RFB NO. 316024

CONSTRUCTION DOCUMENTS
PROJECT MANUAL

DANE COUNTY DEPARTMENT OF PUBLIC WORKS,
HIGHWAY AND TRANSPORTATION

PUBLIC WORKS SOLID WASTE DIVISION
1919 ALLIANT ENERGY CENTER WAY
MADISON, WISCONSIN 53713

REQUEST FOR BIDS NO. 316024
PHASE 10 – CELL 2 LINER CONSTRUCTION
DANE COUNTY NO. 2 (RODEFELD) LANDFILL
7102 U.S. HIGHWAY 12 & 18
MADISON, WISCONSIN

PREPARED BY:
TRC ENVIRONMENTAL CORPORATION
708 HEARTLAND TRAIL, SUITE 3000
MADISON, WISCONSIN 53717

Due Date / Time: June 28, 2016/2:00 p.m.

Location: **PUBLIC WORKS OFFICE**

Performance / Payment Bond: **100% OF CONTRACT AMOUNT**

Bid Deposit: **5% OF BID AMOUNT**

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

JOHN WELCH, PUBLIC WORKS PROJECT ENGINEER
TELEPHONE NO.: 608/516-4154
FAX NO.: 608/267-1533
E-MAIL: WELCH@COUNTYOFDANE.COM

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Section

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

LIST OF DRAWINGS (BOUND SEPARATELY)

Sheet	**These Drawings are for Base Bid**
1	Index/Title Sheet
2	Standard Legend and General Notes
3	Existing Conditions Map
4	Subbase Grades/Groundwater Gradient Control System
5	Base Grades/Leachate Collection System
6	Soil Stockpile Areas
7	Details – Horizontal Area Liner, Gradient Control, and Leachate Collection
8	Details – Cross Section and Miscellaneous
9	Details – Tie-in to Existing Final Cover and Miscellaneous
10	Erosion Control/Site Restoration Plan
11	Details – Erosion Control

SECTION 00020
INVITATION TO BID

LEGAL NOTICE

INVITATION TO BID

Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, will receive sealed Bids until:

2:00 P.M., TUESDAY, JUNE 28, 2016

REQUEST FOR BIDS NO. 316024

PHASE 10 CELL 2 CONSTRUCTION

DANE COUNTY LANDFILL SITE #2

7102 US HIGHWAY 12/18

MADISON, WISCONSIN

Dane County is inviting Bids for construction services. Work shall consist of construction of base liner, leachate collection system, and stormwater control elements for a new landfill cell. Alternate Bid Work includes excavation and trucking of clay from secondary site. Only firms with capabilities, experience & expertise with similar projects should obtain this Request for Bids document & submit Bids.

Request for Bids document may be obtained after **2:00 p.m. on June 7th, 2016** by downloading it from countyofdane.com/pwbids. Please call John Welch, Project Manager, at 608/516-4154, or our office at 608/266-4018, for any questions or additional information.

All Bidders must be a registered vendor with Dane County & pay an annual registration fee & must be pre-qualified as a Best Value Contractor before award of Contract. Complete Vendor Registration Form at danepurchasing.com/account/create or obtain one by calling 608/266-4131. Complete Pre-qualification Application for Contractors at countyofdane.com/pwht/BVC_Application.aspx or obtain one by calling 608/266-4029.

An optional pre-bid site tour will be held Thursday June 16, 2016 from 8:00-9:30am at Dane County Landfill Site #2, starting at the Scale House. Bidders are strongly encouraged to attend this optional tour.

PUBLISH: **THURSDAY JUNE 2ND & 9TH, 2016 - WISCONSIN STATE JOURNAL**
THURSDAY JUNE 2ND & 9TH, 2016, 2016 – THE DAILY REPORTER

SECTION 00030
BEST VALUE CONTRACTING APPLICATION

DANE COUNTY DEPARTMENT of PUBLIC WORKS, HIGHWAY and TRANSPORTATION

County Executive
Joseph T. Parisi

1919 Alliant Energy Center Way ◆ Madison, Wisconsin 53713
Phone: (608) 266-4018 ◆ FAX: (608) 267-1533

Commissioner / Director
Gerald J. Mandli

BEST VALUE CONTRACTING APPLICATION

CONTRACTORS / LICENSURE APPLICANTS

The Dane County Department of Public Works requires all contractors to be pre-qualified as a best value contractor with the County prior to being awarded a contract. In addition, the County pre-qualifies potential contractors and sub-contractors who wish to work on County contracts. Subcontractors must become pre-qualified ten (10) days prior to commencing work under any Dane County Public Works Contract. Potential subcontractors are urged to become pre-qualified as early as possible. This document shall be completed, properly executed, along with the necessary attachments and additional information that the County requires for the protection and welfare of the public in the performance of a County contract.

Contractors or subcontractors of any tier who attain pre-qualification status will retain that status for a period of two (2) years from the date of qualification. Contractors shall notify the Dane County Department of Public Works, Highway & Transportation within fifteen (15) days of any changes to its business or operations that are relevant to the pre-qualification application. Failure to do so could result in suspension, revocation of the contractor's pre-qualification, debarment from County contracts for up to three (3) years and / or other sanctions available under the law.

No contracts will be awarded for construction work performed on Dane County projects unless the contractor is currently approved as a Wisconsin Trade Trainer or has applied for approval as an Apprenticeship Trade Trainer to the Wisconsin Department of Workforce Development and agrees to an acceptable apprenticeship program. If you are not currently approved as a Wisconsin Trade Trainer, or have not applied for approval as an Apprenticeship Trade Trainer, please contact the Department of Workforce Development - Bureau of Apprenticeship Standards at 608/266-3133 or visit their web site at: dwd.wisconsin.gov/apprenticeship/.

EXEMPTIONS

- Contractors who employ less than five (5) apprenticeable trade workers are not required to pre-qualify.
- Contractors performing work that does not apply to an apprenticeable trade, as outlined in Appendix A.
- The contractor / subcontractor provides sufficient documentation to demonstrate one or more of the following:
    - apprentices are not available in a specific geographic area;
    - the applicable apprenticeship program is unsuitable or unavailable; or
    - there is a documented depression of the local construction market which prevents compliance.

