SANBORN HEAD

Monthly Dust Monitoring Report

L STREET STATION PROJECT

Boston, Massachusetts

Prepared for HRP 776 Summer Street, LLC

File No. 4867.03

September 2022

MONTHLY DUST MONITORING REPORT
L STREET STATION PROJECT
SEPTEMBER 2022

1.0 INTRODUCTION

Sanborn, Head & Associates, Inc. (Sanborn Head) has prepared this Monthly Dust Monitoring Report on behalf of HRP 776 Summer Street, LLC (the Client) for the deconstruction phase of the L Street Station project at 776 Summer Street in Boston, Massachusetts (the Site). A Locus Plan showing the location of the Site is provided as Figure 1.

A site perimeter Dust Monitoring Plan (DMP) was prepared for the project to establish project action levels, a real-time monitoring program, and mitigation protocols. During the implementation of the DMP, measures were taken by the deconstruction subcontractor, NorthStar Contracting Group, Inc. (NorthStar), working under the project construction manager, Suffolk Construction Company (Suffolk), to provide effective and timely dust control measures to minimize fugitive dust emissions at the Site. This report provides the dust monitoring results collected at the Site in September 2022.

2.0 DESCRIPTION OF SITE CONDITIONS

The Site, as shown on Figure 2, consists of one parcel comprising approximately 15 acres. For at least a century, the Site previously operated as the New Boston Generating Station, an electrical power plant. With the exception of one building, referred to as the Administration Office Building, the Site is vacant and abandoned and contains seven main structures with eight ancillary structures that were used when the Site operated as a power plant. The main facility consists of both single and multi-story structures that are in the process of being deconstructed.

The Site features consist of exhaust stacks, turbine rooms, boiler rooms, switch houses, screen houses, sheds, and electrical transformers. The eastern portion of the Site that was previously used for coal storage, wastewater operations, and contained wastewater impoundments was heavily vegetated prior to the start of deconstruction. There is a paved area to the north of the vegetated area. A water body that is part of the Reserved Channel is located in the northwestern portion of the Site.

The Site is located in a highly urbanized area of South Boston with flat topography. It is bounded to the west by Summer Street, to the south by East First Street, and to the north by the Dedicated Freight Corridor (Massport) roadway.

3.0 DUST ACTION LEVELS

To calculate a site-specific, risk-based dust level for the Site, risk calculations were performed by Sanborn Head assuming a child would be present immediately adjacent to the Site during earthwork. The child receptor was assumed to be present 8 hours per day, 5 days per week, for

2 years, and the dust concentration was assumed to be equal to the Massachusetts Ambient Air Quality Standard and USEPA National Ambient Air Quality Standards (NAAQS) of 150 µg/m^3. Sanborn Head used the maximum concentrations detected in soil samples collected recently at the Site to model dust concentrations. Non-cancer and cancer risk estimates for the child receptor based on these conservative exposure assumptions are well below Massachusetts Contingency Plan (MCP) non-cancer and cancer risk limits.

Based on the results, a dust level of 150 µg/m^3 for PM10 particulates based on a 24-hr average was chosen as the project dust action level.

4.0 PERIMETER DUST MONITORING

Real-time perimeter dust monitoring is being performed during deconstruction activities. Six laser-photometer-based aerosol monitors (i.e., TSI Dust Trak II Aerosol Monitor, or equivalent) provide full-time dust monitoring around the Site perimeter. The real-time dust monitors are equipped with telemetry and data logging capabilities. The dust monitors are stored in weatherproof stations on tripods and are equipped with solar panels and batteries.

The six dust monitors are deployed around the perimeter of the Site in the approximate locations shown on Figure 2. Two monitors are located along Summer Street (Stations 5 and 6), two are located along East First Street (Stations 3 and 4), one monitor is located along the northern side of the Site (Station 1), and one monitor is located along the eastern side of the Site (Station 2). The locations of the monitoring stations may be adjusted if needed as the work progresses. The dust monitors were deployed prior to the start of work to collect baseline data for the Site.

Dust data was collected in accordance with the site perimeter DMP, and the results for September 2022 are included on Figure 3. As shown on the figure, there were no exceedances of the dust action level of 150 µg/m^3 for PM10 particulates based on a 24-hr average.

5.0 CORRECTIVE MEASURES

No corrective measures were required for dust mitigation in September 2022 because dust concentrations collected were well below the calculated Site-specific action level.

