Michigan Department of Environmental Quality
Office of Waste Management and Radiological Protection

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Wood Island Waste Management, Inc.

LICENSEE/OPERATOR: Wood Island Waste Management, Inc.

FACILITY OWNER: Wood Island Waste Management, Inc.

PROPERTY OWNER: Wood Island Waste Management, Inc.

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 444301

COUNTY: Alger

LICENSE NUMBER: 9473

ISSUE DATE: April 13, 2016

EXPIRATION DATE: April 13, 2021

FACILITY DESCRIPTION: The Wood Island Waste Management, Inc., a municipal solid waste landfill, consists of 163.46 acres located in the SE 1/4 of Section 18; E 1/2 of Section 19; the W 1/2 of Section 20; and the SW 1/4 of the SW 1/4 of Section 17, T46N, R18W, Munising Township, Alger County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Cells 7, 8, 9, and 10 totaling 12.58 acres.

RESPONSIBLE PARTY: Mr. Terrance J. Barnes, Vice President
Wood Island Waste Management, Inc.
P.O. Box 2002
Kingsford, Michigan 49802
906-774-9006

RENEWAL OPERATING LICENSE: This License Number 9473 supersedes and replaces Solid Waste Disposal Area Operating License Number 9305 issued to Wood Island Waste Management, Inc. on March 17, 2011.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Carrie Hardigan

Carrie Hardigan, Acting Chief, Solid Waste Section
Office of Waste Management and Radiological Protection

The licensee shall comply with all terms of this license and the provisions of Part 115 and the administrative rules implementing Part 115 (Part 115 Rules). This license includes the license application and any attachments to this license.

1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.

2. The following portions of the Facility are authorized to receive solid waste by this license:

   ACTIVE PORTIONS NOT AT FINAL GRADE: The area(s) identified as Cells 7 - 10 were authorized to receive waste by the previous license. This area's total acreage is 12.58 acres.

3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by the Michigan Department of Environmental Quality (MDEQ) of construction certification: None.

4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:

   a. **UNCONSTRUCTED AREA(S) WITHOUT FINANCIAL ASSURANCE:** The area(s) identified as Cells 11 - 15 are not constructed and are not included in the calculation of financial assurance as required by Section 11523 of Part 115. This area's total acreage is 29.3 acres.

   b. **UNCLOSED AREA(S):** The area(s) identified as Cells 5-6 are at final grade but have not had final cover certification approved by the MDEQ. This area's total acreage is 5 acres.

   c. **CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY THE MDEQ:** The following unit(s) and/or portion(s) are closed:

      EXISTING UNIT(S): The unit(s) or portion(s) of unit(s) identified as Cells 1 - 4 had final closure certified on March 9, 2007, as amended on May 24, 2007. This certification was reviewed and approved by the MDEQ on May 30, 2007. This area's total acreage is 11 acres.

5. The attached map (Attachment A) shows the Facility, the area permitted for construction, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances.

6. Issuance of this license is conditioned on the accuracy of the information submitted by the Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by the MDEQ on February 16, 2016, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license and may be grounds for enforcement action. The licensee shall inform the MDEQ's Office of Waste Management and Radiological Protection (OWMRP), Upper Peninsula District Supervisor, of any inaccuracies in the information in the Application upon discovery.

7. This license is issued based on the MDEQ's review of the Application, submitted by Wood Island Waste Management, Inc., for the Wood Island Waste Management, Inc. landfill, dated February 1, 2016, with revisions received by the MDEQ on March 3, 2016, March 7, 2016, and March 16, 2016. The Application consists of the following:

   a. Application Form EQP 5507.

   b. Application fee in the amount of $1,000.00.

   c. Certification of construction by N/A.

   d. Waste Characterization: N/A.

e. Restrictive Covenant:

The Wood Island Waste Management, Inc., November 29, 1993, restrictive covenant on 67.88 acres is on file at the Alger County Register of Deeds recorded on August 17, 1994, as Liber 145 pages 571-573. A copy is on file with the MDEQ.

f. Perpetual Care Fund Agreement, established as an escrow account, signed by David Brisson, President, Wood Island Waste Management, Inc. on September 18, 1997, was executed by the MDEQ on October 6, 1997.

g. Financial Assurance.

i. Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the calculation worksheet form EQP 5507A entitled, "Form A, Financial Assurance Required," and is $5,122,292.00.