SEC.	PROOF OF RESPONSIBILITY	CHECK IF APPLICABLE
1	Does your firm possesses all technical qualifications and resources, including equipment, personnel and financial resources, necessary to perform the work required for any project or obtain the same through the use of responsible, pre-qualified subcontractors?	Yes: ☐ No: ☐
2	Will your firm possess all valid, effective licenses, registrations or certificates required by federal, state, county, or local law, which are necessary for the type of work to be performed including, but not limited to, those for any type of trade work or specialty work?	Yes: ☐ No: ☐
3	Will your firm meet all bonding requirements as required by applicable law or contract specifications?	Yes: ☐ No: ☐
4	Will your firm meet all insurance requirements as required by applicable law or specifications, including general liability insurance, workers compensation insurance and unemployment insurance requirements?	Yes: ☐ No: ☐
5	Will your firm maintain a substance abuse policy for employees hired for public works contracts that comply with Wis. Stats. Sec. 103.503?	Yes: ☐ No: ☐
6	Does your firm acknowledge that it must pay all craft employees on public works projects the wage rates and benefits required under Section 66.0903 of the Wisconsin Statutes?	Yes: ☐ No: ☐
7	Will your firm fully abide by the equal opportunity and affirmative action requirements of all applicable laws, including County ordinances?	Yes: ☐ No: ☐
8	In the past three (3) years, has your firm had control or has another corporation, partnership or other business entity operating in the construction industry controlled it? If so, please attach a statement explaining the nature of the firm relationship?	Yes: ☐ No: ☐ If Yes, attach details.
9	In the past three (3) years, has your firm had any type of business, contracting or trade license, certification or registration revoked or suspended?	Yes: ☐ No: ☐ If Yes, attach details.
10	In the past three (3) years, has your firm been debarred by any federal, state or local government agency?	Yes: ☐ No: ☐ If Yes, attach details.
11	In the past three (3) years, has your firm defaulted or failed to complete any contract?	Yes: ☐ No: ☐ If Yes, attach details.
12	In the past three (3) years, has your firm committed a willful violation of federal, state or local government safety laws as determined by a final decision of a court or government agency authority.	Yes: ☐ No: ☐ If Yes, attach details.
13	In the past three (3) years, has your firm been in violation of any law relating to your contracting business where the penalty for such violation resulted in the imposition of a penalty greater than $10,000?	Yes: ☐ No: ☐ If Yes, attach details.
14	Is your firm Executive Order 108 precertified with the State of Wisconsin?	Yes: No: ☐
15	Is your firm an active Wisconsin Trade Trainer as determined by the Wisconsin Bureau of Apprenticeship Standards?	Yes: ☐ No: ☐
16	Is your firm exempt from being pre-qualified with Dane County?	Yes: ☐ No: ☐ If Yes, attach reason for exemption.
17	Does your firm acknowledge that in doing work under any County Public Works Contract, it will be required to use as subcontractors only those contractors that are also pre-qualified with the County or become so ten days prior to commencing work?	Yes: ☐ No: ☐
18	Contractor has been in business less than one year?	Yes: ☐ No: ☐
19	Is your firm a first time Contractor requesting a one time exemption, but, intend to comply on all future contracts and are taking steps typical of a “good faith” effort?	Yes: ☐ No: ☐
20	Not applicable. My firm does not intend to work on Best Value Contracts. Note: Best Value Contracting is required to bid on most Public Works Contracts (if unclear, please call Jan Neitzel Knox 608-266-4029).	Yes: ☐ No: ☐

SIGNATURE SECTION

Your firm's Officer, or the individual who would sign a bid and / or contract documents must sign this document.

I do hereby certify that all statements herein contained are true and correct to the best of my knowledge:

Signature _____ Date _____

Printed or Typed Name and Title _____

NAME AND ADDRESS OF CONTRACTOR	
Name of Firm:	
Address:	
City, State, Zip:	
Telephone Number:	
Fax Number:	
E-mail Address:	

REMEMBER!

Return all to forms and attachments, or questions to:

JAN NEITZEL KNOX
EMAIL: NEITZEL-KNOX@COUNTYOFDANE.COM
OFFICE: (608)266-4029, FAX: (608)267-1533

DANE COUNTY DEPARTMENT OF PUBLIC WORKS,
HGHWAY & TRANSPORTATION
1919 ALLIANT ENERGY CENTER WAY
MADISON, WI 53713

APPENDIX A

APPRENTICEABLE TRADES

Bricklayer
Carpenter
Cement Mason (Concrete Finisher)
Cement Mason (Heavy Highway)
Construction Craft Laborer
Data Communications Installer
Electrician
Elevator Mechanic / Technician
Environmental Systems Technician / HVAC Service Technician / HVAC Install & Service
Glazier
Heavy Equipment Operator / Operating Engineer
Insulation Worker (Heat & Frost)
Iron Worker (Assembler, Metal Buildings)
Painter / Decorator
Plasterer
Plumber
Roofer / Waterproofer
Sheet Metal Worker
Sprinkler Fitter
Steamfitter (Service & Refrigeration)
Taper & Finisher
Telecommunications (Voice, Data & Video) Installer / Technician
Tile Setter

SECTION 00100
INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

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ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Bidder* – Who submits a Bid directly to Owner, as distinct from a sub-bidder, who submits a bid to a Bidder

B. *Issuing Office* – The office from which the Bidding Documents are to be issued.

C. *Successful Bidder* – The lowest, qualified, responsible, and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office as indicated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer or Designer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 Before award of Contract can be approved, Owner shall be satisfied that Bidder involved meets following requirements:

A. Has completed at least one (1) project of at least fifty percent (50%) of size or value of Division of work being bid and type of work completed is similar to that being bid. If greater magnitude of experience is deemed necessary, other than size or value of work, such requirements will be described in appropriate section of Specifications.

B. Maintains permanent place of business.

C. Can be bonded for terms of proposed Contract.

D. Has record of satisfactorily completing past projects and supplies a list of at least five (5) most recent, similar projects, with Engineer's and Owner's names, addresses and telephone numbers for each project. Upon request, Submit to Public Works Project Engineer within Three (3) days after Bid Opening. Criteria which will be considered in determining satisfactory completion of projects by bidder will include:

1. Completed contracts in accordance with drawings and specifications

2. Diligently pursued execution of work and completed contracts according to established time schedule unless Owner grants extensions.

3. Fulfilled guarantee requirements of construction documents.

4. Is not presently on ineligible list maintained by County's Department of Administration for noncompliance with equal employment opportunities and affirmative action requirements.

5. Authorized to conduct business in Wisconsin. By submitting Bid, bidder warrants that it has: complied with all necessary requirements to do business in State of Wisconsin; that persons executing contract on its behalf are authorized to do so; and, if corporation, that name and address of bidder's registered agent are as set forth in Contract. Bidder shall notify Owner immediately, in writing, of any change in its registered agent, their address, and bidder's legal status. For partnership, term "registered agent" shall mean general partner.

3.02 County's Public Works Project Engineer will make such investigations as are deemed necessary to determine ability of bidder to perform the Work, and bidder shall furnish to County's Public Works Project Engineer or designee all such information and data for this purpose as County's Public Works Project Engineer may request. Owner reserves right to reject Bid if evidence submitted by, or investigation of, bidder fails to satisfy Owner that bidder is responsible and qualified to carry out obligations of Contract and to complete the Work contemplated therein.

3.03 Bidder will submit a completed and signed Fair Labor Practices Certification with their bid. The Fair Labor Practices Certification form is included in the Bid Form.

All Bidders must be a registered vendor with Dane County, pay an annual registration fee, and must be pre-qualified as a Best Value Contractor before award of Contract. Complete Vendor Registration Form at danepurchasing.com/account/create or obtain one by calling 608/266-4131. Complete Pre-qualification Application for Contractors at countyofdane.com/pwht/BVC_Application.aspx or obtain one by calling 608/266-4018.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The Supplementary Conditions identify:

a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.

b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.

d. Technical Data contained in such reports and drawings.

2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

4.03 *Site Visit and Testing by Bidders*

A. Bidder shall conduct Site visits by appointment and shall not disturb any ongoing operations at the Site. Contact John Welch, Solid Waste Manager, Dane County Public Works, Solid Waste Division [Cell: (608)516-4154] to arrange a Site visit.

B. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such existing condition topographic surveys, additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.

C. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

D. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

A. Reference is made in the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;

B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;

D. carefully study all reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;

F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;

G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;

H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;

I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and

J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.01 A Pre-Bid conference will be held on Thursday June 16th, 2016 at 8:00 a.m. at the Dane County No. 2 (Rodefeld) Landfill, 7102 US Hwy 12, Madison, WI. Upon completion at

the landfill, a site visit will be held at the clay borrow site for any interested parties. Attendance by all bidders is optional, however bidders and subcontractors are strongly encouraged to attend. Representatives of Owner and Engineer will be present to discuss the Project. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

6.02 Visits at other times can be arranged by appointment. Coordinate site visits with John Welch, Solid Waste Manager, Dane County Public Works, Solid Waste Division Cell: (608)516-4154.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than eight days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

8.01 Bank certified check, cashier's check or Bid Bond, payable to County in amount not less than five percent (5%) of maximum bid, shall accompany each Bid as guarantee that if Bid is accepted, Bidder will execute and return proposed Contract and Performance and Payment Bonds within ten (10) days after being notified of acceptance of Bid. Company issuing bonds must be licensed to do business in Wisconsin.

