From:	Verburg, Ben
To:	Neste, David E - DNR
Cc:	Rick Bethel; Danko, Jeff; Scott D Wahl; Bedard, Michael
Subject:	Soil Excavation for Construction - Ansul Fire Technology Center, 2700 Industrial Parkway South, Marinette, Wisconsin (BRRTS#s 02-38-580694 and 03-38-001345).
Date:	Wednesday, May 13, 2020 9:40:43 PM
Attachments:	image005.png Figure 1 - Site Layout.pdf Figure 2 -Staging Area.pdf Table 1 - Soil Analytical Results (002).pdf sheet C2.0 overall site plan.pdf

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Dave-

Tyco Fire Products LP (Tyco) is planning a construction project at the Ansul Fire Technology Center located at 2700 Industrial Parkway South, Marinette, Wisconsin (Site). The construction project will be an addition to an existing building (Building 105) and includes an on-Site indoor testing facility and industrial wastewater treatment plant (WWTP) (hereinafter referred to as Building 105 addition), and a stormwater detention pond. Sheet 2.0 – Overall Site Plan presents the Building 105 addition. Approximately 3,300 cubic yards (CY) of soil will be generated during construction. Tyco proposes to manage the contaminated soil in accordance with Wis. Admin. Code§ 718.12 (1). The two Bureau of Remediation and Redevelopment Tracking System (BRRTS) sites associated with this project are:

- BRRTS# 02-38-580694 – JCI/Tyco FTC (PFAS)
- BRRTS# 03-38-001345 – JCI/Tyco FTC (VOCs)

Objective

The objective of this email is to provide notification to the WDNR that Tyco will excavate and store soil generated as part of Building 105 addition and stormwater detention pond construction at the Site pending soil sampling, laboratory analysis, soil results reporting to the WDNR, and preparation of a Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15 Form 4400-315 (hereinafter Form 4400-315).

Project Overview

The construction project will require the excavation of approximately 3,300 CY of soil. Two excavations will be required, one for the Building 105 addition and one for the stormwater detention pond. The footprint of the Building 105 addition will be approximately 34,394 square feet (SF) with depths ranging from 2 to 4 feet below the ground surface (ft. bgs). The stormwater detention pond will be excavated to variable depths and the maximum excavation depth is approximately 8 ft. bgs. Because the water table is expected be encountered at approximately 4 ft. bgs, dewatering will be necessary and a *Contaminated Groundwater from Remedial Action Operations (WI-0046566-7)* and *High Capacity Dewatering Well Application* are being prepared and will be submitted to the WDNR wastewater section under separate cover.

Current Soil Data

Historical per- and polyfluoroalkyl substances (PFAS) soil analytical results from soil samples collected within or near the excavation areas are summarized in Table 1 and superimposed on Figure 1. Five soil borings have been drilled (Figure 1) and nine soil samples (Table 1) have been collected in the proposed excavation area for analysis of PFAS. In multiple phases of work, an additional 58 soil samples were collected from the Site (a total of 67 soil samples). While PFAS was detected in several soil samples, there were no exceedances of the non-industrial or industrial direct contact (DC RCLs) for PFOA or PFOS of 1.26 milligrams per kilogram (mg/kg) and 16.4 mg/kg, respectively. Data were collected by Arcadis during the Site investigation to support the calculation of a Site-specific soil RCL based on protection of groundwater quality and the results will be in a Conceptual Site Model (CSM) Report under separate cover.

Volatile organic compounds (VOCs) are present on-Site associated with BRRTS# 03-38-001345; however the source and location of VOCs are south of the Building 105 addition.

Current Groundwater Data

Site groundwater contamination includes PFAS and VOCs. A *Contaminated Groundwater from Remedial Action Operations (WI-0046566-7)* and *High Capacity Dewatering Well Application* are being prepared and will be submitted to the WDNR wastewater section under separate cover.

Locational Standards

The locational standards for soil staging are provided in NR718.12 (1) (c). The location standards follow:

1. Within a floodplain.
2. Within 100 feet of any wetland or critical habitat area.
3. Within 300 feet of any navigable river, stream, lake, pond, or flowage.
4. Within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well.
5. Within 3 feet of the high groundwater level.
6. At a depth greater than the depth of the original excavation from which the contaminated soil was removed.
7. Where the contaminated soil poses a threat to public health, safety, or welfare or the environment.

Figure 2 presents the soil staging area. The soil staging area is located on existing grade and was selected based on compliance with the locational standards. Arcadis conducted field delineation work in April 2020 and prepared and submitted to the WDNR a *Wetland and Waterbody Delineation Report* in May 2020. Arcadis concluded that the locational standards would be met relative to wetland and critical habitat.

