

April 5, 2019

Mr. Ed Jones, Project Manager  
Washington State Department of Ecology  
3190 160<sup>th</sup> Avenue Southeast  
Bellevue, Washington 98008-5452

**RE: PROGRESS REPORT, JANUARY THROUGH MARCH 2019  
REMEDIAL INVESTIGATION MONITORING AND FEASIBILITY STUDY  
CAPITAL INDUSTRIES, INC.  
5801 THIRD AVENUE SOUTH, SEATTLE, WASHINGTON  
AGREED ORDER NO. DE 10402  
FARALLON PN: 457-008**

Dear Mr. Jones:

Farallon Consulting, L.L.C. (Farallon) has prepared this progress report on behalf of Capital Industries, Inc. (CI) to summarize the activities conducted during the first quarter of 2019, January through March, as part of the ongoing remedial investigation monitoring and feasibility study being conducted at the CI facility at 5801 3<sup>rd</sup> Avenue South in Seattle, Washington (herein referred to as the CI Site). This progress report has been prepared in accordance with Agreed Order No. DE 10402 dated April 23, 2014, entered into by potentially liable persons that include CI; Art Brass Plating, Inc.; Blaser Die Casting Co.; and PSC Environmental Services, LLC (Burlington Environmental, LLC is a wholly owned subsidiary of PSC Environmental Services, LLC, which is a wholly owned subsidiary of Stericycle Environmental Solutions, Inc.); and by the Washington State Department of Ecology (Ecology) (Agreed Order). CI and the other potentially liable persons listed above are collectively referred to as the West of 4<sup>th</sup> Group. The West of 4<sup>th</sup> Group Site under the Agreed Order consists of Site Unit 1 (SU1) and Site Unit 2 (SU2) as depicted on the figure presented in Attachment A. The CI Site is located in SU2.

## ACTIVITIES DURING REPORTING PERIOD

Activities completed during this progress reporting period included:

- Continuing operation of vapor intrusion mitigation subslab depressurization systems (SSDSs) at the Pacific Foods Systems North Building at 5815 4<sup>th</sup> Avenue South and the Natus Medical Facility at 5900 First Avenue South in Seattle, Washington.<sup>1</sup> This work included inspection of system operations and collection of ambient air samples.
- Conducting a semiannual groundwater monitoring and sampling event in March 2019 for select SU2 monitoring wells.

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<sup>1</sup> The Natus Medical Facility at 5900 First Avenue South in Seattle, Washington previously was known as the Olympic Medical Facility.



- Submitting the *Final Capital Industries Plant 4 Interim Action – Stage 1 In-Situ Chemical Oxidation Report, West of 4<sup>th</sup> Group Site, Capital Industries, Inc., 5801 3<sup>rd</sup> Avenue South, Seattle, Washington* dated February 22, 2019, prepared by Farallon (ISCO Report).
- Preparing the *Draft Capital Industries Plant 4 Soil Vapor Extraction Pilot Study Work Plan, West of 4<sup>th</sup> Group Site, Capital Industries, Inc., 5801 3<sup>rd</sup> Avenue South, Seattle, Washington* dated March 29, 2019 (Draft SVE Pilot Study Work Plan) for submittal to Ecology by April 5, 2019.

These activities are summarized in the sections that follow.

## VAPOR INTRUSION MITIGATION AND REPORTING

The SSDSs at the Pacific Food Systems North Building and the Natus Medical Facility operated continuously during the first quarter of 2019. Farallon inspected the SSDSs and collected system influent and ambient air samples at both facilities on March 20, 2019.

Based on information provided by the tenant and observations made by the Farallon Field Engineer, the Magnehelic gauge for Sump No. 6 (Attachment B)<sup>2</sup> at the Natus Medical Facility is not functioning properly and is providing vacuum readings that are not consistent with other Magnehelic gauge readings, which ranged from 8.0 to 9.3 inches of water. Based on the vacuum readings at the other sump locations, the SSDS is performing in accordance the operating specifications. In addition, excessive noise was observed at Sump No. 2 at the Natus Medical Facility. The potential issues with Sump Nos. 6 and 2 will be investigated further and any needed repairs will be facilitated at that time.

