

C.M. CHRISTIANSEN CO. INC.
c/o Registered Agent Solutions Inc
PO Box 266
Eaton Rapids, MI 48827
Ground Cover Maintenance Plan

September 28, 2022

"POLEYARD"
County E
Phelps, WI 54554

DNR BRRTS Case #02-64-000068
FID #76436230

Part of Govt Lot 3 and the North East ¼ of the South East ¼ in Section 35, T42N, R11E,
Town of Phelps, Vilas County, Wisconsin. Vilas County Parcel Number 018-1391

Introduction

This document is the Maintenance Plan for a ground cover barrier system at the above-referenced property in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the existing sand, gravel, and stone barrier system which occupies the area over contaminated soil that was excavated in 1999.

More site-specific information about this property/site may be found in:

- The case file in the DNR Northern Region office
- At <http://dnr.wi.gov/topic/Brownfields/wrrd.html>, which includes:
 - BRRTS on the Web (DNR's internet-based database of contaminated sites) for the link to a PDF for site-specific information,
 - RR Sites Map for a map view of the site, and
- The DNR project manager for Vilas County, WI

Description of Contamination

Soil contaminated by #2 fuel oil blended with approximately 5% pentachlorophenol was located in the areas subject to deed restrictions (EXHIBIT A-1), also described as "Contamination Areas" (EXHIBIT A-2), attached to this Plan.

Description of the Cover to be Maintained

The groundcover barrier consists of a minimum of 6 inches of clean sand and gravel with respect to all areas except "Contamination Area #2" (referring to EXHIBIT A-2), where the groundcover barrier is 6 inches of topsoil beneath a non-woven geo-textile, covered with an additional 6-inch layer of two-inch stone riprap (above the fabric). SEE EXHIBIT B, an excerpt from the Remedial Action Documentation Report for the Former Pole Treatment Facility, dated January 21, 2000 (pages 2-16 and 2-17). In addition, the property owner has fenced the respective "contamination areas" with chain-link fence.

Cover Purpose

The cover over the contaminated soil serves as a barrier to prevent direct human contact with residual soil contamination. Based on the current use of the property, the barrier should function as intended unless disturbed.

Annual Inspection

The cover will be inspected once a year, normally in the late spring after all snow and ice is gone, for deterioration and other potential problems that could cause exposure to underlying soils. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age, and other factors. Any area where contaminated soils have become or are likely to become exposed will be documented.

A log of inspections and any repairs will be maintained by the property owner on Form 4400-305, Continuing Obligations Inspection and Maintenance Log, a form of which is attached to this Plan as EXHIBIT C. The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the inspection log.

As there is currently no acceptable place at the site, a copy of this Plan and the inspection log will be kept at the address of the property owner and will be submitted to Wisconsin Department of Natural Resources (DNR) using the DNR RR Program's Submittal Portal [www.dnr.wisconsin.gov - keyword search "brownfields submittal"].

Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling or larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment (PPE). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored, and disposed of by the owner in accordance with applicable local, state, and federal law.

In the event the cover overlying the soil is removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Plan unless indicated otherwise by the DNR or its successor.

Prohibition of Activities and Notification of DNR Prior to Actions Affecting the Cover

The following activities are prohibited on any portion of the property where the soil cover is required, as shown on the attached maps, EXHIBITS A-1 and A-2, unless prior written

approval has been obtained from the DNR: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure; or 7) changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar residential exposure settings.

If removal, replacement, or other changes to a cover are considered, the property owner will contact DNR at least 45 days before taking such an action to determine whether further action may be necessary to protect human health, safety, or welfare, or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

Amendment or Withdrawal of Maintenance Plan

This Plan can be amended or withdrawn by the property owner and its successors with the written approval of DNR.