8.02 Any bid, which is not accompanied by bid guarantee, will be considered "No Bid" and will not be read at Bid Due Date

8.03 If successful Bidder so delivers Contract, Certificate of Insurance, and Performance and Payment Bonds, check will be returned to Bidder. In case Bidder fails to deliver such Contract, insurance, and bond, amount of bid guarantee will be forfeited to County as liquidated damages.

ARTICLE 9 – CONTRACT TIMES

9.01 The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Sample Construction Contract and Bid Form.

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 There are no liquidated damages associated with this Construction Contract.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the

bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.

11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

11.03 Bidders shall carefully read requests for Alternative Bids and thoroughly exam Drawings and Specifications to determine extent various changes and conditions will affect Bid.

11.04 Space is provided in the Bid Form for requested Alternate Bids.

11.05 Bidder shall state amount to be added / subtracted to Base Bid for providing alternatives, including all incidentals, omissions, additions, and adjustments as may be necessary or required by such changes. If there is no difference in price, Bidder shall state "No Change".

11.06 Descriptions of requested Alternate Bids are as set forth in Construction Documents.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers.

If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer.

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents.

A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.

B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."

13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.

13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.

13.04 A Bid by an individual shall show the Bidder's name and official address.

13.05 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.

13.06 All names shall be printed in ink below the signatures.

13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

13.08 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

14.01 Base Bid with Alternates

A. Bidders shall submit a Bid on a lump sum basis for the base Bid and include a separate price for each alternate described in the Bidding Documents and as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate.

B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form.

C. Bid will be a lump sum bid for a lump sum contract price with unit prices given on some Schedule of Value Items for informational purposes only. It is not a unit price bid. The lump sum bid price and the contract price will not change based on measured quantities. Quantities given in the Contract Documents are based on the existing aerial survey and other available information. Bidder is responsible for field verifying the existing conditions and quantities prior to bidding to provide their lump sum bid.

ARTICLE 15 – SUBMITTAL OF BID

15.01 All Bids shall be submitted on standard Bid Form bound herein and only Bids that are made on this Bid Form will be considered. Entire Bid Form and other supporting

documents, if any, shall be removed or copied from Construction Documents, filled out, and submitted in manner specified hereinafter. Submit Bid Security with Bid.

15.02 No bids for any subdivision or any sub-classification of this Work, except as indicated, will be accepted. Any conditional Bid, amendment to Bid Form or appended item thereto, or inclusion of any correspondence, written or printed matter, or details of any nature other than that specifically called for, which would alter any essential provision of Construction Documents, or require consideration of unsolicited material or data in determining award of Contract, will disqualify Bid. Telecommunication alterations to Bid will not be accepted.

15.03 Bidders must submit single Bid for all the Work.

15.04 Bid amounts shall be inserted in words and in figures in spaces provided on Bid Form; in case of conflict, written word amounts will govern.

15.05 Addenda issued after Bid Letting shall become part of Construction Documents. Bidders shall acknowledge receipt of such addenda in appropriate space provided on Bid Form. Bid may be rejected if receipt of any particular addendum applicable to award of Contract has not been acknowledged on Bid Form.

15.06 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Dane County Solid Waste Division, 1919 Alliant Energy Center Way, Madison WI, 53713.

15.07 Bidder shall be responsible for sealed Bid being delivered to place designated for Bid Due Date on or before date and time specified. Bids received after time of closing will be rejected and returned to bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder. Negligence on part of bidder in preparing their Bid confers no right for withdrawal of Bid after it has opened.

16.02 No Bid may be withdrawn for a period of ninety (90) days after Bid Due Date.

16.03 If a Bid contains error, omission or mistake, bidder may limit liability to amount of bidder's guarantee by giving written Notice of Intent not to execute Contract to Owner within seventy-two (72) hours of Bid Due Date.

ARTICLE 17 – OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids, to waive any informality in any bid, and to accept any bid that will best serve interests of County. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.

19.03 **Evaluation of Bids**

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. For determination of the apparent low Bidder(s) when sectional bids are submitted, Bids will be compared on the basis of the aggregate of the Bids for separate sections and the Bids for combined sections that result in the lowest total amount for all of the Work.

C. Unit prices and informational bids will not be considered in establishing low bidder.

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

20.01 Articles 28 and 46 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Contract (executed by Successful Bidder) to Owner, it shall be accompanied by required performance and payment bonds and insurance documentation. Surety Company shall be licensed to do business in Wisconsin. Performance and Payment Bonds must be dated same date or subsequent to date of Contract. Performance and Payment Bonds must emulate information in Sample Performance and Payment Bonds in Construction Documents.

20.02 Provide certified copy of power of attorney from Surety Company showing that agent who signs Bond has power of attorney to sign for Surety Company. Secretary or Assistant Secretary of company must sign this certification, not attorney-in-fact. Certification must bear same or later date as Bond. Power of Attorney must emulate model power of attorney information detailed in Sample Performance and Payment Bonds.

20.03 If Bidder is partnership or joint venture, State certified list, providing names of individuals constituting partnership or joint venture must be furnished. Contract itself may be signed by one partner of partnership, or one partner of each firm comprising joint venture, but Performance and Payment Bonds must be signed by all partners.

20.04 If Bidder is a corporation, it is necessary that current certified copy of resolution or other official act of directors of corporation be submitted showing that person who signs Contract is authorized to sign contracts for corporation. It is also necessary that corporate seal be affixed to resolution, contract, and performance and payment bonds. If your corporation has no seal, it is required that above documents include statement or notation to effect that corporation has no seal.

ARTICLE 21 – SIGNING OF CONTRACT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Contract along with the other Contract Documents as identified in the Contract. Within the time indicated in the Contract Documents, Successful Bidder shall execute and deliver the required number of counterparts of the Contract (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Owner shall deliver one fully executed counterpart of the Contract to Successful Bidder, together with printed and electronic copies of the Contract Documents.

ARTICLE 22 – SALES AND USE TAXES

22.01 Bidder shall include in Bid, all Sales, Consumer, Use and other similar taxes required by Wisconsin Statute 77.54 (9m) allows building materials that become part of local unit government facilities to be exempt from sales & use tax. Vendors & materials suppliers may not charge Bidders sales & use tax on these purchases. This does not include highways, streets or roads. Any other Sales, Consumer, Use & other similar taxes or fees required by law shall be included in Bid.

22.02 In accordance with Wisconsin Statute 71.80(16)(a), successful nonresident bidder, whether incorporated or not, and not otherwise regularly engaged in business in this state, shall file surety bond with State of Wisconsin Department of Revenue payable to Department of Revenue, to guarantee payment of income taxes, required unemployment compensation contributions, sales and use taxes and income taxes withheld from wages of employees, together with any penalties and interest thereon. Amount of bond shall be three percent (3%) of Contract or subcontract price on all contracts of $50,000 or more.

ARTICLE 23 – WAGE RATE DETERMINATION

23.01 A wage rate determination is inserted at the end of Specification Section 01310 as part of the Bidding Documents and will be on file at the office of OWNER. Bidders shall

inspect the wage rate determination and shall incorporate its requirements into their Bid. See Section 01310 for additional requirements.

ARTICLE 24 – CONTRACT INTERESTS BY COUNTY PUBLIC OFFICIALS

24.01 In accordance with Wisconsin Statute 946.13, county official may not bid for or enter into any contract involving receipts or disbursements of more than $15,000.00 in a year, in which they have private pecuniary interest, direct or indirect if at same time they are authorized to take official action with respect to making of this Contract. Any contract entered into in violation of this Statute is void and County incurs no liability thereon. This subsection does not affect application and enforcement of Wisconsin Statute 946.13 by state prosecutors in criminal courts of this state.

