

November 12, 2020

Mr. David Hanson
Senior Waste Management Specialist
Department of Natural Resources
2300 N. Dr. Martin Luther King Dr.
Milwaukee, WI 53212-3128

Project # 40405

Subject: Sub-Slab Vapor Investigation Work Plan for the Community Within the Corridor, Limited Partnership, located at 2748 N. 32nd Street, 3212 West Center Street, 2727 N. 32nd Street, 2758 N. 33rd Street, and 2784 N. 32nd Street, in Milwaukee, WI

Dear Mr. Hanson:

K. Singh & Associates, Inc. (KSingh) is pleased to submit this sub-slab vapor investigation work plan on behalf of the Community Within the Corridor, Limited Partnership (CWC) for the referenced facility.

Project Background

Historically, the building complex served various industrial purposes for over 100 years. The building complex at 2748 N. 32nd Street was recently used as storage and is currently vacant, but plans for redevelopment are underway, estimated to commence December 2020 and continue through 2022. Current plans include residential multi-family housing, mixed use commercial and underground parking, and various amenities within the former industrial complex.

A historic hazardous discharge existed for 2748 N. 32nd Street, addressed under BRRTS #02-41-263675, and closed in August 2008 with continuing obligations applied to closure. Continuing obligations included maintaining a cap over the contaminated area and mitigating soil vapor concentrations. The contaminated area was not excavated due to existing structural impediments.

A teleconference between the WDNR, CWC, and KSingh was held to discuss the plans for redevelopment, and the following issues were raised by the WDNR October 2020:

- A more extensive vapor intrusion investigation for trichloroethylene (TCE) is recommended due to the former industrial complex redevelopment to residential multi-family housing and other mixed land uses.
- The vapor intrusion investigation shall include a sub-slab vapor investigation work plan.
- The work plan shall include locations of residential areas and other improvements which include elevators, piping, and tunnels.

Previous Vapor Intrusion Investigations

As per the conditions of closure for the former industrial complex, a mitigation system has been active at the facility since August 2008. The mitigation system is comprised of two extraction points in the eastern and western extents of 2748 N. 32nd Street (Refer to Figure 1). KSingh performed indoor air and sub-slab sampling to determine the overall effectiveness of the mitigation system in July 2020. The western extraction

point appears to be successfully mitigating sub-slab vapor concentrations as no detections exceeded Wisconsin Indoor Air Vapor Action Levels (VALs) or Sub-Slab Vapor Risk Screening Levels (VRSLs). The eastern extent of the property did exceed residential VRSLs beneath the sub-slab. This portion of the mitigation had been left inactive for an unknown amount of time.

KSingh's recommendations after evaluating the effectiveness of the mitigation system were as follows in respect to future planning for redevelopment:

- The western portion of the mitigation system will remain active until plans for redevelopment. At that time, the system will be temporarily decommissioned since its location conflicts with planning. Current plans for this portion of the complex are an underground parking garage. KSingh recommended the system be modified into a parking garage mitigation design following guidelines outlined in WDNR guidance publication RR-800: Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin, January 2018.
- The eastern portion of the mitigation system would remain unchanged as it currently does not impede redevelopment planning. However, an electrician should be retained to evaluate and provide power to resume the functionality of the mitigation system.
- A commissioning plan would be prepared and implemented once mitigation resumes.

Additional Vapor Intrusion Investigation for Redevelopment

Proposed sub-slab sampling locations are included on Figure 2. Locations were chosen based on where the highest TCE concentrations are expected and planned layout for the mixed-use redevelopment.

Sub-slab sampling will be performed in two stages:

Proposed STAGE 1 sub-slab sampling locations will be installed at 38 points throughout the eastern complex following guidelines outlined in WDNR guidance publication RR-986. The current mitigation system will be shut off for a minimum of 48 hours prior to sampling activities. A 5/8-inch drillhole will penetrate the existing sub-slab at each location. Soil will be collected to a depth no greater than six inches beneath the sub-slab and analyzed for chlorinated volatile organic compounds (CVOCs). A stainless-steel vapor pin will be placed in each drillhole. Once sub-slab vapors are given time to equilibrate and prior to sample collection, leak testing via water dam methods and negative pressure testing will be performed to ensure no leaks are present between the sub-slab, vapor pin, sample train, and canister. 1.4 L Summa canisters will be utilized to collect sub-slab samples. Once samples are collected, Summa canisters will be transported to Synergy Environmental Lab, Inc. using chain-of-custody procedures to be analyzed for CVOCs in accordance with EPA Method TO-15.