Dated as of September 28, 2022

FORMER Site Owner and Operator: C.M. CHRISTIANSEN CO., INC.
c/o Registered Agent Solutions Inc
PO Box 266
Eaton Rapids, MI 48827

by: 
Eric R. Christiansen, President

CURRENT Property Owner: TOWN OF PHELPS
4495 Town Hall Rd
PO Box 157
Phelps, WI 54554

by: 
Steve Doyen Chairman [printed name & title]

Location Maps

EXHIBITS A-1, A-2, and A-3

Excerpt from the Remedial Action Documentation Report for the Former Pole Treatment Facility, dated January 21, 2000 (pages 2-16 and 2-17) - EXHIBIT B

Continuing Obligations Inspection and Maintenance Log

DNR Fillable Form Form 4400-305 - SAMPLE attached as EXHIBIT C
[<https://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf>]









Current Photographs of Areas Subject to Cover/Barrier:

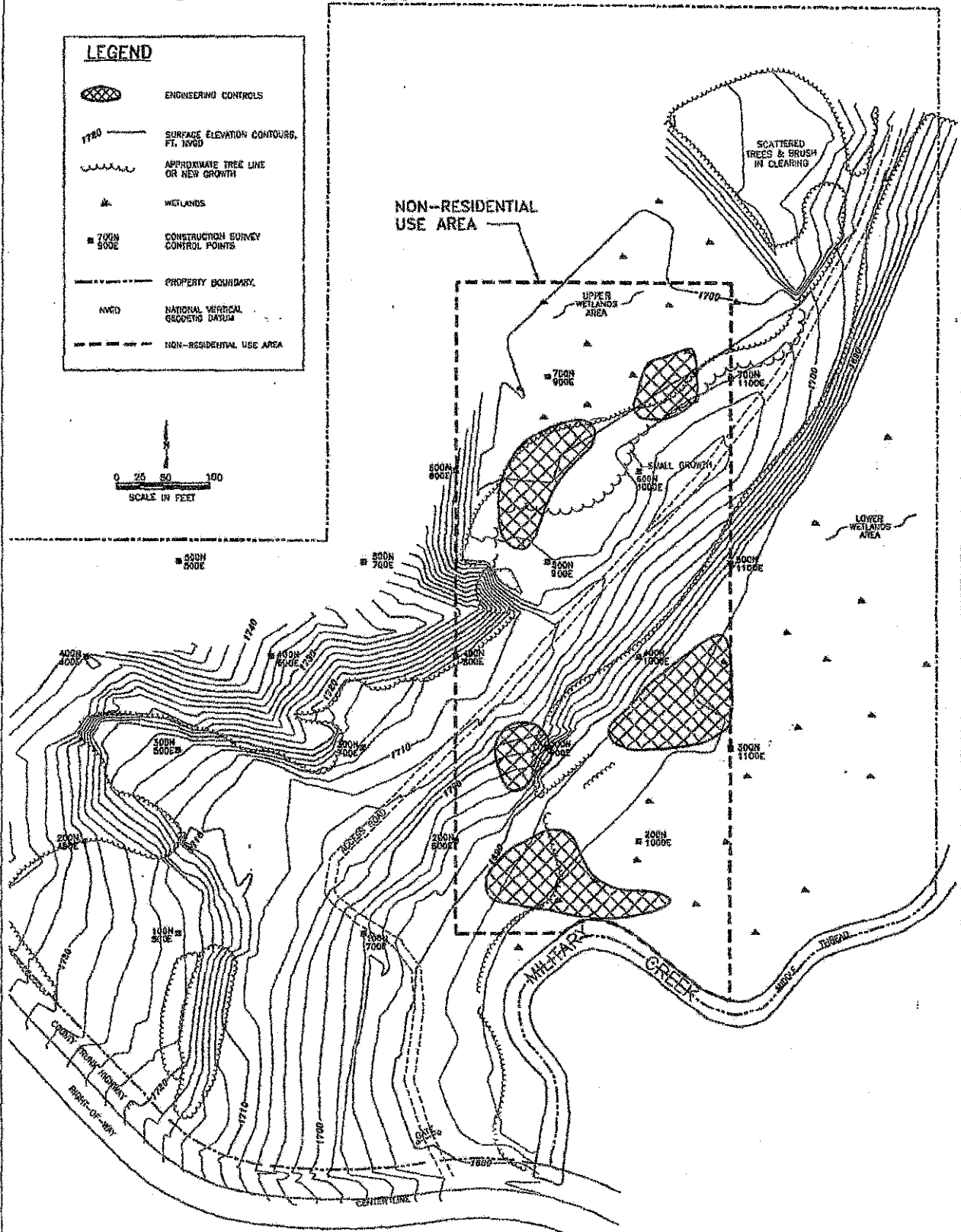
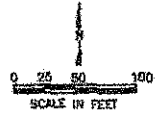
EXHIBIT D