Excavation Procedures

Soil excavation will use standard construction equipment. Environmental oversight, documentation and analytical sampling will be performed by Arcadis.

Excavated soil will be visually checked for signs of impacts such as staining, debris and/or free product and olfactory detections will be noted. A photoionization detector (PID) will be utilized to screen soil at a frequency of once per 30 CY. Soil with readings above 10 parts per million (ppm) or with visual/olfactory impacts will be stockpiled separately from soil with readings less than 10 ppm. The soil will be transported to the soil staging area on-Site.

Soil samples will be collected from the staged soil piles at a rate of one sample per 100 CY for the first 600 CY and one sample for each additional 300 CY of material. The first 600 CY of soil will be staged in 100 CY stockpiles while additional material will be staged in 300 CY stockpiles. The soil will be staged on 10-mil poly liners installed on the ground surface and the liner will overlap the edge of the stockpile by at least one foot. All stockpiles will contain a 12" berm around its perimeter. Once the stockpile is created, it will be covered with 10-mil poly. Soil samples will be collected for PFAS (36-analyte list) and VOCs. Analytical results will be provided to the WDNR within 10 days of receipt.

Schedule

Soil excavation is scheduled to begin May 25, 2020. Soil samples will be collected for laboratory analysis as each soil pile is generated. The soil results will be reported within 10 business days to the WDNR. Form 4400-315 is will be submitted once excavation and soil sampling and laboratory analysis is complete, anticipated submittal timeframe to the WDNR is early August 2020, subject to construction schedule.

Summary and Closing

On behalf of Tyco, Arcadis is providing notification to the WDNR that Tyco will excavate and store soil generated as part of Building 105 addition and stormwater detention pond construction at the Site pending soil sampling, laboratory analysis, and soil analytical results reporting to the WDNR. Additionally, Arcadis will prepare and submit a Form 4400-315 to the WDNR review and approval. Included in the completed Form 4400-315 will be a summary of the construction excavation procedures, summary of laboratory testing, comparison to soil RCLs, proposed soil management plan for soil placement, engineering and institutional control plans.

Please do not hesitate to me if you have any questions.

Regards,
Ben

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Professional Registration/PE-WI, #31794-006

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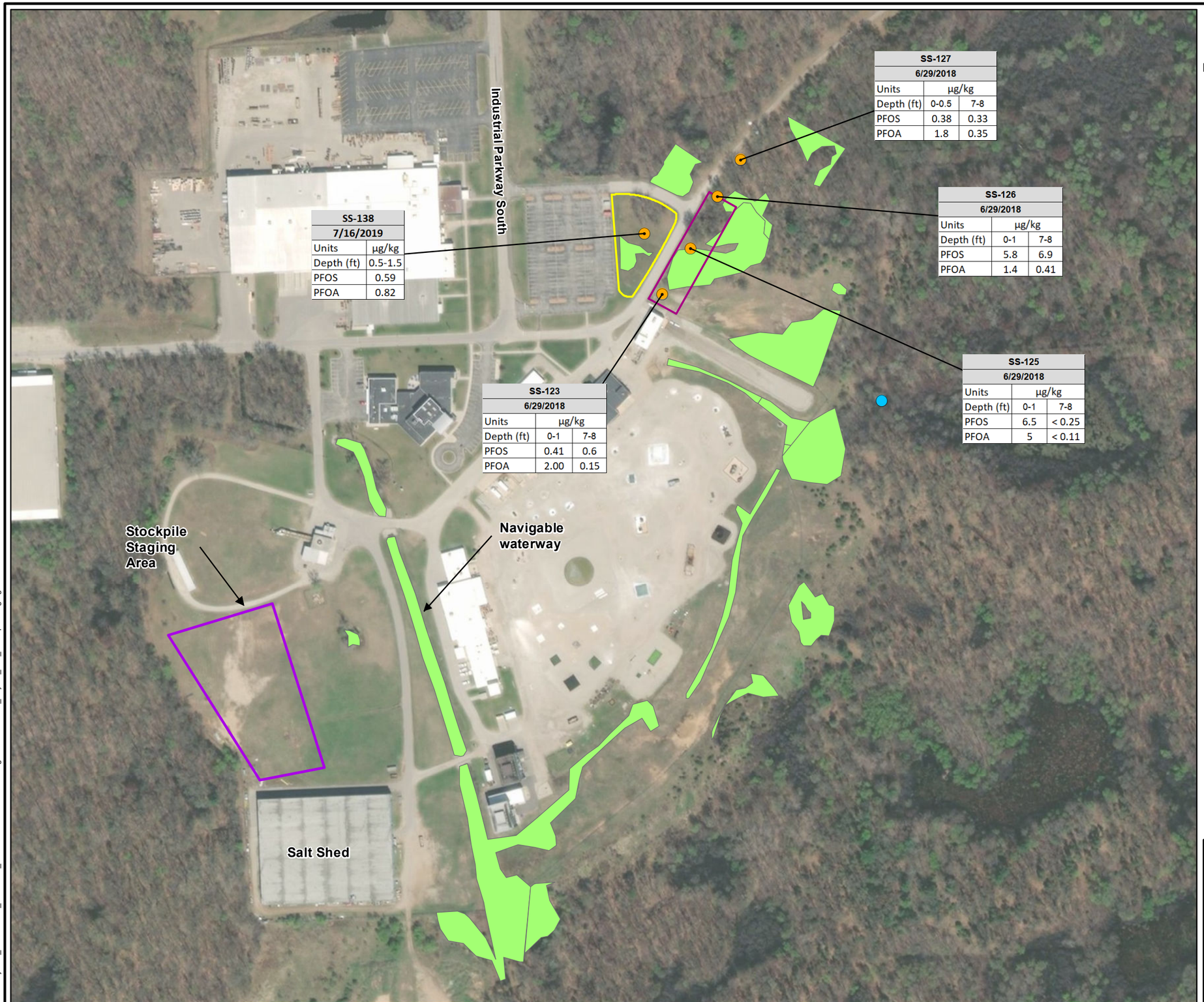
Table 1
Excavation Area Soil Results
Tyco Fire Products, L.P.
2700 Industrial Parkway South
Marinette, Wisconsin 54143