The SSDS at the Pacific Food Systems North Building was operating at a vacuum pressure of 4.0 inches of water. The vacuum readings at the five subslab monitoring ports (SSMP-1 through SSMP-5) (Attachment C) ranged from -0.013 to -0.050 inches of water, indicating that the SSDS is successfully maintaining a negative pressure field below the building slab. No operational issues were noted for the SSDS at the Pacific Food Systems North Building.

Influent and ambient air monitoring results will be evaluated in April 2019 and provided in the second quarter 2019 progress report.

## FEASIBILITY STUDY REPORT

A pilot study is being conducted at SU1, and an interim action pilot study to evaluate soil vapor extraction (SVE) is planned at CI Plant 4 in SU2.

## INTERIM MEASURES

The ISCO Report was submitted to Ecology to summarize the Stage 1 in-situ chemical oxidation pilot study conducted in the third quarter of 2018. The in-situ chemical oxidation pilot study indicated that this technology would not be technically feasible and could not achieve cleanup objectives at CI Plant 4. Ecology concurred with this conclusion in the letter regarding West of 4<sup>th</sup>

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<sup>2</sup> Magnehelic gauges for the sumps at the Natus Medical Facility are collocated with the sumps and mounted on the riser.



Site, Agreed Order #DE 10402, Site Unit 2 Interim Action dated February 21, 2019, from Mr. Jones of Ecology to Ms. Dana Cannon of Aspect Consulting (Ecology Response Letter).

CI will be conducting an SVE pilot study to evaluate whether this remedial technology has the potential to achieve the cleanup objectives. Ecology concurred with this approach in the Ecology Response Letter. Farallon provided a schedule for the SVE pilot study to Ecology in the letter regarding Capital Industries Plant 4 Interim Action Soil Vapor Extraction Pilot Test Schedule, Capital Industries, Inc., 5801 Third Avenue South, Seattle, Washington dated February 22, 2019, from Ms. Jennifer Moore and Mr. Jeffrey Kaspar of Farallon to Mr. Jones of Ecology. The SVE pilot study will be described in the Draft SVE Pilot Study Work Plan being prepared by Farallon for submittal to Ecology by April 5, 2019.

### **GROUNDWATER MONITORING AND SAMPLING**

Groundwater monitoring and sampling was performed during the week of March 18, 2019 in accordance with the technical memorandum regarding FINAL West of 4<sup>th</sup> Groundwater Monitoring Program Plan, 2017 through Draft Cleanup Action Plan, W4 Joint Deliverable, Agreed Order No. DE 10402 dated March 21, 2017, from Ms. Janet Knox of Pacific Groundwater Group to Mr. Jones of Ecology. Groundwater elevation data were collected at SU1 and SU2 monitoring wells on March 21, 2019. Groundwater samples were collected from monitoring wells scheduled for sampling and analyzed for chlorinated volatile organic compounds. Groundwater samples from select monitoring wells also were analyzed for natural attenuation parameters, including nitrate, ferrous iron, sulfate, methane, total organic carbon, and ethane/ethene. The analytical results will be validated and summarized in the second quarter of 2019 to evaluate plume stability and the potential for natural attenuation.

### **PUBLIC COMMUNICATIONS**

No public communication activities were completed by CI during this period.

### **ANTICIPATED WORK IN THE NEXT QUARTER**

Work anticipated to be performed during the second quarter of 2019, April through June, is summarized below.

#### **MONITORING WELL MAINTENANCE**

Evaluation of the condition of the monitoring wells is conducted during each semiannual groundwater monitoring event. Based on the results of the March 2019 groundwater monitoring event, routine monitoring well maintenance activities, including replacement of monuments at monitoring wells CI-12-WT, CI-12-60, MW-4, and CI-14-70, will be coordinated during the second quarter of 2019.

#### **FEASIBILITY STUDY WORK**

Continued interim action work at CI Plant 4 is the only feasibility study-related work anticipated for the second quarter of 2019 and is expected to continue throughout 2019. In 2020, following



completion of the SU1 pilot study and confirmation that SVE can be applied as an interim action at CI Plant 4, an addendum to the Feasibility Study Reports will be prepared, and a final remedial alternative will be proposed for Ecology approval.

#### **INTERIM MEASURES**

Based on the anticipated SVE pilot study schedule presented in the forthcoming Draft SVE Pilot Study Work Plan, the SVE pilot study is expected to be conducted in June 2019.