**CM CHRISTIANSEN CO., INC. - Cover Maintenance Plan
Map Showing Deed Restrictions**

EXHIBIT A-1

LEGEND

-  ENGINEERING CONTROLS
-  SURFACE ELEVATION CONTOURS, FT. 1980
-  APPROXIMATE TREE LINE OR NEW GROWTH
-  WETLANDS
-  CONSTRUCTION SURVEY CONTROL POINTS
-  PROPERTY BOUNDARY
-  NATIONAL VERTICAL DATUM
-  NON-RESIDENTIAL USE AREA



NOTES:

1. BASE MAP SURVEY COMPLETED BY CEC WITH ADDITIONAL INFORMATION OBTAINED FROM USDA-ASCB HISTORICAL AERIAL PHOTOGRAPHS, A 7/7/05 SITE VISIT WITH CM CHRISTIANSEN CO., INC., AND A 5/21/06 FIELD INSPECTION.
2. WETLAND AREA APPROXIMATELY INTERPRETED FROM WISCONSIN WETLAND INVENTORY MAP AND IS NOT FIELD VERIFIED.
3. CONSTRUCTION GRID SURVEY POINTS WITH ORIGIN AT SW 1/4 SECTION CORNER, NE 1/4 OF SE 1/4 OF SECTION 35, T24N, R11E, IRON PIPE LOCATION BASED ON EAGLE LANDMARK SURVEY.
4. EXCAVATION AND CAPPING AREA LIMITS BASED ON FIELD MEASUREMENT OFF OF CONSTRUCTION SURVEY CONTROL POINTS.
5. PROPERTY BOUNDARY TAKEN FROM REGISTER OF DEEDS, WILSON COUNTY, WISCONSIN, VOLUME 801, PAGE 410-411.




SOURCE NOTES:
THIS MAP WAS MODIFIED FROM DRAWING BY COLLEMAN ENGINEERING COMPANY (CEC), IRON MOUNTAIN, MICHIGAN, DATED FEBRUARY 1997, JOB NO. 02042 AT, AND A SURVEY BY EAGLE LANDMARK SURVEYING, INC., EAGLE RIVER, WISCONSIN, DING. NO. E1282, DATED 1-05-98, REVISED ON 8-13-99.