Chemical Name	Location	SS-123		SS-125		SS-126		SS-127		SS-138
	Sample Date	6/29/2018		6/29/2018		6/29/2018		6/29/2018		7/16/2019
	Depth (feet)	0-1	7-8	0-1	7-8	0-1	7-8	0-0.5	7-8	0.5-1.5
	Unit									
Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	µg/kg	< 0.39	< 0.44	< 0.44	< 0.46	< 0.44	< 0.44	< 0.39	< 0.44	<0.44 U
Methylperfluoroocatane Sulfonamidoacetic Acid (MeFOSAA)	µg/kg	< 0.41	< 0.46	< 0.46	< 0.48	< 0.47	< 0.46	< 0.41	< 0.47	<0.46 U
Perfluorobutane sulfonic acid (PFBS)	µg/kg	< 0.026	< 0.029	< 0.030	< 0.031	< 0.030	< 0.030	< 0.027	< 0.030	<0.029 U
Perfluorodecanoic acid (PFDA)	µg/kg	2.0	0.44	1.7	0.052	1.4	0.071	0.56	0.11	0.045 J
Perfluorododecanoic acid (PFDoA)	µg/kg	1.4	< 0.079	0.23	< 0.083	0.12	< 0.079	0.74	< 0.080	<0.079 U
Perfluoroheptanoic acid (PFHpA)	µg/kg	0.53	0.11	2.1	0.062	0.75	0.24	0.46	0.49	0.85
Perfluorohexane sulfonic acid (PFHxS)	µg/kg	< 0.033	< 0.037	0.31	< 0.038	0.062	< 0.037	0.091	< 0.037	<0.036 U
Perfluorohexanoic acid (PFHxA)	µg/kg	3.1	1.2	3.2	0.37	1.4	0.33	0.89	0.72	0.46
Perfluorononanoic acid (PFNA)	µg/kg	0.53	0.25	7.8	< 0.044	2.9	0.49	0.34	0.26	0.52
Perfluorooctanesulfonic acid (PFOS)	µg/kg	0.41	0.6	6.5	< 0.25	5.8	6.9	0.38	0.33	0.59
Perfluorooctanoic acid (PFOA)	µg/kg	2.0	0.15	5.0	< 0.11	1.4	0.41	1.8	0.35	0.82
Perfluorotetradecanoic acid (PFTeA)	µg/kg	0.60	< 0.064	0.068	< 0.067	< 0.065	< 0.064	0.27	< 0.065	<0.064 U
Perfluorotridecanoic acid (PFTriA)	µg/kg	0.56	< 0.060	0.31	< 0.063	< 0.061	< 0.060	< 0.054	< 0.061	<0.060 U
Perfluoroundecanoic acid (PFUnA)	µg/kg	2.1	< 0.042	0.97	< 0.044	0.43	< 0.043	1.4	0.053	<0.042 U