The Facility has provided financial assurance totaling $5,186,007.00, based on the requirements of Section 11523 of Part 115, consisting of a combination of the Perpetual Care Fund established under Section 11525 of Part 115, bonds, and the financial capability of the Applicant as evidenced by a financial test. The financial assurance mechanisms used by the Facility are summarized below in Items ii and iii, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

The Perpetual Care Fund Agreement statement showed a balance of $1,537,067.48 in the Facility's Perpetual Care Fund as of February 4, 2016. Of this amount, the MDEQ has granted the request to use $1,537,067.00 toward the total amount of financial assurance required.

iii. Financial Assurance Provided Via Bond:

The following financial assurance has been received from the Applicant to meet the amount of financial assurance required:

Surety Bond	$3,055,940.00
Irrevocable Letter of Credit	$593,000.00
Total Amount Received:	$3,648,940.00

iv. Financial Assurance Updates Required:

For Type II landfills, the financial assurance cost estimates of closure and postclosure activities must be updated annually and the corresponding requisite amount of financial assurance must be adjusted annually for the costs of inflation. The corresponding financial assurance, as adjusted for inflation and other factors, is due on April 13, 2017, and each year thereafter.

8. The following documents approved with construction permit number 4153 issued to the Wood Island Waste Management, Inc. on January 15, 2016, are incorporated in this license by reference:

a. Construction Permit Application, Wood Island Waste Management, Inc. Sanitary Landfill - Eastern Expansion, Volume 1 of 3 prepared by Golder Associates, Inc., dated May 2015, revised August 2015, October 2015, and December 2015 that contains the following:

i. Section A - General Information (revised December 2015)
ii. Section B - Environmental Assessment (revised December 2015)

b. Construction Permit Application, Wood Island Waste Management, Inc. Sanitary Landfill - Eastern Expansion, Volume 2 of 3 prepared by Golder Associates, Inc., dated May 2015, revised August 2015, October 2015, and December 2015 that contains the following:

   i. Section C - Hydrogeologic Investigation Report (revised December 2015)
   ii. Section D - Hydrogeologic Monitoring Plan (revised December 2015)
   iii. Section E - Topographic maps (revised December 2015)
   iv. Section F - Engineering Report (revised December 2015)
   v. Section G - Operations Plan (revised December 2015)

c. Construction Permit Application, Wood Island Waste Management, Inc. Sanitary Landfill - Eastern Expansion, Volume 3 of 3 prepared by Golder Associates, Inc., dated May 2015, revised August 2015, October 2015, and December 2015 that contains the following:

   i. Section H - Construction Quality Assurance Plan (revised December 2015)
   ii. Section I - Remedial Action Plan (revised August 2015)
   iii. Section J - Engineering Drawings (revised November 2015)

d. Construction Permit Application for Wood Island Waste Management, Inc., Cells 9 and 10 Contract Documents and Specifications for Type II Landfill Construction, prepared by Wilcox Professionals Services, LLC, dated March 2010.

e. Construction Permit Application for Wood Island Waste Management, Inc., Cells 9 and 10, Environmental Site Assessment prepared by Wilcox Professional Services, LLC, dated May 2010.

f. Construction Permit Application for Wood Island Waste Management, Inc., Cells 9 and 10 Engineering Plans (Sheets 1-15) prepared by Wilcox Professional Services, LLC, dated November 2009, amended by an August 2, 2010 letter, received by the MDEQ on August 12, 2010, and approved for construction on September 23, 2010.

g. Construction Permit Application for Wood Island Waste Management, Inc., Cells 9 and 10 Hydrogeological Report and Hydrogeological Monitoring Plan prepared by U.P. Engineers and Architects, Inc., dated July 1, 2010 (revised).

h. Construction Permit Application for Wood Island Waste Management, Inc., Cells 9 and 10 Engineering Report prepared by Wilcox Professional Services, LLC, dated August 2010.

9. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 8, are incorporated in this license by reference: None.