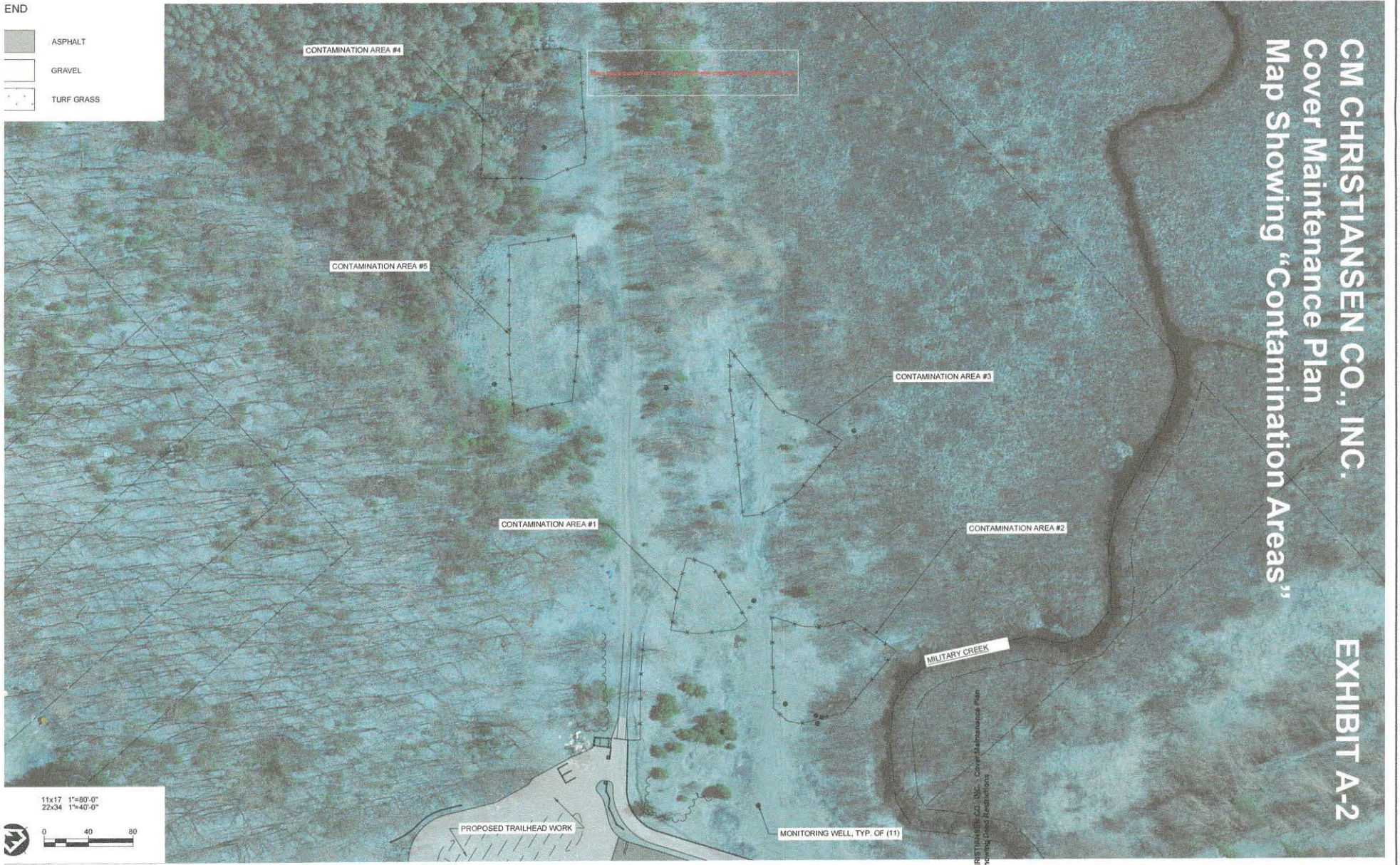


**PROPERTY MAP FOR
DECLARATION OF RESTRICTIONS**

PROJECT NO.
1226/RO/4.4
DRAWING NO.
1226-EX1

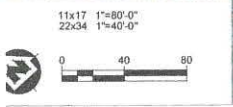
END

-  ASPHALT
-  GRAVEL
-  TURF GRASS



CM CHRISTIANSEN CO., INC.
Cover Maintenance Plan
Map Showing "Contamination Areas"

EXHIBIT A-2



NO.	DATE	REVISION	BY

DATE: _____
 DRAWN BY: **ME**
 DESIGNED BY: **ME**
 CHECKED BY: **ME**

MSA ENGINEERING | ARCHITECTURE | SURVEYING
 FUNDING | PLANNING | ENVIRONMENTAL
 1230 South Boulevard, Baraboo WI 53913
 (608) 356-2771 www.msa-pi.com
 © MSA Professional Services, Inc.