#### **GROUNDWATER MONITORING AND SAMPLING**

The groundwater data from the March 2019 groundwater monitoring event conducted in SU2 will be used to continue to evaluate plume stability and support the selection of potential cleanup alternatives presented in the Feasibility Study Report. Summary figures with historical data for 2017 through 2019 will be provided to Ecology and included in the second quarter 2019 progress report.

#### **PUBLIC COMMUNICATIONS**

The project website (<http://www.farallonconsulting.com/457-capital-industries>) will be updated with an electronic copy of this progress report.

The next progress report will summarize activities completed from April through June 2019, and will be submitted on or before July 8, 2019.

#### **CLOSING**

Farallon trusts that this quarterly progress report provides sufficient information for Ecology needs. If you have questions regarding this project, please contact either of the undersigned at (425) 295-0800.

Sincerely,

**Farallon Consulting, L.L.C.**

Jennifer L. Moore  
Senior Scientist

Jeffrey Kaspar, L.G., L.H.G.  
Principal Geologist

Attachments: Attachment A, Site Diagram  
Attachment B, Subslab Depressurization System Layout – Natus Medical Building  
Attachment C, Subslab Depressurization System Features – Pacific Food Systems – North Building

cc: Ron Taylor, Capital Industries, Inc.  
Donald Verfurth, Gordon and Rees, L.L.P.



Email with link to electronic copy on project website:

Janet Knox, Pacific Groundwater Group

Dana Cannon, Aspect Consulting

Bill Carroll, Arrow Environmental

Bill Beck, PSC Environmental Services, LLC

JM/JK:mm

**ATTACHMENT A  
SITE DIAGRAM**

PROGRESS REPORT, JANUARY THROUGH MARCH 2019

Capital Industries, Inc.  
5801 Third Avenue South  
Seattle, Washington

Farallon PN: 457-008







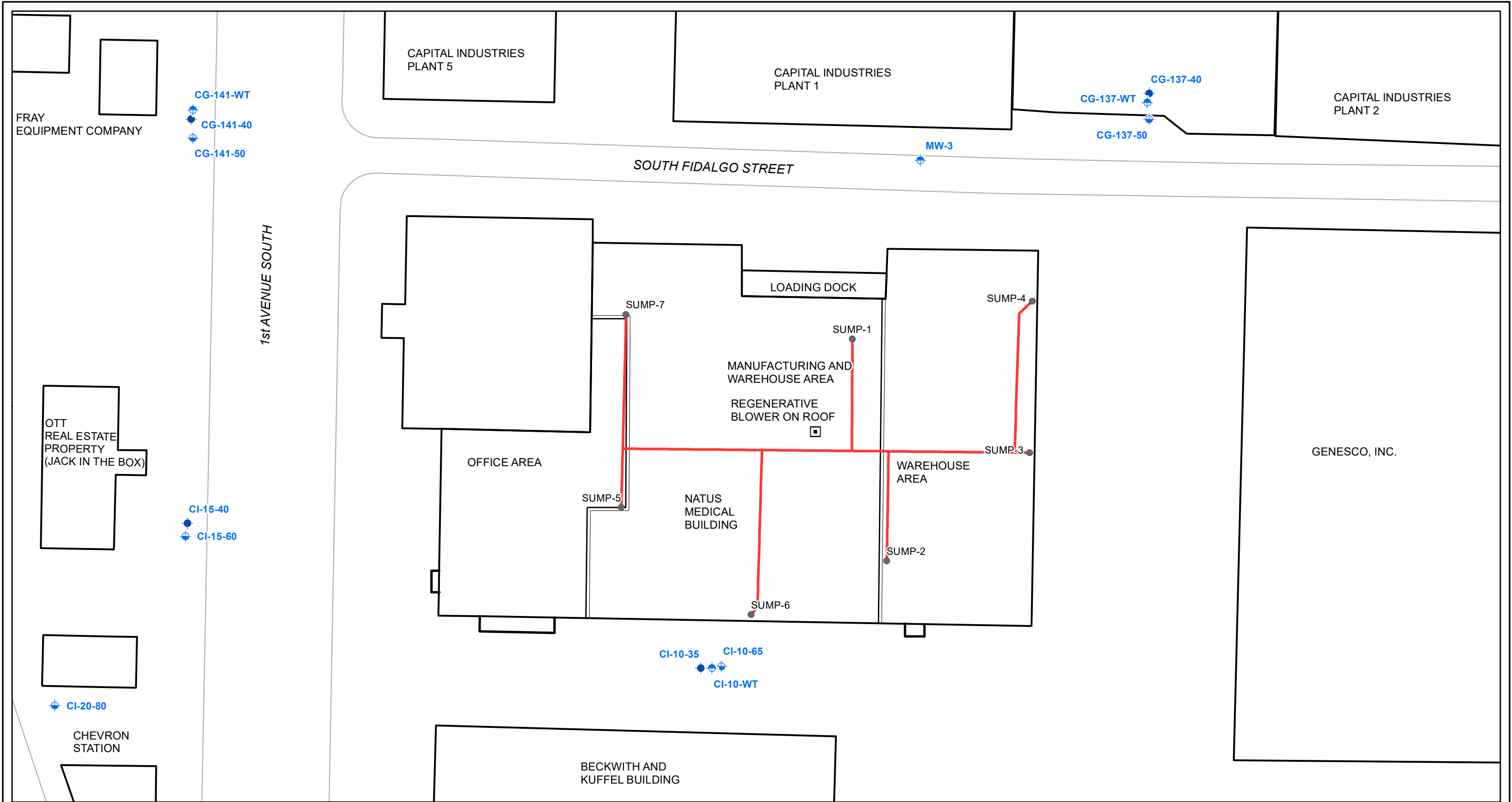
**ATTACHMENT B**  
**SUBSLAB DEPRESSURIZATION SYSTEM LAYOUT – NATUS**  
**MEDICAL BUILDING**