ARTICLE 25 – EMERGING SMALL BUSINESS PROVISIONS

25.01 **Emerging Small Business Definition.** For purposes of this provision, ESB is defined as:

A. Independent business concern that has been in business minimum of one year;

B. Business located in State of Wisconsin;

C. Business comprised of less than twenty-five (25) employees;

D. Business must not have gross sales in excess of three million dollars ($3,000,000.00) over past three years; and

E. Business does not have history of failing to complete projects.

25.02 **Emerging Small Business (ESB) Involvement.** Bidder shall make good faith effort to award minimum of ten percent (10%) of the Work to ESBs. Bidder shall submit report to Dane County Contract Compliance Officer within twenty-four (24) hours after Bid Due Date demonstrating such efforts. Good faith efforts means significant contact with ESBs for purposes of soliciting bids from them. Failure to make or demonstrate good faith efforts will be grounds for disqualification.

25.03 **Emerging Small Business Report.** Emerging Small Business Enterprise Report is to be submitted by Bidder in separate envelope marked “Emerging Small Business Report”. This report is due by 2:00 p.m. following specified twenty-four (24) hours after Bid Due Date. Bidder who fails to submit Emerging Small Business Report shall be deemed not responsive.

25.04 **ESB Goal.** Goal of this project is ten percent (10%) ESB participation. ESB utilizations are shown as percentage of total Bid. If Bidder meets or exceeds specified goal, Bidder is only required to submit Form A - Certification, and Form B - Involvement. Goal shall be met if Bidder qualifies as ESB.

25.05 **Report Contents.** Following award of Contract, Bidder shall submit copies of executed contracts for all Emerging Small Businesses. Emerging Small Business Report shall consist of these:

A. Form A - Certification;

B. Form B - Involvement;

C. Form C - Contacts;

D. Form D - Certification Statement (if appropriate); and

E. Supportive documentation (i.e., copies of correspondence, telephone logs, copies of advertisements).

25.06 **ESB Listing.** Bidders will solicit bids from ESB listing provided by Dane County.

25.07 **ESB Certification.** All contractors, subcontractors and suppliers seeking ESB certification must complete and submit Emerging Small Business Certification Application to Dane County Contract Compliance Program.

25.08 **Certification Statement.** If ESB firm has not been certified by County as ESB prior to submittal of this Bid, ESB Report cannot be used to fulfill ESB goal for this project unless firm provides "Form D - Certification Statement". Certification statement must be completed and signed by ESB firm.

25.09 **Questions.** Questions concerning Emerging Small Business provisions shall be directed to:

Dane County Contract Compliance Officer
City-County Building, Room 421
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703
608/266-5623

25.10 **Substituting ESBs.** In event of any significant changes in subcontract arrangements or if need arises to substitute ESBs, Bidder shall report such proposed changes to Contract Compliance Officer to making any official changes and request authorization to substitute ESB firm. Bidder further agrees to make every possible effort to replace ESB firm with another qualified ESB firm.

25.11 **Good Faith Efforts.** Good faith efforts can be demonstrated by meeting all of these obligations:

A. Selecting portions of the Work to be performed by ESBs in order to increase likelihood of meeting ESB goal including, where appropriate, breaking down Contract into smaller units to facilitate ESB participation.

B. Advertising in general circulation, trade associations and women / minority focus media concerning subcontracting opportunities.

C. Providing written notices to reasonable number of specific ESBs that their interest in Contract was being solicited in sufficient time to allow ESBs to participate effectively.

D. Following up on initial solicitations of interest by contacting ESBs within five (5) working days prior to Bid Due Date to determine with certainty whether ESB were interested, to allow ESBs to prepare bids.

E. Providing interested ESB with adequate information about Drawings, Specifications and requirements of Contract.

F. Using services of available minority, women and small business organizations and other organizations that provide assistance in recruitment of MBEs / WBEs / ESBs.

G. Negotiating in good faith with interested ESBs, not rejecting ESBs as unqualified without sound reason based on thorough investigation of their capabilities.

H. Submitting required project reports and accompanying documents to County's Contract Compliance Officer within twenty-four (24) hours after Bid Due Date.

25.12 **Appeals Disqualification of Bid.** Bidder who is disqualified may appeal to Public Works & Transportation Committee and Equal Opportunity Commission.

FORM A

DANE COUNTY
EMERGING SMALL BUSINESS REPORT - CERTIFICATION

In accordance with General Conditions of Contract, submit this Emerging Small Business Report within 24 hours after Bid Due Date.

PROJECT NAME: _____

_____

BID NO.: _____ BID DUE DATE: _____

BIDDER INFORMATION

COMPANY NAME: _____

ADDRESS: _____

_____

TELEPHONE NO.: _____

CONTACT PERSON: _____

FORM B

DANE COUNTY
EMERGING SMALL BUSINESS REPORT - INVOLVEMENT

Page ___ of ___
(Copy this Form as necessary to provide complete information)

COMPANY NAME: ______________________________

PROJECT NAME: ______________________________ BID NO.: ______________

ESB NAME: ____________________ CONTACT PERSON: ____________________

ADDRESS: ____________________ PHONE NO.: ____________________

CITY: ____________________ STATE: ________ ZIP: __________

Indicate percentage of financial commitment to this ESB: ______________% Amount: $______________

ESB NAME: ____________________ CONTACT PERSON: ____________________

ADDRESS: ____________________ PHONE NO.: ____________________

CITY: ____________________ STATE: ________ ZIP: __________

Indicate percentage of financial commitment to this ESB: ______________% Amount: $______________

ESB NAME: ____________________ CONTACT PERSON: ____________________

ADDRESS: ____________________ PHONE NO.: ____________________

CITY: ____________________ STATE: ________ ZIP: __________

Indicate percentage of financial commitment to this ESB: ______________% Amount: $______________

FORM C

DANE COUNTY
EMERGING SMALL BUSINESS REPORT - CONTACTS

(Copy this Form as necessary to provide complete information)

COMPANY NAME: _____

PROJECT NAME: _____ BID NO.: _____

	ESB FIRM NAME CONTACTED	DATE	PERSON CONTACTED	DID ESB BID?	DID YOU ACCEPT BID?	REASON FOR REJECTION
1)						
2)						
3)						
4)						
5)						
6)						
7)						

FORM D

DANE COUNTY
EMERGING SMALL BUSINESS REPORT - CERTIFICATION STATEMENT

I, _____ , _____ of
Name Title

_____ certify to best of my knowledge and
Company

belief that this business meets Emerging Small Business definition as indicated in Article 9 and that information contained in this Emerging Small Business Report is true and correct.

_____ _____
Bidder's Signature Date

SECTION 00200
INFORMATION AVAILABLE TO BIDDERS

The following documents will be made available for review by bidders at the office of Dane County Solid Waste Division. The following documents contain site information including site geology, soil boring information, site water table/water level information, Phase 9 – Cell 1 Liner Construction (liner adjacent to and northeast of Phase 10 – Cell 2), Phase 10 – Cell 1 Liner Construction (liner adjacent to and north of Phase 10 – Cell 2):

- Dane County. 2015. Eastern Expansion Phase 10 – Cell 1 Liner Construction Documentation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. November 2015.

- Request for Bids No. 315034. 2015. Eastern Expansion Phase 10 – Cell 1 Liner Construction, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. June 2015.

- Dane County. 2014. Eastern Expansion Phase 9 – Cell 1 Liner Construction Documentation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. December 2014.

- TRC Environmental Corporation. 2014. Addendum No. 1 Eastern Expansion Plan of Operation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin, March 2014.

- TRC Environmental Corporation. 2014. Eastern Expansion Plan of Operation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. March 2014.

- Request for Bids No. 314005. 2014. Eastern Expansion Phase 9 – Cell 1 Liner Construction, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. February 2014.

- TRC Environmental Corporation. 2013. Eastern Expansion Feasibility Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. May 24, 2013.