10. Consent Order/Judgment Number: N/A.

11. The licensee shall repair any portion of the certified liner or leachate collection system that is found to be deficient or damaged during the term of this license unless determined otherwise by the MDEQ.

12. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer in accordance with R 299.4921 of the Part 115 Rules and approved by the MDEQ before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to the MDEQ's OWMRP, Upper Peninsula District Office Supervisor, for review and approval.

13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated December 2015. The sampling analytical results shall be submitted to the MDEQ's OWMRP, Upper Peninsula and Gaylord District Office.

14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the OWMRP, Upper Peninsula District Supervisor. Proposed revisions must be submitted in a format specified by the MDEQ.

15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the OWMRP, Upper Peninsula District Supervisor.

16. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(l) of the Part 115 Rules, may be approved, in writing, by the OWMRP, Upper Peninsula District Supervisor.

17. Requests for alternate daily cover may be approved, in writing, by the OWMRP, Upper Peninsula District Supervisor.

18. Leakage Control Criteria:

    The active portions of the unit(s) authorized to receive waste by this license is an unmonitorable unit(s) designed with a double-liner systems that is in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that is capable of detecting and collecting leakage through the primary composite liner. The action flow rate for each unit containing a leak detection system is 5 gallons/acre/day. The response flow rate for each unit containing a leak detection system is 25 gallons/acre/day.

19. **VARIANCES**: The licensee is granted the following variance(s) from Part 115 and/or the Part 115 Rules: None.

20. **SPECIAL CONDITIONS**:

    a. The licensee shall place a compacted layer of not less than six inches of earthen material, unless an exemption is granted, of suitable cover material on all exposed solid waste by the end of each working day, as required by R 299.4429(1) of the Part 115 Rules. Suitable cover shall be either uncontaminated soil or an alternate cover approved by the OWMRP, listed in Item i, below. Alternate cover shall be restricted as indicated in Item ii and applied as per the approved operational plan submitted by the licensee.

        i. Approved alternate cover shall be any of the following:

            <u>Product/Waste Material</u>

            Paper mill sludge and boiler ash from Neenah Paper – Munising Mill that has been tested in accordance with the requirements of Attachment B and meets the guidelines for daily cover from Attachment C of MDEQ Operational Memo OWMRP-115-10, "Sanitary Landfill Alternative Daily Cover Approval Requirements and Procedures."

        ii. The above materials are approved for daily cover when used in the following manner:

            (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.

            (2) The licensee shall maintain copies of the testing performed on Class B and Class C materials in the facility operating record.

            (3) The licensee shall only stockpile material in a secure manner within the active cell.

            (4) This approval does not preclude the licensee from disposing of the material as waste in the active fill area instead of using the material as daily cover.

            (5) This approval shall immediately become void upon documentation by the MDEQ that the alternative cover is not being used in accordance with listed conditions, that the alternative cover is not providing the necessary protection, that the material no longer meets the alternative daily cover guidelines, or that the process producing the waste material has changed.

            (6) If the material does not meet the guidelines from Attachment 2 of Policy and Procedure OWMRP-115-10, for nonvolatiles, the licensee shall ensure that fugitive dust emissions from this material do not occur. Acceptable methods to ensure fugitive emissions do not occur are:

                (a) Implement a schedule to wet down material; or

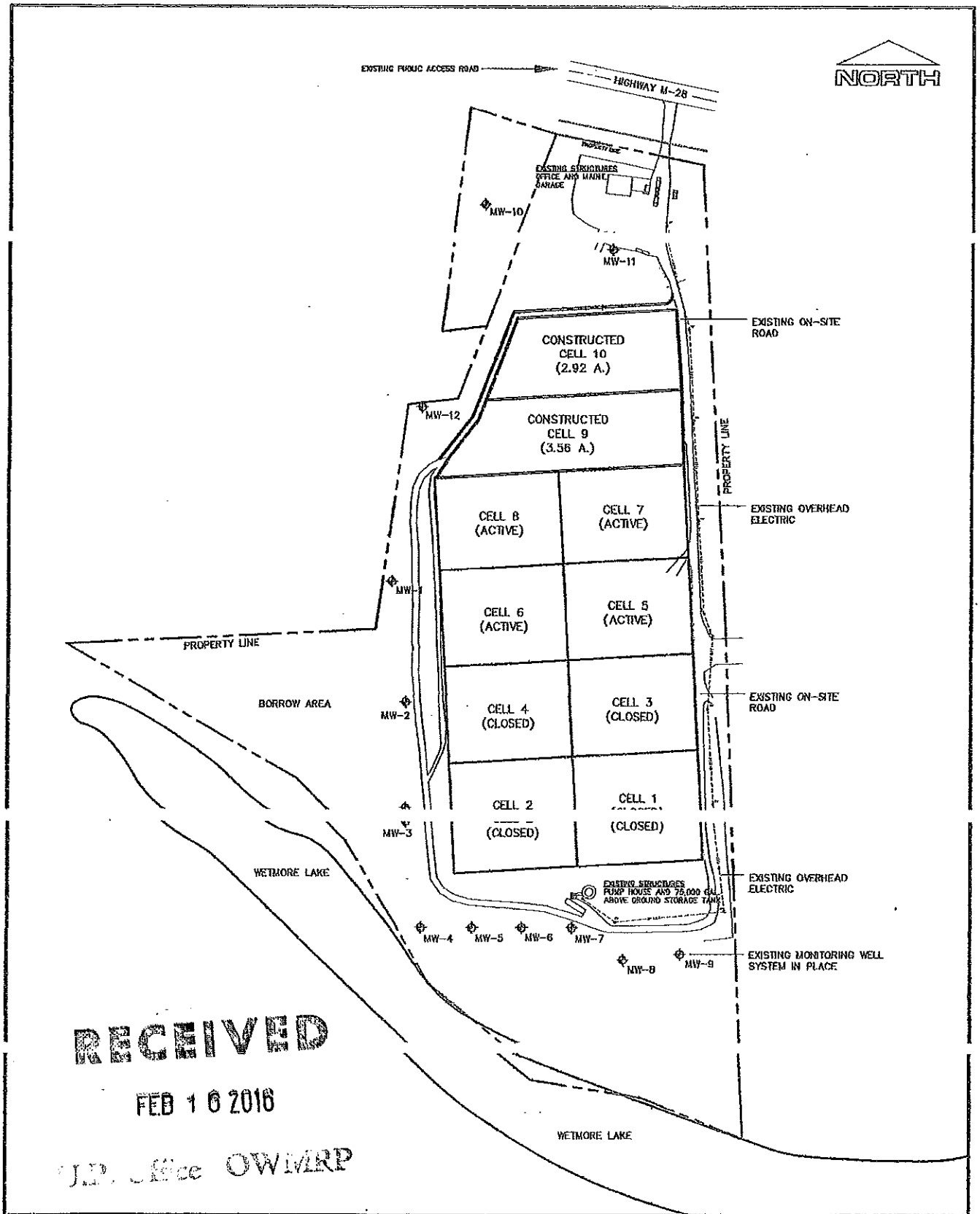
                (b) Cover the material with a tarp; or

(c) Apply an approved foam or other appropriate commercial dust control product.

(7) This approval to use alternative cover shall expire upon expiration of this operating license.

21. **TERM**: This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by, the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