Up to 12 additional proposed STAGE 2 sub-slab sampling locations may be installed once analytical results from the STAGE 1 sampling event are received to fill the data gaps. Installation and sampling methods will be consistent with STAGE 1 sampling; however, no soil samples would be collected beneath the sub-slab.

Prior to removal of any vapor pins installed in the vicinity of the current mitigation system, radius of influence measurements will be measured beneath the sub-slab.

Sub-slab sampling will not occur throughout the western building complex since the Phase II Environmental Site Assessment dated May 24, 2020 did not find VOCs contamination on the property and the building is

more than 150 feet from the TCE plume on the eastern property. Per WDNR publication RR-800, a sub-slab investigation is not required.

Project Schedule

The schedule for this sub-slab investigation work is as follows:

- | | |
|--|-------------------|
| • Seek approval of work plan | November 18,2020 |
| • Begin sample collection | November 25, 2020 |
| • Receive analytical test results | December 18, 2020 |
| • Report preparation | December 30, 2020 |
| • Additional investigation and reporting | January 31, 2021 |

Conclusions

- The sub-slab sampling investigation will be performed by KSingh for Community Within the Corridor, Limited Partnership in two stages.
- During STAGE 1, 38 sub-slab samples will be collected and analyzed for CVOCs to determine the extent of TCE vapor impacts beneath the sub-slab.
- STAGE 2 sub-slab samples will be collected and analyzed for CVOCs to fill in any data gaps from STAGE 1 sampling.
- Prior to sub-slab sampling, the current mitigation system will be shut off a minimum of 48 hours prior to any sampling activities and resumed once sampling is completed.

Should you have any questions or require any additional information, please feel free to contact us at 262-821-1171.

Sincerely,

K. SINGH & ASSOCIATES, INC.



Kyle R. Vander Heiden
Staff Geologist



Robert T. Reineke, P.E.
Project Manager



Pratap N. Singh, Ph.D., P.E.
Principal Engineer

cc: Pamela A. Mylotta, NR Region Program Manager / Wisconsin Department of Natural Resources
Que El-Amin / Scott Crawford, Inc.
Shane LaFave / Roers Companies

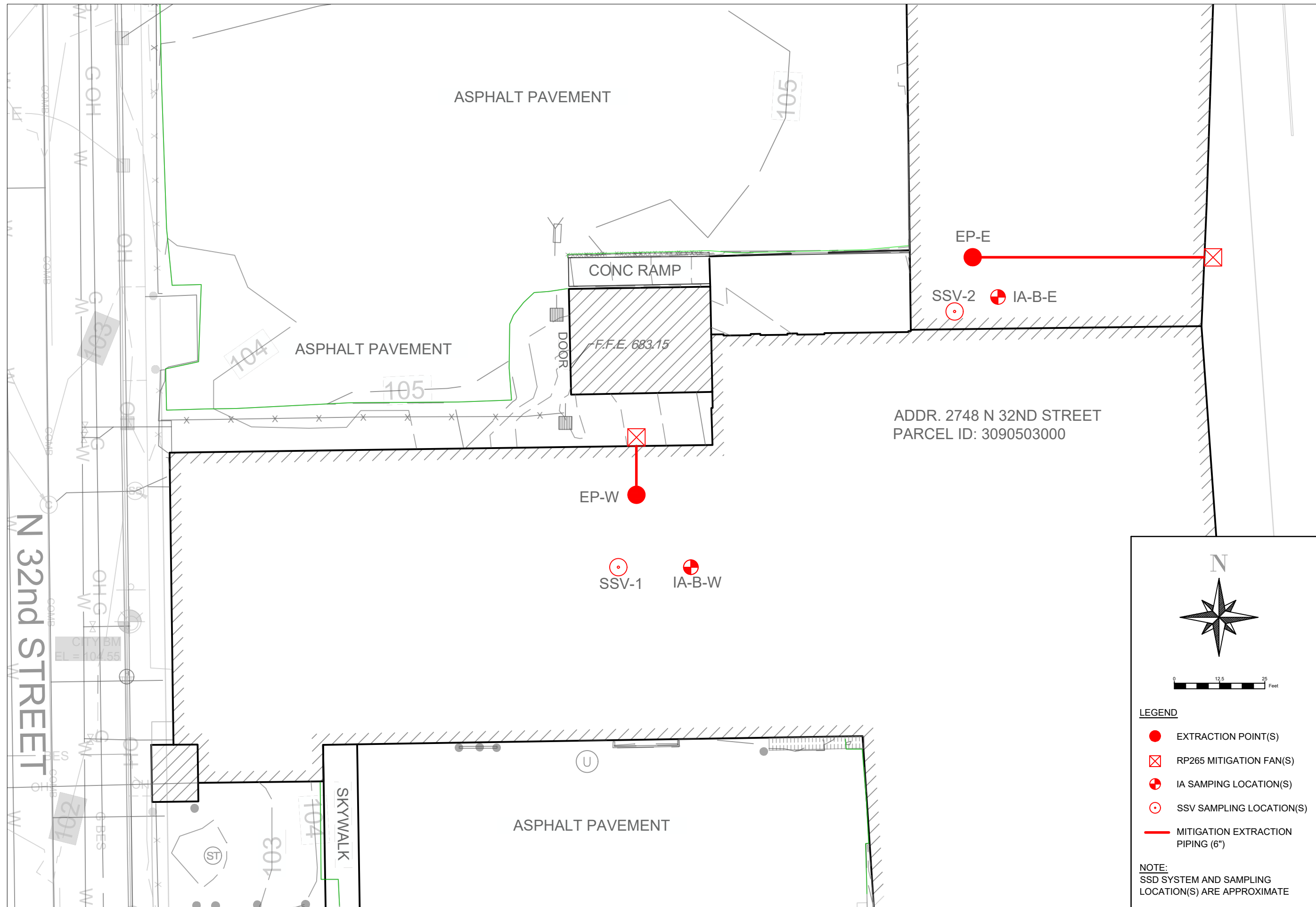
Attachments : Figure 1 and 2.