- Rust Environment and Infrastructure. 1993. Plan of Operation Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. November 1993.

- SEC Donohue Environment and Infrastructure. 1992. Feasibility Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. October 1992.

- RMT, Inc. 1984. Plan of Operation Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. February 1984.

- RMT, Inc. 1982. Feasibility Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. September 1982.

SECTION 00300
BID FORM (LUMP SUM)

TO: Dane County Department of Public Works – Solid Waste Division
1919 Alliant Energy Center Way
Madison, Wisconsin 53713

FOR: Dane County No. 2 (Rodefeld) Landfill
Phase 10-Cell 2 Liner Construction

BID FROM: _____

_____

_____

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to BIDDERs, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for ninety (90) days after the day of Bid opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within ten (10) days after the date of OWNER's Notice of Award.

3. In the event there is a disagreement related to the volume of soil handled on site for this project, Dane County will have their surveyor verify quantities based on a before and after survey of the ground surface where the soils were removed.

4. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the Bidding Documents and of the following Addenda receipt of all which is hereby acknowledged: (List addenda by Addendum Number and Date)

Date	Number

(b) BIDDER has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work;

(c) BIDDER is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work;

(d) BIDDER has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the Supplementary Conditions. BIDDER acknowledges that such reports and drawings are not Contract Documents and may not be complete for BIDDER's purpose. BIDDER acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or

completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the site. BIDDER has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the site or otherwise which may affect cost progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by BIDDER and safety precautions and programs incident thereto. BIDDER does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the times, price and other terms and conditions of the Contract Documents.

(e) BIDDER is aware of the general nature of Work to be performed by OWNER and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

(f) BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

(g) BIDDER has given OWNER/ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that BIDDER has discovered in the Contract Documents and the written resolution thereof by OWNER/ENGINEER is acceptable to BIDDER, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

(h) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.

BID FORM
PHASE 10, CELL 2 LINER CONSTRUCTION

5. BIDDER will complete the Work in accordance with the Contract Documents for the following price(s):

ITEM	SCHEDULE OF VALUE DESCRIPTION	UNITS	ESTIMATED QUANTITY	UNIT PRICE	SCHEDULE OF VALUE PRICE
1	Mobilization	LS	1		
2	Surveying	LS	1		
3	Sediment Control • Sediment Control Fence • Sediment Control Erosion Logs	 LF LF			
4	Clear and Grub	LS	1		
5	Geomembrane Boots Around Two Existing Gas Wells	LS	1		
6	Subbase Grade Construction – Horizontal Expansion area (Area "C" on Drawings 4 and 5) • Estimated Cut Volume(1)(2)(4) • Estimated Fill Volume(1)(2)(4)	 CY CY	 99,400 400		
7	Subbase Grade Construction – Vertical Expansion Area with no Existing Geomembrane Layer (Area "B" on Drawings 4 and 5) • Estimated Cut Volume(1)(2)(3)(4)	 CY	 10,170		
8	Grading for Vertical Expansion Area with an Existing Geomembrane Layer (Area "A" on Drawings 4 and 5) • Estimated Cut Volume(1)(2)(4)	 CY	 1,940		
9	Groundwater Gradient Control System	LS	1		
10	Select Clay Fill (1)	CY	30,700		
11	Geomembrane Surface Preparation	LS	1		
12	60 mil Geomembrane	SY	35,470		
13	Geotextile Cushion	SY	35,620		
14	Select Aggregate Fill Drainage Layer(1)	CY	11,900		
15	Delineation Berms	LF	815		
16	Perforated HDPE Leachate Pipe	LF	640		
17	Electrical Resistivity Testing Assistance	LS	1		
18	Strip and Stockpile Topsoil(5)	Acre	15.6		
19	Topsoil Placement(6)	Acre	15.6		

ITEM	SCHEDULE OF VALUE DESCRIPTION	UNITS	ESTIMATED QUANTITY	UNIT PRICE	SCHEDULE OF VALUE PRICE
20	Seed, Fertilize, and Mulch	Acre	20.4		
21	Erosion Control and Revegetation Mat	LS	1		
22	Access Roads	LS	1		
23	Temporary Surface Water Diversion Berm on Final Cover	LF	810		
24	Flat Bottom and V-notch Ditches	LS	1		
25	Remove and Relocate Existing Flume Pipe and Energy Dissipater	LS	1		
26	Remove Existing CMP Culvert	LS	1		
27	Temporary Perimeter Berm at Western Limits of Phase 10 – Cell 2 Liner	LF	640		
28	Removal of Existing Gravel Haul Road	SY	1,870		
			TOTAL:		

TOTAL LUMP SUM PRICE:

_____ ($_____)

(use words)

(1) The quantity is the volume of clay needed for liner construction and is based on in-place volume with no consideration for haul loses, shrinkage, or compaction.

(2) The cut and fill volumes are based on an aerial topography map flown on February 2, 2016 for the Phase 10 – Cell 2 construction area.

(3) For this cut and fill volume, BIDDER assumes that after removal of the existing topsoil and general fill layers, the existing clay liner (clay in the existing final cover) will meet compaction requirements and will not require reworking prior to preparing the subbase grades for installation of the new geomembrane layer. Add bid for reworking clay in the Alternative Bid Item table below.

(4) Quantity calculated to the top of existing ground (includes topsoil)

(5) Topsoil stripped from general fill and clay stockpile areas. Topsoil in Phase 10 – Cell 2 liner area is included with Bid Items 6, 7, and 8.

(6) Topsoil placed over general fill and clay stockpile areas.

Note: CONTRACTOR is responsible for determining that all costs to complete the Work in accordance with the Contract Documents are included in the TOTAL of the Bid Form and in the TOTAL LUMP SUM PRICE. BIDDER is required to complete the Estimated Quantities in the Bid Form that are blank based on the bidding documents, review of Information Available to Bidders, site visits and investigations. Refer to Section 01270 (Schedule of Values and Payment) for descriptions of Schedule of Value items.

6. BIDDER will complete the Work for the following add or deduct prices from the lump sum price, if directed by the OWNER (refer to Specification Section 01310 Subpart 1.7 (Administrative Provisions) for Alternative descriptions:

ALTERNATE BID ITEMS

ITEM	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY	ADD(+)/DEDUCT(-) PRICE
1A	Rework Existing Clay over Vertical Expansion Area	SY	1	
2A	Bid for Excavation and Transportation of Clay from Dane County's Off-Site Borrow Source to the Landfill (Also Bidding on Construction of the Geocomposite Liner System)	CY	30,000	
3A	Bid for Excavation and Transportation of Clay from Dane County's Off-site Borrow Source to the Landfill (Not Bidding on Construction of the Geocomposite Liner System)	CY	30,000	
OTHER ALTERNATIVES PROPOSED BY THE BIDDER				
4A		LS	1	
5A		LS	1	
6A		LS	1	

7. BIDDER agrees that the Work will be substantially complete and completed and ready for final payment in accordance with the Contract Documents on or before the dates or within the number of calendar days indicated in the Sample Construction Contract.

Dane County Public Works Solid Waste Division must have final completion of this project by December 31, 2016. Assuming this Work can be started by July 25, 2016, what dates can you commence and complete this job?

Commencement Date: _____ Completion Date: _____
(final, not substantial)

8. The following documents are attached to and made a condition of this Bid:

(a) Required 5 Percent Bid Security in the form of _____. (Attached as Exhibit A). If Bid Security is in the form of a Bid Bond, the sample Bid Bond provided can be used or another Bid Bond form containing the same information as the sample Bid Bond.

(b) Fair Labor Practices Certification

9. The terms used in this Bid, which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents, have the meanings assigned to them in the General Conditions.