END OF LICENSE



RECEIVED
FEB 16 2016
UP Office OWMRP

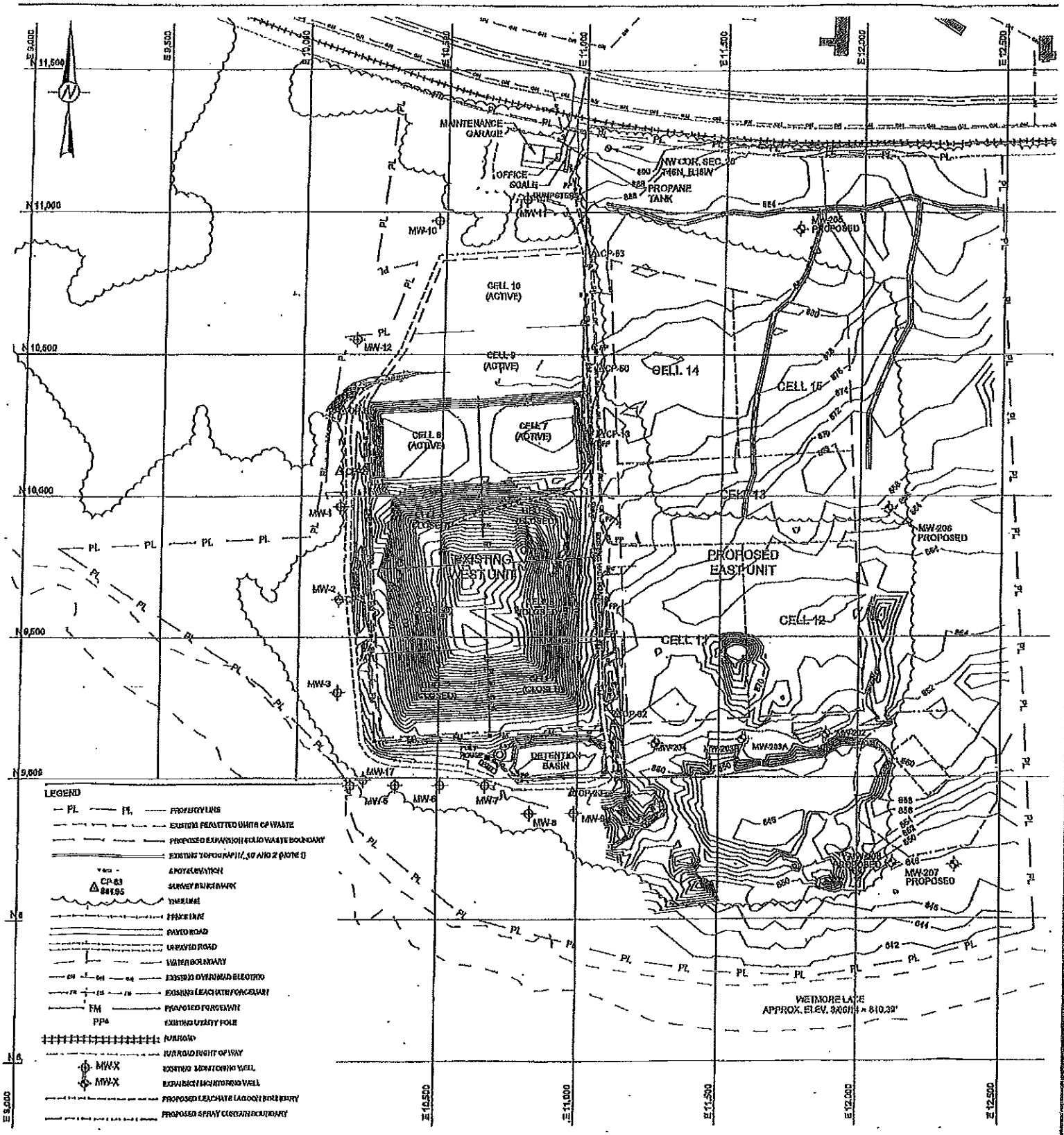
Wilcox Professional Services
AN ISO 9001:2000 CERTIFIED COMPANY

SCALE: 1"=400'	DESIGNED: TJD	WOOD ISLAND LANDFILL MUNISING, MICHIGAN FACILITY MAP
DATE: 12-13-10	CHECKED:	

CONTRACT 22818.00011

FIGURE 1

CADD PART 22818\00010\DRAWINGS\FACILITYMAP



CLIENT
WOOD ISLAND WASTE MANAGEMENT, INC.
MUNISING, MICHIGAN

PROJECT
CONSTRUCTION PERMIT APPLICATION
HMP

0 200 400
SCALE FEET

CONSULTANT

Golder Associates

YYYY-MM-DD	2015-04-29
PREPARED	DJC
DESIGN	KLW
REVIEW	CCP
APPROVED	WLJ

TITLE
SITE PLAN

PROJECT No.	FILE NAME	Rev.	FIGURE
11301181	11301181D001	2	2

IF THIS MEASUREMENT DOES