FIGURES

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PROJECT TITLE: COMMUNITY WITHIN THE CORRIDOR
MILWAUKEE, WI
PROJECT NUMBER: 40392

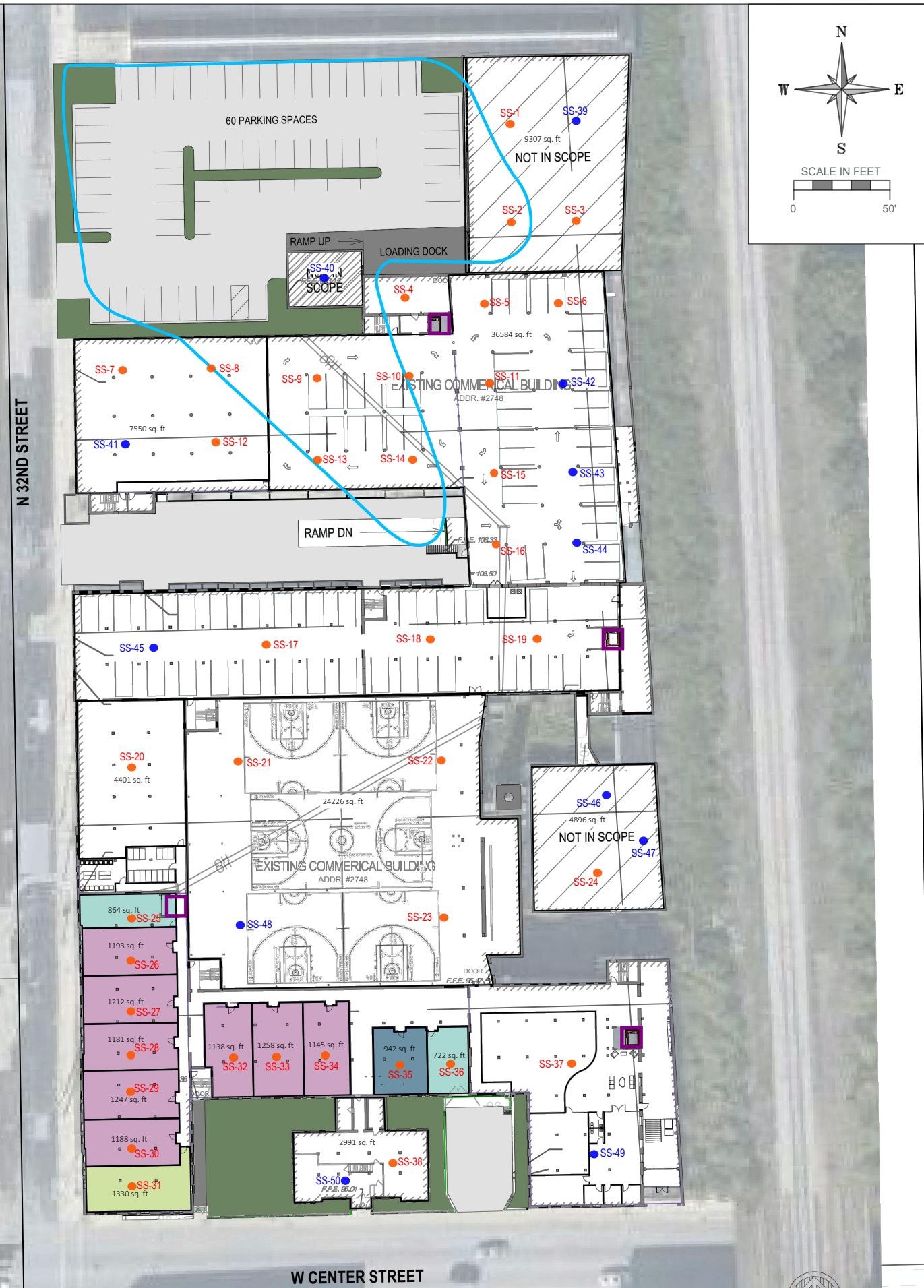
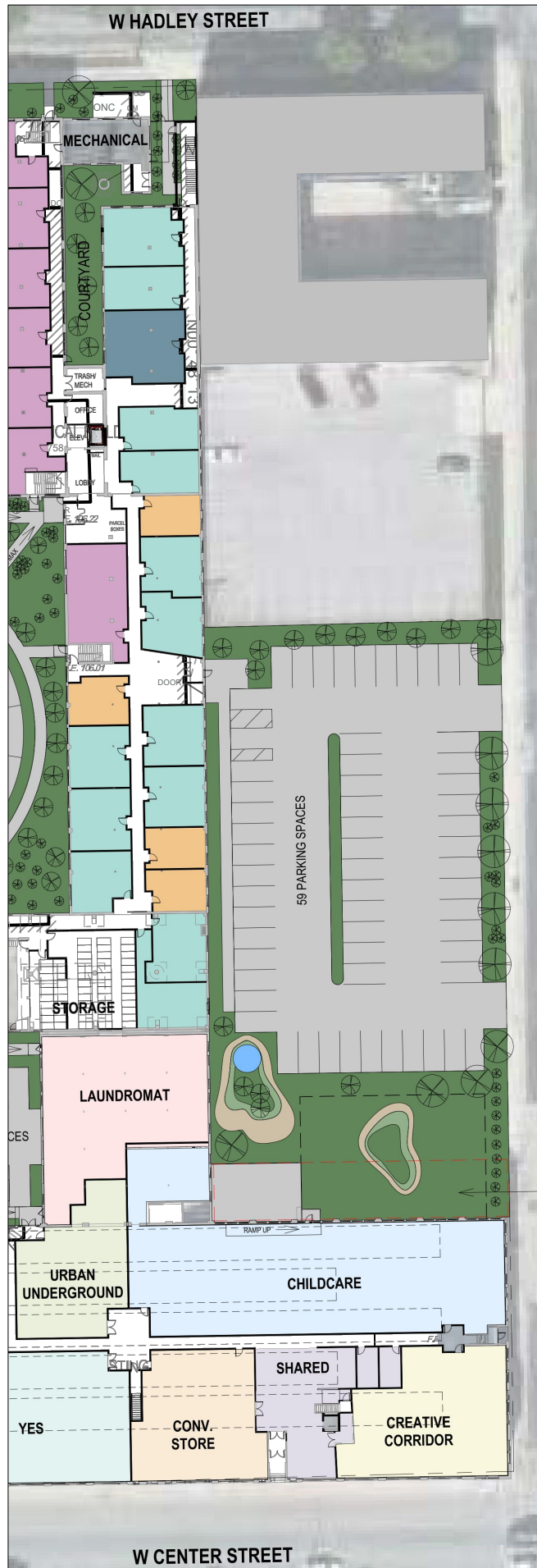
CLIENT:
ROERS COMPANIES

REVISIONS	DATE	DESCRIPTION

DRAWN BY AMZ	DATE 05/21/2020
CHECKED BY KVH	DATE 05/21/2020

SHEET TITLE
SUB-SLAB DEPRESSURIZATION
SYSTEM OVERVIEW

FIGURE 1



LEGEND

- Proposed STAGE 1 Sub-Slab Sampling Locations (38)
- Proposed STAGE 2 Sub-Slab Sampling Locations (12)
- NR 720 RCL Exceedance Extents
- Known Elevator Shaft Locations

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PROJECT TITLE: COMMUNITY WITHIN THE CORRIDOR
MILWAUKEE, WI
PROJECT NUMBER: 40405
CLIENT: COMMUNITY WITHIN THE CORRIDOR LIMITED PARTNERSHIP

REVISIONS	DATE	DESCRIPTION

DRAWN BY: AMZ DATE: 09/21/2020
CHECKED BY: KVH DATE: 09/21/2020
SHEET TITLE: Sub-Slab Vapor Investigation Overview

FIGURE 2