10. Bid submittal:

I have examined and carefully prepared this Bid from the associated Construction Documents and have checked the same in detail before submitting this Bid; that I have full authority to make such statements and submit this Bid in (its) (their) (my) behalf; and that the said statements are true and correct. In signing this Bid, we also certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a Bid; that this Bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; that this Bid has not been knowingly disclosed prior to the Bids Due Date to another bidder or competitor; that the above statement is accurate under penalty of perjury.

BIDDER: *[Indicate correct name of bidding entity]*

_____

By:
[Signature] _____

[Printed name] _____
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:
[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

_____

_____

_____

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

_____

Bidder's License No.: _____
(where applicable)

- **THIS PAGE IS FOR BIDDERS' REFERENCE AND NEED NOT BE SUBMITTED WITH BID FORM.**

- **BID CHECK LIST:**

These items **must** be included with Bid:

☐ Bid Form ☐ Bid Bond ☐ Fair Labor Practices Certification

- **BIDDERS SHOULD BE AWARE OF THE FOLLOWING:**
- **DANE COUNTY VENDOR REGISTRATION PROGRAM**

Any person bidding on any County contract must be registered with the Dane County Purchasing Division & pay an annual registration fee. A contract will not be awarded to an unregistered vendor. Obtain a *Vendor Registration Form* by calling 608/266-4131 or complete a new form or renewal online at:

www.danepurchasing.com/registration

- **DANE COUNTY BEST VALUE CONTRACTING PRE-QUALIFICATION**

Contractors must be pre-qualified as a Best Value Contractor with the Dane County Public Works Engineering Division before the award of contract. Obtain a *Best Value Contracting Application* by calling 608/266-4018 or complete one online at:

www.countyofdane.com/pwht/BVC_Application.aspx

- **EQUAL BENEFITS REQUIREMENT**

By submitting a Bid, the contractor acknowledges that a condition of this contract is to provide equal benefits as required by Dane County Code of Ordinances Chapter 25.016. Contractor shall provide equal benefits as required by that Ordinance to all required employees during the term of the contract. Equal Benefits Compliance Payment Certification shall be submitted with final pay request. For more information:

www.danepurchasing.com/partner_benefit.aspx

EXHIBIT A
BID SECURITY

BID BOND

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

BIDDER *(Name and Address)*:

SURETY *(Name, and Address of Principal Place of Business)*:

OWNER *(Name and Address)*:

BID

Bid Due Date:

Description *(Project Name— Include Location)*:

BOND

Bond Number:

Date:

Penal sum _____ $ _____

(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER	**SURETY**
_____ (Seal)	_____ (Seal)
Bidder's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature	Signature (Attach Power of Attorney)
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	Attest: _____
Signature	Signature
_____	_____
Title	Title

Note: Addresses are to be used for giving any required notice.
Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder any difference between the total amount of Bidder's Bid and the total amount of the Bid of the next lowest, responsible Bidder that submitted a responsive Bid as determined by Owner for the work required by the Contract Documents, provided that:

1.1 If there is no such next Bidder, and Owner does not abandon the Project, then Bidder and Surety shall pay to Owner the penal sum set forth on the face of this Bond, and

1.2 In no event shall Bidder's and Surety's obligation hereunder exceed the penal sum set forth on the face of this Bond.

1.3 Recovery under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or

3.2 All Bids are rejected by Owner, or

3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

EXHIBIT B
FAIR LABOR PRACTICES CERTIFICATION

FAIR LABOR PRACTICES CERTIFICATION

The undersigned, for and on behalf of the BIDDER, APPLICANT or PROPOSER named herein, certifies as follows:

A. That he or she is an officer or duly authorized agent of the above-referenced BIDDER, APPLICANT or PROPOSER, which has a submitted a proposal, bid or application for a contract with the county of Dane.

B. That BIDDER, APPLICANT or PROPOSER has (check one):

_____ not been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

_____ been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

_____ _____
Officer or Authorized Agent Signature Date

_____
Printed or Typed Name and Title

_____
Printed or Typed Business Name

NOTE: You can find information regarding the violations described above at: www.nlrb.gov and werc.wi.gov.

For reference, Dane County Ordinance 25.11(28)(a) is as follows:
(28) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder's responsibility to perform the contract.

If you indicated that the NLRB or WERC have found you to have such a violation, you must include copies of any relevant information regarding such violation with your proposal, bid or application.

SECTION 00500
SAMPLE CONSTRUCTION CONTRACT

COUNTY OF DANE

PUBLIC WORKS CONSTRUCTION CONTRACT

Contract No. _____ Bid No.

Authority: Res. _____, 2016

THIS CONTRACT, made and entered into as of the date by which authorized representatives of both parties have affixed their signatures, by and between the County of Dane (hereafter referred to as "COUNTY") and _____ (hereafter, "CONTRACTOR"), and

W I T N E S S E T H :

WHEREAS, COUNTY, whose address is c/o Solid Waste Manager, 1919 Alliant Energy Center Way, Madison, WI 53713, desires to have CONTRACTOR provide Phase 10 – Cell 2 Liner Construction, Dane County Landfill Site #2 ("the Project"); and

WHEREAS, The Project has been designed by TRC Environmental Corporation (Designer), 708 Heartland Trail, Suite 3000, Madison, Wisconsin 73717. The COUNTY has retained Dane County Solid Waste Division ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents, and

WHEREAS, CONTRACTOR, whose address is _____ _____ is able and willing to construct the Project, in accordance with the Construction Documents;

NOW, THEREFORE, in consideration of the above premises and the mutual covenants of the parties hereinafter set forth, the receipt and sufficiency of which is acknowledged by each party for itself, COUNTY and CONTRACTOR do agree as follows:

1. CONTRACTOR agrees to construct, for the price of $_____ the Project and at the CONTRACTOR'S own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence labor, insurance, and other accessories and services necessary to complete the Project in accordance with the conditions and prices stated in the Bid Form, General Conditions of Contract, the drawings which include all maps, plats, plans, and other drawings and printed or written explanatory matter thereof, and the specifications therefore as prepared by TRC Environmental Corporation (hereinafter referred to as "the Designer"), and as enumerated in the Project Manual Document Index, all of which are made a part hereof and collectively evidence and constitute the Contract.

2. COUNTY agrees to pay the CONTRACTOR in current funds for the performance of the Contract subject to additions and deductions, as provided in the General Conditions of Contract, and to make payments on account thereof as provided in Article entitled, "Payments to Contractor" of the General Conditions of Contract.

3. During the term of this Contract, CONTRACTOR agrees to take affirmative action to ensure equal employment opportunities. The CONTRACTOR agrees in accordance with Wisconsin Statute 111.321 and Chapter 19 of the Dane County Code of Ordinances not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs. Such equal opportunity shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation. CONTRACTOR agrees to post in conspicuous places, available to all employees and applicants for employment, notices setting forth the provisions of this paragraph.

4. CONTRACTOR shall file an Affirmative Action Plan with the Dane County Contract Compliance Officer in accord with Chapter 19 of the Dane County Code of Ordinances. CONTRACTOR must file such plan within fifteen (15) days of the effective date of this Contract. During the term of this Contract CONTRACTOR shall also provide copies of all announcements of employment opportunities to COUNTY'S Contract Compliance Office, and shall report annually the number of persons, by race, ethnicity, gender, and disability status, which apply for employment and, similarly classified, the number hired and number rejected.

5. During the term of this Contract, all solicitations for employment placed on CONTRACTOR'S behalf shall include a statement to the effect that CONTRACTOR is an "Equal Opportunity Employer."

6. CONTRACTOR agrees to comply with provisions of Chapter 25.016 of the Dane County Code of Ordinances, which pertains to domestic partnership benefits.

7. CONTRACTOR agrees to furnish all information and reports required by COUNTY'S Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and the provisions of this Contract.