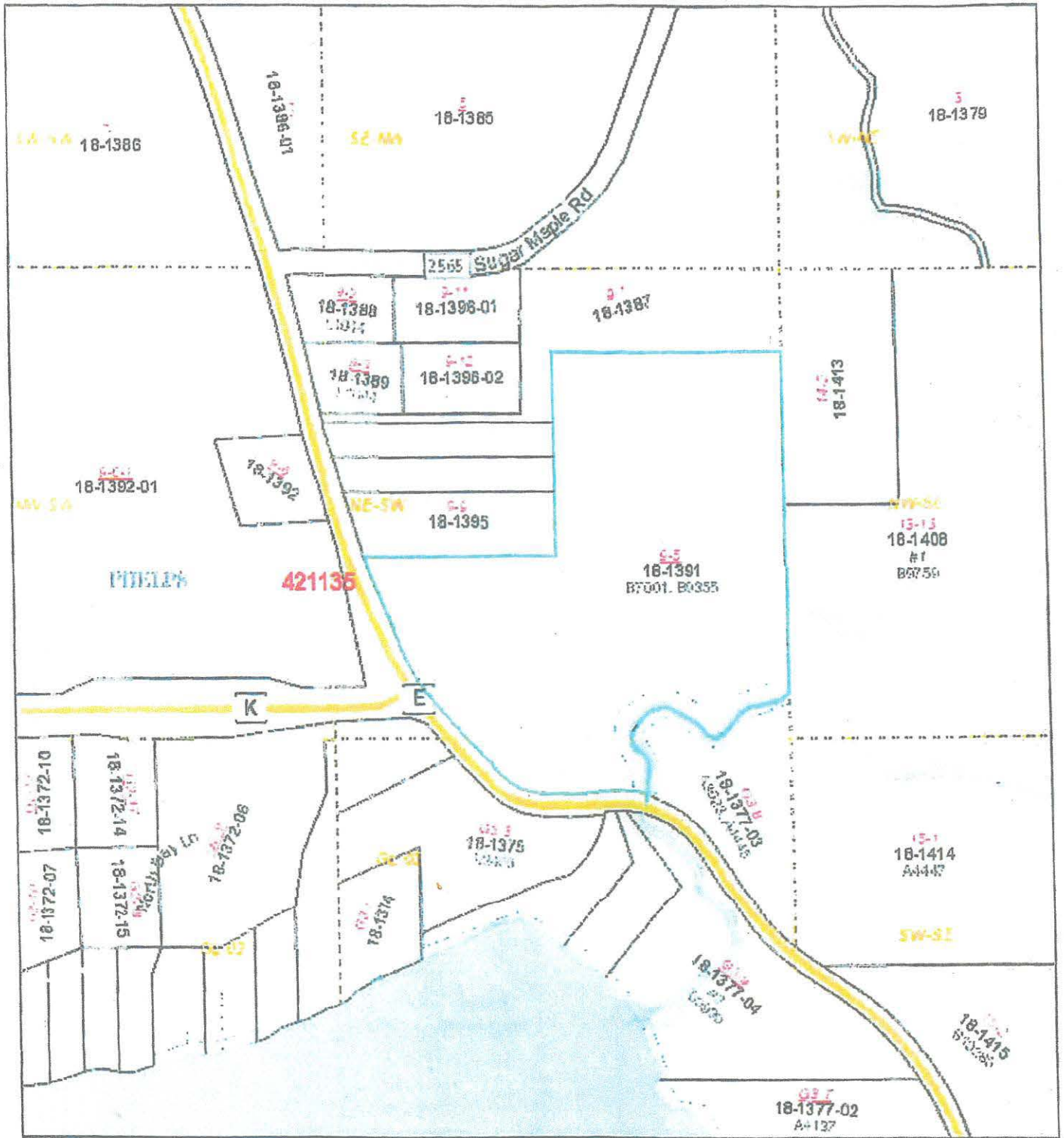
MILITARY CREEK TRAILHEAD PROJECT
 TOWN OF PHELPS
 VILAS COUNTY, WI

SITE PLAN

PROJECT NO:
07558013
 SHEET:
C1.0

5/14/2021 3:02 PM \\msa-pi.com\Projects\07\07558013\CAD\Construction documents\07558013 Site Plan.dwg



CM CHRISTIANSEN CO., INC. - Cover Maintenance Plan
 Map Showing Contamination Areas





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Section Corners

-  Section Corner
-  Quarter Corner



Water Access

-  Boat Ramp
-  Carry-In Lake Access

Highways

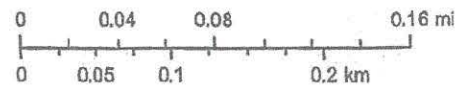
-  US/State Highway
-  County Highway

Major Roads

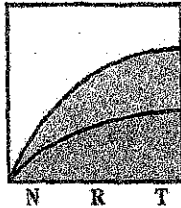
-  Collector Road
-  Local Road

Minor Roads

-  Service Road
-  4WD Road
-  Runway
-  Section Line
-  Quarter/Gov't Lot Line



Created by Vilas County Mapping Department



**Natural
Resource
Technology, Inc.**

REMEDIAL ACTION DOCUMENTATION REPORT

**FORMER POLE TREATMENT FACILITY
COUNTY E
PHELPS, WISCONSIN**

Project No: 1226

Prepared For:

**C.M. Christiansen Co., Inc.
P.O. Box 100
Phelps, WI 54554**

Prepared By:

**Natural Resource Technology, Inc.
23713 W. Paul Road, Unit D
Pewaukee, WI 53072**

January 21, 2000

**Daniel V. Plovnick, E.I.T.
Geological Engineer**

"I, Daniel V. Plovnick, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

**Spiros L. Fafalios, P.E.
Environmental Engineer**

"I, Spiros L. Fafalios, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

**Laurie J. Parsons, P.E.
Sr. Environmental Engineer**

"I, Laurie J. Parsons, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

CELL-DE), in approximately the same area within the seepage cell, had a PCP concentration of less than 0.2 mg/kg, indicating that no environmental impact occurred as a result of the discharge.