PROGRESS REPORT, JANUARY THROUGH MARCH 2019








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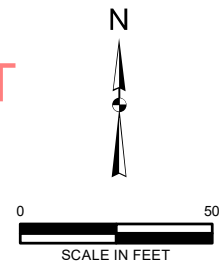





**LEGEND**

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|---|---|
|  WATER TABLE INTERVAL MONITORING WELL  |  BUILDING OUTLINE      |
|  SHALLOW INTERVAL MONITORING WELL      |  INTERIOR WALL         |
|  INTERMEDIATE INTERVAL MONITORING WELL |  SSDS PIPING (ON ROOF) |
|  SSDS EXTRACTION SUMP LOCATION         |   |

DRAFT



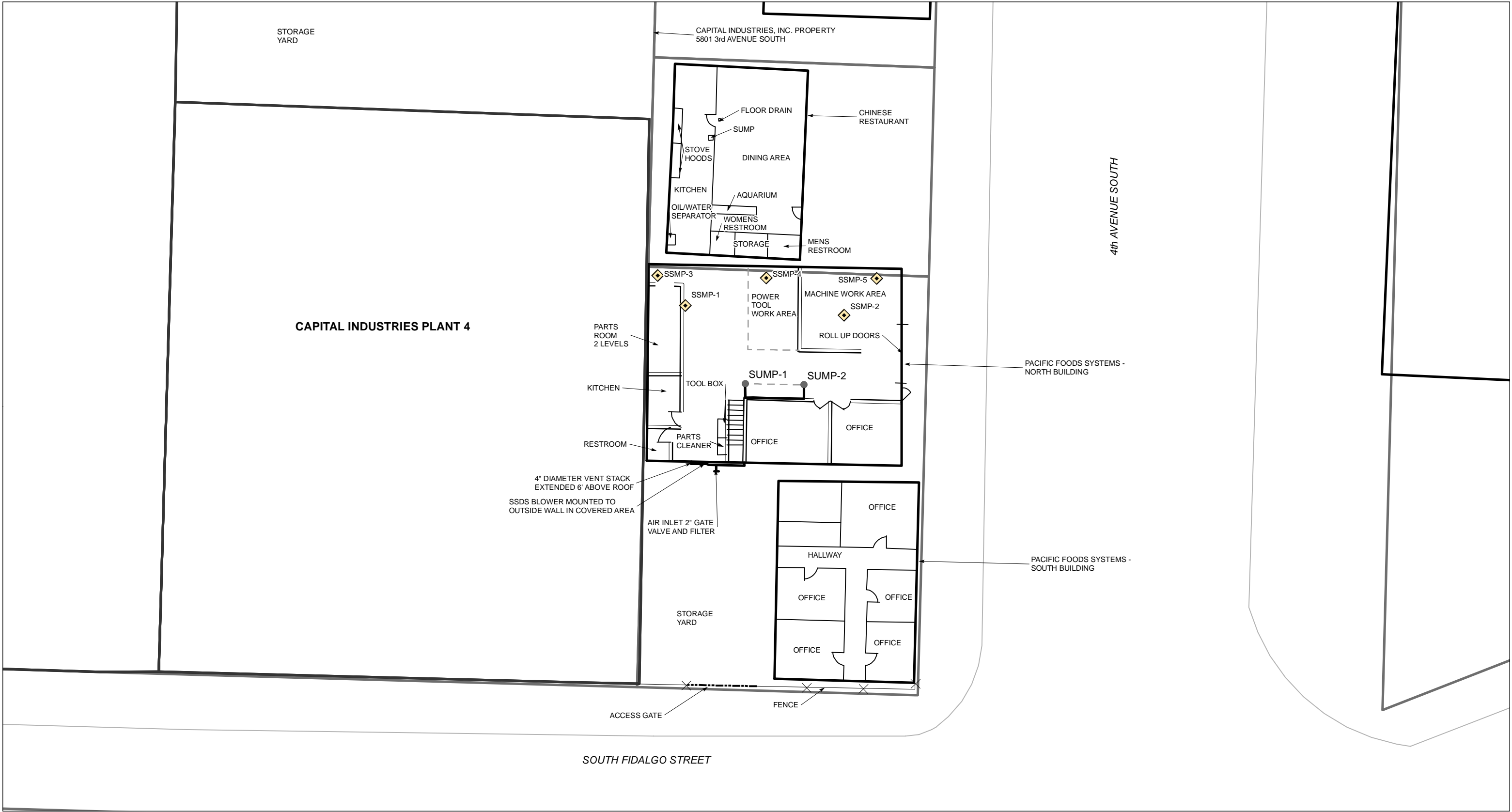
 <b>FARALLON</b> CONSULTING <small>Quality Service for Environmental Solutions   farallonconsulting.com</small>	Washington Issaquah   Bellingham   Seattle	<b>FIGURE 1</b> <b>SUBSLAB DEPRESSURIZATION SYSTEM LAYOUT</b> <b>NATUS MEDICAL BUILDING</b> <b>5900 1st AVENUE SOUTH</b> <b>CAPITAL INDUSTRIES, INC.</b> <b>SEATTLE, WASHINGTON</b>  FARALLON PN: 457-007
	Oregon Portland   Bend   Baker City	
	California Oakland   Folsom   Irvine	
	Disc Reference: Q:\Projects\457 CapitalIndust\007 RemInv\Monitoring\Mapfiles\Air Samples\EcoLetter_20190404\Figure 01 Subslab NatusMed_Air.mxd	