8. CONTRACTOR agrees that all persons employed by CONTRACTOR or any subcontractor shall be paid no less than the minimum wage established under Chapter 40, Subchapter II, Dane County Code of Ordinances. CONTRACTOR agrees to abide by and comply with the provisions of Chapter 40, Subchapter II of the Dane County Code of Ordinances, and said Subchapter is fully incorporated herein by reference.

9. This Contract is intended to be a Contract solely between the parties hereto and for their benefit only. No part of this Contract shall be construed to add to, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties including, but not limited to, employees of either of the parties.

10. The entire agreement of the parties is contained herein and this Contract supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that the express terms of this Contract shall not be amended in any fashion except in writing, executed by both parties.

11. CONTRACTOR must be pre-qualified as a Best Value Contractor with Dane County Public Works Engineering Division before award of Contract. Subcontractors must be pre-qualified ten (10) days prior to commencing Work under this Contract.

IN WITNESS WHEREOF, COUNTY and CONTRACTOR, by their respective authorized agents, have caused this Contract and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

* * * * * * *

FOR CONTRACTOR:

Signature | Date

Printed or Typed Name and Title

Signature | Date

Printed or Typed Name and Title

NOTE: If CONTRACTOR is a corporation, Secretary should attest. In accordance with IRS Regulations, unincorporated entities are required to provide either their Social Security or Employer Number in order to receive payment for services rendered.

* * * * * * *

This Contract is not valid or effectual for any purpose until approved by the appropriate authority designated below, and no work is authorized until the CONTRACTOR has been given notice to proceed by COUNTY'S Assistant Public Works Director.

FOR COUNTY:

Joseph T. Parisi, County Executive | Date

Scott McDonell, County Clerk | Date

SECTION 00700
GENERAL CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS OF CONTRACT

TABLE OF CONTENTS

1. CONSTRUCTION DOCUMENTS

A. Construction Documents, listed in Table of Contents of this Specification volume shall form part of this Contract and provisions of Construction Documents shall be as binding upon parties as if they were fully set forth in Contract itself.

B. These shall also be considered as part of Construction Documents: Addenda, including additions and modifications incorporated in such addenda before execution of Contract; requests for information; construction bulletins; change orders; and written interpretations by Engineer or Public Works Project Engineer that are made after execution of Contract.

C. Construction Documents are complementary, and what is required by one shall be as binding as if required by all. Intent of Construction Documents is to include all labor, materials and equipment necessary for proper execution of the Work.

2. DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. All uses of term "County" in Construction Documents shall mean Dane County.

B. All uses of term "Department" in Construction Documents shall mean Department of Public Works, Highway & Transportation, which is a unit of Dane County government. Department is County agency overseeing Contract with Contractor. Department also refers to Owner/Engineer, Owner, and Engineer throughout the Contract Documents. Department will be on-site conducting Construction Quality Assurance during construction.

C. Public Works Project Engineer is appointed by and responsible to Department. Public Works Project Engineer has authority to act on behalf of Department and will sign change orders, payment requests and other administrative matters related to projects.

D. Public Works Project Engineer is responsible for supervision, administration and management of field operations involved in construction phase of this Work.

E. Term "Work" includes all labor, equipment and materials necessary to produce project required by Construction Documents.

F. Term "Substantial Completion" is date and definition given in Item 3.B of the Dane County Public Works Construction Contract located in Section 00500.

G. Contractor is person, firm, or corporation with whom County makes Contract. Though multiple contracts may be involved, Construction Documents treat them throughout as if each were of singular number.

H. Designer refers to TRC Environmental Corporation (TRC). TRC assisted Dane County in preparing the Contract Documents.

I. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have

the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

5. *Bidder*—An individual or entity that submits a Bid to Owner.

6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.

7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.

8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.

9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the

procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.

13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.

14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .

15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.

16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.

17. *Cost of the Work*—See Paragraph 13.01 for definition.

18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.

19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.

20. *Engineer*—The individual or entity named as such in the Agreement.

21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.

22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be

incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.

26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.

27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.

29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.

32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.

33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.

35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.

38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.

40. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.

41. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.

42. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.

43. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.

44. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

45. *Unit Price Work*—Work to be paid for on the basis of unit prices.

46. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

47. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives*:

1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. *Day*:

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*:

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

   a. does not conform to the Contract Documents; or

   b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

   c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).

E. *Furnish, Install, Perform, Provide*:

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

3. ADDITIONAL INSTRUCTIONS AND DRAWINGS

A. Contractor may be furnished additional instructions and detail drawings as necessary to carry out the Work included in Contract. Additional drawings and instructions thus supplied to Contractor will coordinate with Construction Documents and will be so prepared that they can be reasonably interpreted as part thereof. Contractor shall carry out the Work in accordance with additional detail drawings and instructions.

4. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. Unless otherwise specified, Contractor shall submit three (3) copies of all Shop Drawings for each submission, until receiving final approval. After final approval, provide five (5) additional copies for distribution and such other copies as may be required.

B. Contractor shall submit, on an on-going basis and as directed, Product Data such as brochures that shall contain catalog cuts and specifications of all furnished mechanical and electrical equipment. After Engineer's approval, one (1) copy shall remain in Engineer's file, one (1) kept at Department's office and one (1) kept at job site by Contractor for reference purposes.

C. Samples shall consist of physical examples furnished by Contractor in sufficient size and quantity to illustrate materials, equipment or workmanship, and to establish standards to compare the Work.
   1. Submit Samples in sufficient quantity (minimum of two (2)) to permit Engineer to make all necessary tests and of adequate size showing quality, type, color range, finish, and texture. Label each Sample stating material, type, color, thickness, size, project name, and Contractor's name.
   2. Submit transmittal letter requesting approval, and prepay transportation charges to Engineer's office on samples forwarded.
   3. Materials installed shall match approved Samples.

D. Contractor shall review Shop Drawings and place their dated stamp thereon to evidence their review and approval and shall submit with reasonable promptness and in orderly sequence to cause no delay in the Work or in work of any other contractor. At time of submission, Contractor shall inform Engineer in writing of any deviation in Shop Drawings or Samples from requirements of Construction Documents. Engineer will not consider partial lists.

E. Engineer will review and approve or reject Shop Drawings with reasonable promptness to cause no delay. Engineer's approval shall not relieve Contractor from responsibility for errors or omission in Shop Drawings.

F. Contractor shall not commence any work requiring Shop Drawing, Product Data or Sample submission until Engineer has approved submission. All such work shall be in accordance with approved Shop Drawings, Product Data and Samples.

G. Contractor shall keep on site of the Work, approved or conformed copy of Shop Drawings and shall at all time give Department access thereto.

H. By stamping and submitting Shop Drawings, Product Data and Samples, Contractor thereby represents that he or she has or will determine and verify all field measurements, field construction criteria, materials, catalog numbers, and similar data and that he or she has checked and coordinated each Shop Drawing, Product Data and Sample with requirements of the Work and of Construction Documents. Engineer shall return without examination, Shop Drawings, Product Data and Samples not so noted.

I. All Shop Drawings from any one Contractor should be numbered consecutively and on cover sheet shall bear name and location of project, name of Contractor, date of submittal and date of each correction or revision and associated Specification section and page number.

5. CUTTING AND PATCHING

A. Contractor shall be responsible for all cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

B. Contractor shall not damage or endanger portion of the Work or fully or partially completed construction of County or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. Contractor shall not cut or otherwise alter such construction by County or separate contractor except with written consent of County and of such separate contractor; such consent shall not be unreasonably withheld. Contractor shall not withhold unreasonably from County or separate contractor, Contractor's consent to cutting or otherwise altering the Work.

6. CLEANING UP

A. Contractor shall keep premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under Contract. Contractor shall remove from and about the Work waste materials, rubbish, Contractor's tools, construction equipment, machinery, and surplus materials at completion of the Work. Contractor shall maintain streets and sidewalks around the Work site in clean condition. Contractor shall remove all spillage and prevent tracking of spillage arising from performance of the Work, into, out of, and within the Work site. Contractor shall establish regular maintenance program of sweeping, vacuuming and / or hosing to minimize accumulation of dirt and dust upon such areas.

