpd) x 4:1 x \$21.26 (as of 1/1/2022) = \$415,590

cc: Barney Heath
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