6.0 EQUIPMENT MAINTENANCE

Due to server connectivity and battery issues, the dust monitors had variable functionality during this reporting period. New equipment was ordered and dust monitor maintenance is ongoing to support continuous operation of the units.

FIGURES

Figure 1 Locus Plan
Figure 2 Dust Monitoring Location Plan
Figure 3 September 2022 Dust Concentration 24-hour Averages

Path: P:\4800s\4867.00\Graphics Files\ArcGIS\Figures\202110_DustMonitoring\Locus.mxd Last Edited By: zsvoboda © 2022 SANBORN, HEAD & ASSOCIATES, INC.

Drawn By:	Z. Svoboda
Designed By:	T. Snay
Reviewed By:	P. Pinto
Project No:	4867.03
Date:	September 2022

1,000 500 0 1,000 2,000 Feet

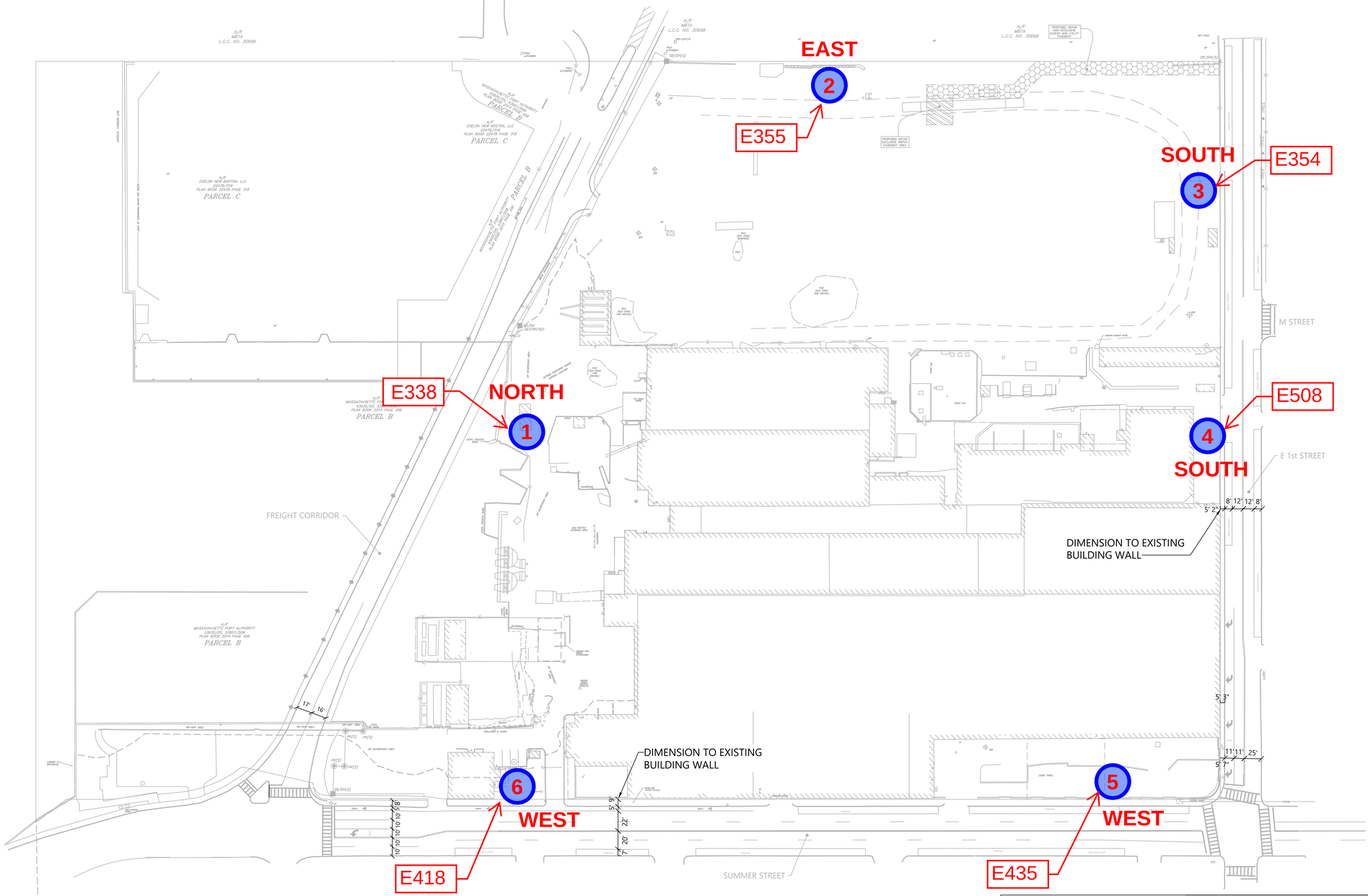
SANBORN HEAD

Figure 1

Locus Plan

Dust Monitoring Report

776 Summer Street
Boston, Massachusetts

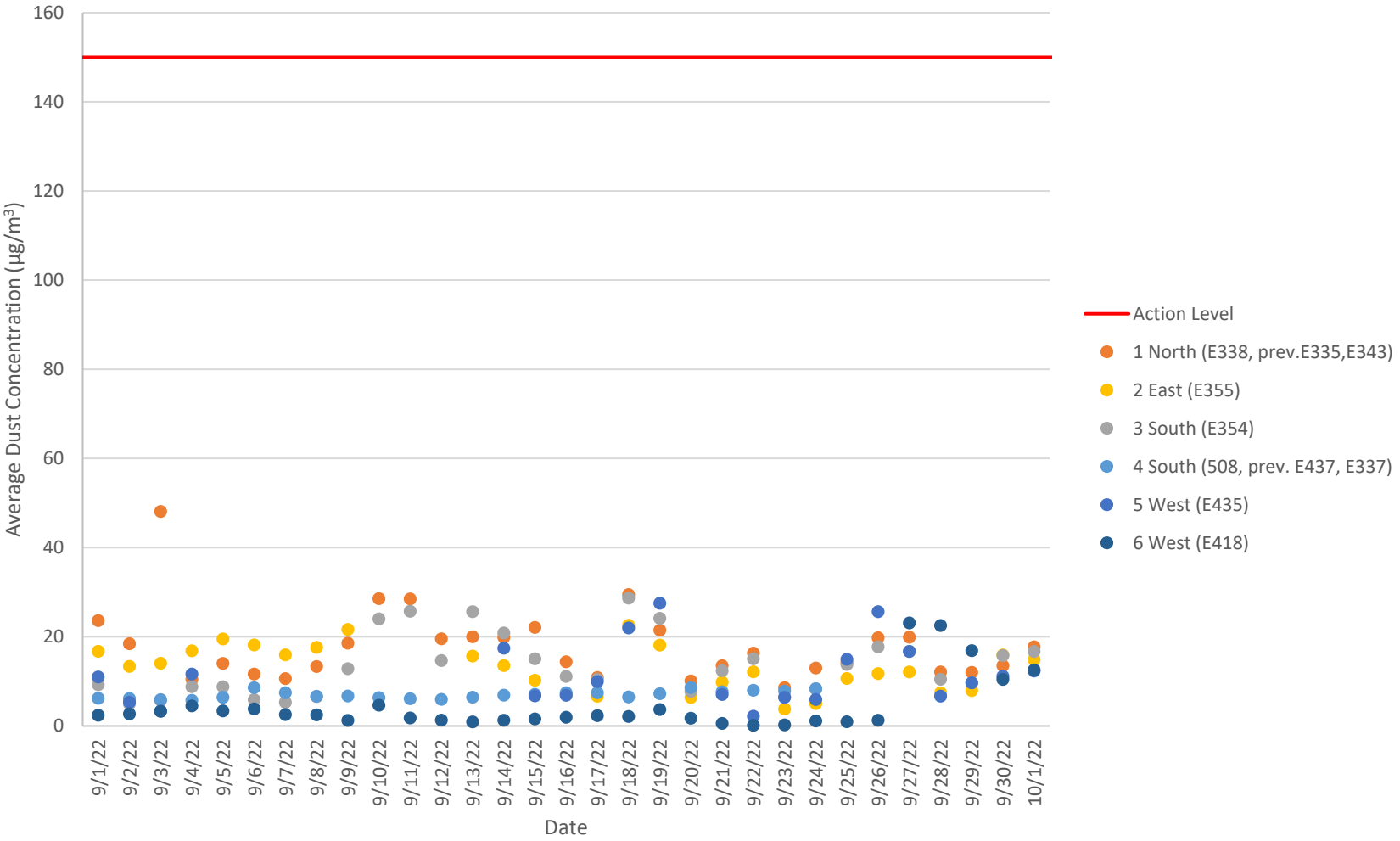


776 Summer Street - Deconstruction

SOUTH BOSTON

EXISTING CONDITIONS

FIGURE 2

DUST MONITORING LOCATION PLAN

Dust Concentration 24-hour Averages
September 1 - September 30, 2022
776 Summer Street
Boston, Massachusetts