Acronyms and Abbreviations:
< = Below method detection limit
mg/kg = milligram per kilogram
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit
µg/kg = microgram per kilogram



LEGEND:

- SOIL SAMPLE LOCATION
- PROPOSED DISCHARGE LOCATION
- StockPileStagingArea
- BUILDING EXCAVATION AREA
- DETENTION POND EXCAVATION AREA
- EXISTING WETLANDS

0 200 400

GRAPHIC SCALE IN FEET

NOTES:

1. IMAGERY SOURCE: 4/27/2016, DIGITALGLOBE, VIVID - USA.

1. IMAGERY SOURCE: 4/27/2016, DIGITALGLOBE, VIVID - USA.
2. EXPECTED DEPTH OF EXCAVATION FOOTPRINT TO BE APPROXIMATELY 2 FEET. EXPECTED DEPTH OF FOUNDATION AND FOOTINGS TO BE APPROXIMATELY 4 FEET.
3. EXPECTED DEPTH OF DETENTION POND TO BE MAXIMUM 8 FEET.
4. ESTIMATED DEPTH TO GROUNDWATER 2-5 FEET.

DRAFT

PRIVILEGED AND CONFIDENTIAL
ATTORNEY-CLIENT PRIVILEGED/ATTORNEY WORK PRODUCT

TYCO FIRE PRODUCTS, LP
MARINETTE, WISCONSIN

**SITE LAYOUT
WITH STOCKPILE STAGING AREA**

ARCADIS

FIGURE
1

City: Minneapolis/Citrix Div/Group: IMDVC Created By: Last Saved By: msmiller
TYCO Marinette, WI
Z:\GISProjects_ENV\TYCO_Marinette_WI\MXD\2020-04\SoilManagementPlan\Site_Layout_Soil_StockpileStagingArea.mxd 4/27/2020 4:49:05 PM

LEGEND:

- Stock Pile Staging Area
- 25 FT DIAMETER STOCKPILE
- 37 FT DIAMETER STOCKPILE
- EXISTING WETLANDS

GRAPHIC SCALE IN FEET

0 100 200

NOTES:

1. IMAGERY SOURCE: 4/27/2016, DIGITALGLOBE, VIVID - USA.

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PRIVILEGED AND CONFIDENTIAL
ATTORNEY-CLIENT PRIVILEGED/ATTORNEY WORK PRODUCT

