The Compass Residences – Water Sub-Metering Case Study

Architect: Dattner Architects

Developer: Monadnock, HPD, HDC

Water Consultant: Ashokan Water Services

Building Manager: Prestige **Conservation Challenge**:

As part of the West Farms Redevelopment Plan, Compass Residences provide affordable housing units in three apartment buildings, mixed with retail and community facilities. Ashokan Water Services was retained to discover why water consumption for one of the apartment buildings was significantly higher than for the other two structures, and provide a solution to manage water use going forward.

Conservation Solution:

Ashokan's engineers surveyed the site and proposed a leak survey coupled with submetering and monitoring. A sub-meter was installed in each of the retail stores and tenants were made aware their water use was being monitored. City water data was also analyzed and compared with the other two buildings to detect anomalies in water consumption. Within days, retail water usage was reduced by 74% as a result of hourly monitoring of the sub-meter data. In addition, a manual inspection of the apartments, combined with additional city and building water use information, revealed leaks in 95% of the apartment units. Ashokan's diligence in analyzing data, combined with manual inspections, resulted in a 54% reduction in the site's water footprint.

Conservation Impact:

With a daily data review and comparison of water consumption across buildings, the Compass Residences now receive a warning when a leak occurs, allowing onsite maintenance to address the issue within hours, resulting in conserving 15.7 million gallons of water and saving \$208K annually since 2018.

Installed Products:

Elster evQ4 water meter

Badger High Resolution Encoded (HRE) water meter

Metron Spectrum water meter

AquaSync AWS – AMR – RT transmitter and data logger