Drawn By: tperrin	Checked By: JM	Date: 4/4/2019

**ATTACHMENT C**  
**SUBSLAB DEPRESSURIZATION SYSTEM FEATURES – PACIFIC FOOD**  
**SYSTEMS – NORTH BUILDING**

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Capital Industries, Inc.  
5801 Third Avenue South  
Seattle, Washington

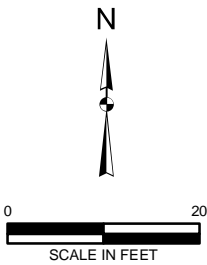
Farallon PN: 457-008



**LEGEND**

- SSDS EXTRACTION SUMP LOCATION
- ◆ EXISTING SUBSLAB MONITORING PORT
- ▭ KING COUNTY PARCEL BOUNDARY

NOTES:  
SSDS = SUBSLAB DEPRESSURIZATION SYSTEM  
ALL LOCATIONS ARE APPROXIMATE.  
FIGURES WERE PRODUCED IN COLOR.  
GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.





**FARALLON**  
CONSULTING

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Washington  
Issaquah | Bellingham | Seattle

Oregon  
Portland | Bend | Baker City

California  
Oakland | Folsom | Irvine

**FIGURE 1**  
**SUB-SLAB DEPRESSURIZATION SYSTEM FEATURES**  
**PACIFIC FOOD SYSTEMS - NORTH BUILDING**  
**5814 4th AVENUE SOUTH**  
**SEATTLE, WASHINGTON**

FARALLON PN: 457-007