2.8 Management of Debris and Residuals

In addition to off-site disposal of soil, other material incorporated and disposed under the same profile included:

- PPE from earlier site investigations;
- Bag filters from the groundwater pretreatment system;
- Oil sorbent pads and pillows from the groundwater pretreatment system;
- Soil cuttings collected during earlier site investigation activities;
- Empty drums formerly containing soil cuttings and purge water from investigation activities;
- Sediment from the settling tanks used in the groundwater pretreatment system; and,
- Debris encountered within the excavations such as treated wood poles.

Prior to disposal, a sample of the oil sorbent pads and pillows was analyzed for TCLP-PCP, the result of which was within the landfill limit. The GAC used in the groundwater treatment system was not disposed and remains on-site for potential future use.

2.9 Backfilling, Capping, and Site Restoration

With the exception of Area 2B, each excavation area was backfilled with clean sand and gravel following its completion. The source of the backfill was an on-site borrow area, the location of which is shown on Plate 1. Sample BRW-1 was composited from the five locations shown and analyzed for PCP to confirm that the soil quality would be adequate for capping and backfill purposes. Results were below detection limit for BRW-1 (Appendix D). Approximately 4,000 cubic yards of fill from this borrow area was placed in the excavation and capping areas.

To reduce the potential for direct contact with soil containing 24 mg/kg PCP or greater, locations adjacent to Excavation Areas 2, 3, 4, and 5 were capped with a minimum of six inches of clean sand and gravel. Capped areas are shown on Plate 1 and Figures 3 through 6.

Area 2B, completed adjacent to Military Creek, was backfilled in accordance with WDNR Grading Permit 3-NO-99-64019UW and input from the US Army Corps of Engineers. As discussed previously, excavation and replacement of the creek embankment was not necessary based upon soil quality at the creek bank. Therefore, as specified in the permit, excavated area within 20 feet of Military Creek was stabilized through placement of six inches of topsoil beneath a non-woven geotextile. A six inch layer of two inch stone riprap was placed above the fabric.

Upon completion of excavation activities, disturbed areas of the site were restored, to the extent practical, to pre-remediation conditions with respect to topography, hydrology, and vegetation (reference Photos, Appendix B).

Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name	BRRTS No.
----------------------	-----------

Inspections are required to be conducted (see closure approval letter):

annually
 semi-annually
 other - specify _____

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier for soil <input type="checkbox"/> sediment cap <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

Continuing Obligations Inspection and Maintenance Log

Form 4400-305 (R 7/20)

Page 2 of 2

BRRTS No.

Activity (Site) Name

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:

CM CHRISTIANSEN CO., INC. - Cover Maintenance Plan

Current Photographs of Areas Subject to Cover/Barrier

View from County E Bridge looking upstream (N, NE)



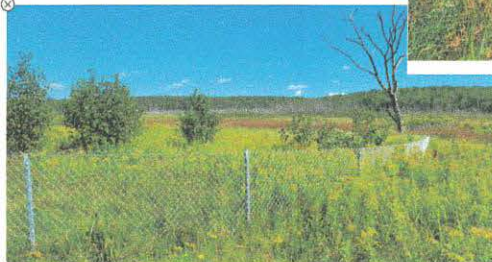
View looking downhill [S] from RR Grade (Snowmobile Trail) towards Creek/Wetland showing Largest Containment Area



Largest Containment Area, from RR Grade (Snowmobile Trail) at left; Creek on Right (looking E and S). Fence corner is in wetland based on current water level.

