Burlington Wards 5 & 6 Right-of-Way Condition Inventory

Services / Expertise

Water Resources Management Geospatial & Data Solution Water Quality and Watershed Planning Stormwater System Management Stormwater Retrofit Identification & Design Urban Retrofit Planning Spatial Analysis & Mapping MS4 Permit Compliance Municipal System Improvements Phosphorus Control Plan ArcGIS Online Survey123 Collector for ArcGIS

Markets

Municipal Clients Regional Planning Commissions

Project Location Burlington, Vermont

Date Completed 2020 – Present

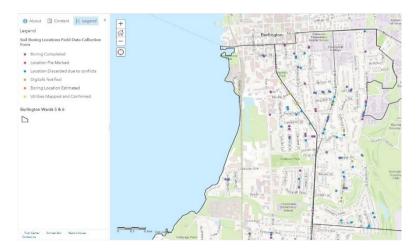
Project Owner

Chittenden County Regional Planning Commission (CCRPC)

Project ID# 17-061-E

Project Manager Peter Lazorchak, PE, LEED AP

Project Team Peter Lazorchak, PE, LEED AP Branden Martin Warren Rich



Screenshot of the web map displaying the status and results of soil borings conducted as ROW areas potentially suitable for stormwater BMP's.

Stone worked with the Chittenden County Regional Planning Commission and the City of Burlington Department of Public Works to develop and implement this extension of developing the Burlington Integrated Water Quality Management Plan (see related project description above). The project is intended to help the City better understand the potential for designing and building stormwater best management practices (BMPs) in City right-of-way (ROW) areas throughout the southern portion of Burlington, with the ultimate goal of providing an expandable strategy for tracking subsurface conditions and ROW BMP siting feasibility across the entire City.

The Stone team first conducted a desktop GIS analysis of the ROW areas, considering a variety of factors that may preclude stormwater BMP implementation. Stone then established a web map of potentially suitable ROW areas, which was utilized during field data collection to assess and refine feasibility determinations and provide a real-time public interface for tracking the status of field investigations (available at https://arcg.is/1qT0Ce0). Field inspections utilized mobile data collection with ArcGIS Collector and Survey123 to record relevant data regarding utility conflicts and other feasibility constraints. For suitable ROW areas, Stone advanced soil borings to characterize subsurface conditions, and performed infiltration testing at the most promising sites. Data collection status and location-specific results were added to a client-facing web map that includes relevant data, images, and boring logs.