TYCO FIRE PRODUCTS, LP
MARINETTE, WISCONSIN

SITE LAYOUT
WITH STOCKPILE STAGING AREA
AND STOCKPILES

ARCADIS

FIGURE
2

City: Minneapolis/Citrix Div/Group: IMDVC Created By: Last Saved By: msmiller
TYCO Marinette_WI
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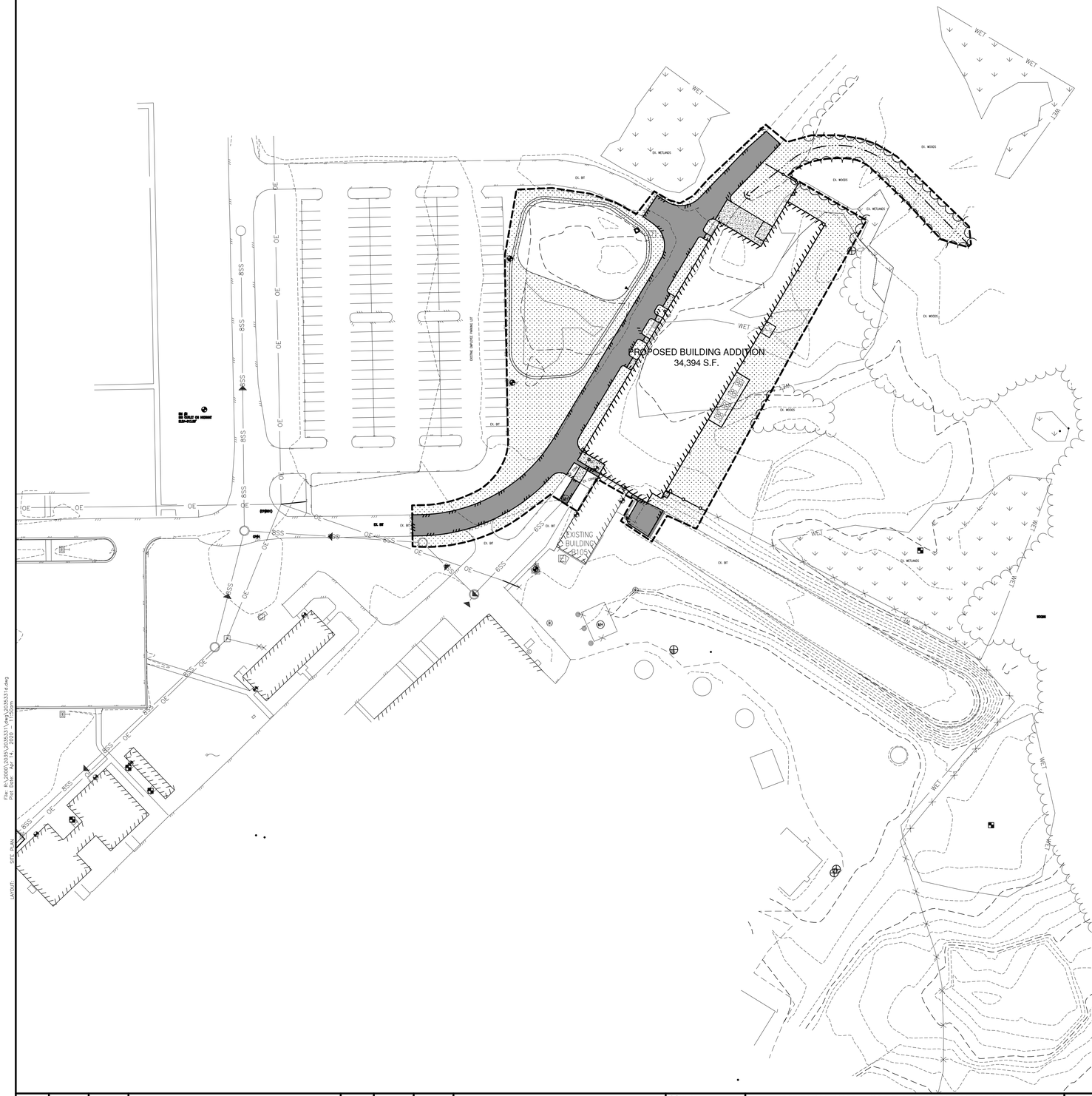

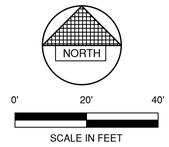

NOTE

ALL DISTURBED AREAS SHALL BE TOPSOILED TO A DEPTH OF 6 INCHES, SEEDED AND MULCHED. AREA TO BE RAKED FREE OF STONES AND CLUMPS.

SITE DATA (PROJECT LIMITS)

TOTAL AREA = 2.12 ACRES, 92,367 S.F.

BUILDING AREA = 0.56 ACRES, 24,394 S.F. (26%)

PAVED AREA = 0.35 ACRES, 15,277 S.F. (17%)

GREEN SPACE = 1.20 ACRES, 52,696 S.F. (57%)

ZONING

M-2 HEAVY MANUFACTURING

CONSTRUCTION CLASSIFICATION

IIB

PARCEL NO.

251-615

OWNER INFORMATION:

JOHNSON CONTROLS
2700 INDUSTRIAL PARKWAY SOUTH
MARINETTE, WI 54143

(715)735-7415 EXT 84025

CONTACT: RYAN SUENNEN

CONTRACTOR INFORMATION:

ROBERT E. LEE & ASSOCIATES, INC.
1250 CENTENNIAL CENTRE BLVD.
HOBART, WI 54155

(920)-662-9641

CONTACT: PATRICK KUEHL P.E.

CONTRACTOR INFORMATION:

BAYLAND BUILDINGS, INC
P.O. BOX 13571
GREEN BAY, WI 54307

(920)-371-2011

CONTACT: JIM THYES

LEGEND

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT (HEAVY)
- LANDSCAPE AREA
- GREEN SPACE

*NOTE: ALL DIMENSIONS ARE TO THE FACE OF CURB, UNLESS NOTED OTHERWISE

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Plot Date: Apr 14, 2020 - 11:50am
Layout: SITE PLAN

NO.	DATE	APPROV.	REVISION	NO.	DATE	APPROV.	REVISION

DRAWN PHK/RLB
CHECKED JGS
DESIGNED PHK

JOHNSON CONTROLS BUILDING B105 ADDITION
FOR BAYLAND BUILDINGS, INC.
CITY OF MARINETTE
MARINETTE COUNTY, WISCONSIN

OVERALL SITE PLAN

DATE 04/03/2020
FILE 2035331D
JOB NO. 2035331

Robert E. Lee & Associates, Inc.
ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES
1250 CENTENNIAL CENTRE BOULEVARD HOBART, WI 54155
920-662-9641 www.releeinc.com

SHEET NO. C2.0