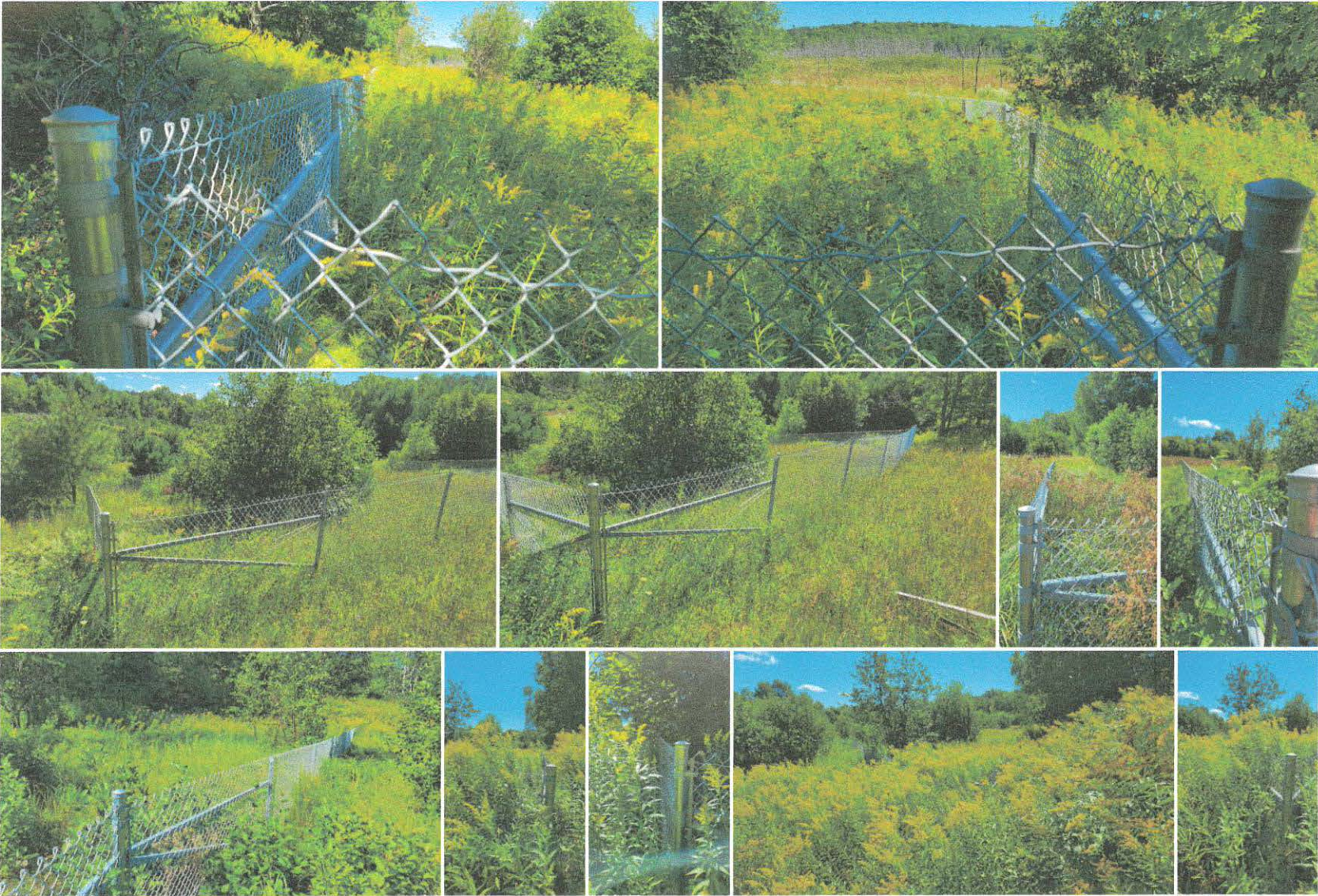


Largest Containment Area looking up towards from RR Grade (Snowmobile Trail) [N]



CM CHRISTIANSEN CO., INC. - Cover Maintenance Plan
Current Photographs of Areas Subject to Cover/Barrier

Perimeter of Containment Area to the East of Largest Containment Area



CM CHRISTIANSEN CO., INC. - Cover Maintenance Plan
Current Photographs of Areas Subject to Cover/Barrier

EXHIBIT D
Page 3 of 3

Upper Wetland #1 (Western)



Upper Wetland #2 (Eastern)