B. If Contractor fails to clean up as directed in Construction Documents, County may do so and shall charge Contractor cost thereof.

C. Contractor shall be responsible for broken windows and glass, and at completion of the Work shall replace such damaged or broken windows and glass. After replacing damaged or broken windows and glass, Contractor shall remove all labels, wash and polish both sides of all windows and glass.

D. In addition to general cleaning (sweeping, vacuuming and / or hosing, as is appropriate to work surface), Contractor shall perform following final cleaning for all trades at completion of the Work:
   1. Remove temporary protections;
   2. Remove marks, stains, fingerprints and other soil or dirt from painted, decorated and finished woodwork and wall surfaces;
   3. Remove spots, plaster, soil and paint from ceramic tile, marble and other finished materials, and wash or wipe clean;
   4. Clean fixtures, cabinet work and equipment, removing stains, paint, dirt and dust, and leave same in undamaged, new condition;
   5. Clean aluminum in accordance with recommendations of manufacturer; and
   6. Clean resilient floors thoroughly with well-rinsed mop containing only enough moisture to clean off any surface dirt or dust and buff dry by machine to bring surfaces to sheen.

7. USE OF SITE

A. Contractor shall provide County and Engineer access to the Work under all circumstances.

B. Contractor shall confine operations at site to areas and times permitted by County, law, ordinance, permits and Construction Documents and shall not unreasonably encumber site with materials or equipment. Contractor shall assure free, convenient, unencumbered, direct and safe access to all properties adjacent to the Work for County, its employees, invitees and guests.

8. MATERIALS AND WORKMANSHIP

A. Contractor shall perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, necessary to complete the Work required by this Contract, within time specified, in accordance with provisions of Construction Documents.

B. All equipment and materials incorporated in the Work covered by this Contract are to be new; use recycled and / or recovered materials to extent that such use is technically and economically feasible. Recovered materials are products recovered from solid waste in form identical to original form for use that is same as, or similar to original use. Recycled materials are products manufactured from solid waste.

C. If requested, Contractor shall furnish satisfactory evidence as to kind and quality of construction materials proposed or used. Contractor shall furnish to Engineer, for approval, manufacturer name and model, performance capacities and other pertinent information of machinery, mechanical, electrical or other types of equipment, which Contractor plans to install.

D. If not otherwise provided, materials and labor called for in this Contract shall be provided and performed in accordance with established practice and standards recognized by Architects, Engineers, Department, and construction industry.

E. Reference to "Standard" specifications of any association or manufacturer, or codes of County authorities, intends most recent printed edition or catalog in effect on date that corresponds with date of Construction Documents.

F. Whenever reference is made in Specifications that work shall be "performed", "applied", in accordance with "manufacturer's directions or instructions", Contractor to whom those instructions are directed shall furnish three (3) printed copies of such instructions to Engineer before execution of the Work.

9. CONTRACTOR'S TITLE TO MATERIALS

A. Contractor or any subcontractor shall not purchase materials or supplies for the Work subject to any chattel mortgage or under conditional sale contract or other agreement by which seller retains interest. Contractor warrants that all materials and supplies used in the Work are free from all liens, claims or encumbrances and Contractor has good title to them.

10. "OR EQUAL" CLAUSE

A. Whenever equipment or materials are identified on Drawings or in Specifications by reference to manufacturer's or vendor's name, trade name, catalog number, and other identifying information, it is intended to establish standards; and any equipment or material of other manufacturers and vendors which will perform adequately duties imposed by general design will be considered equally accepted provided equipment or material so proposed is, in

opinion of Engineer, of equal substance and function. Engineer and Department shall provide written approval before Contractor may purchase or install it.

B. Equipment or materials of manufacturers, other than those named, may be used only upon following conditions:
   1. That, in opinion of Engineer and Department, proposed material or equipment item is fully equal or superior (in design, materials, construction, workmanship, performance, finish, etc.) to named item. No compromise in quality level, however small, is acceptable.
   2. That, in substituting materials or equipment, Contractor assumes responsibility for any changes in system or for modifications required in adjacent or related work to accommodate such substitution despite Engineer's and Department's approval, and all costs growing out of approval of "or equal" items shall be responsibility of Contractor. No extra costs resulting from such approval shall become responsibility of Department, Engineer or any other separate Contractor.
   3. It shall be understood that use of materials or equipment other than those specified, or approved equal by Engineer and Department, shall constitute violation of Contract, and that Engineer and Department shall have right to require removal of such materials or equipment and their replacement with specified materials or equipment at Contractor's expense.
   4. Product and manufacturer named first in Specifications or on information shown on Drawings is basis of selection of manufactured items and equipment, particularly mechanical equipment. In using other than first named products or manufacturers, including those specified as additionally approved or acceptable, Contractor assumes responsibility for any changes in system and for modifications in any work required to accommodate them. Engineer's approval of such additionally acceptable products or manufacturers, either in Specifications or in Addendum, does not relieve Contractor from obligation to coordinate such optional products with other Contractors, whose work may be affected by them, and to pay all additional costs resulting from their inclusion into the Work. Contractor's liability shall include payment of Engineer's fees for any additional services made necessary by or directly connected to such product changes. No extra costs resulting from such changes shall become responsibility of Department, Engineer or any other separate Contractor.

C. No request for approval of "or equal" materials will be entertained except from Contractor. Identify any request for substitution as substitution on Contractor's letter of transmittal and give reasons for substitution. Department may in its sole discretion allow substitutions of materials.

11. PATENTS AND ROYALTIES

A. If Contractor uses any design, device or material covered by letters, patent or copyright, it is mutually agreed and understood, that, without exception, contract prices shall include all royalties or costs arising from use of such design, device or materials, in any way involved in the Work.

B. Contractor shall indemnify and save harmless County from any and all claims for infringement by reason of use of such patent or copyright in connection with the Work agreed to be performed under this Contract, and shall indemnify County for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during prosecution of the Work or after completion of the Work.

12. SURVEYS, PERMITS, REGULATIONS AND TAXES

A. Department will furnish to Contractor all site, topography and property surveys necessary for execution of the Work.

B. Contractor shall procure all permits, licenses and approvals necessary for execution of this Contract.

C. Contractor shall give all notices and comply with all State of Wisconsin, Federal and local laws, codes, rules and regulations relating to performance of the Work, protection of adjacent property, and maintenance of passageways, guard fences or other protective facilities.

D. Contractor shall pay all Sales, Consumer, Use and other similar taxes required by law government facilities to be exempt from sales & use tax. Vendors & materials suppliers may not charge Bidders sales & use tax on these purchases. This does not include highways, streets or roads. Any other Sales, Consumer, Use & other similar taxes or fees required by law shall be included in Bid.

E. Contractor shall promptly notify Engineer of any variances of Drawings or Specifications with that of any State of Wisconsin, federal or local law, code, rule or regulation. Upon such notification, Engineer will require correction of variance to comply with applicable law, code, rule or regulation at no additional cost to Contractor.

F. Work under this Contract shall comply with all applicable State of Wisconsin, Federal and local laws, codes and regulations.

G. Contractor shall pay charges for water, sewer and other utility connections made by municipalities where required by Specifications.

13. CONTRACTOR'S OBLIGATIONS AND SUPERINTENDENCE

A. Contractor shall provide and pay for all materials, labor, tools, equipment, transportation and superintendence necessary to execute, complete and deliver the Work within specified time. Contractor agrees to secure at their own expense all personnel necessary to carry out the Work. Such personnel shall not be deemed County employees nor shall they have or be deemed to have any direct contractual relationship with County.

B. Performance of any work necessary after regular working hours, on Sundays or Legal Holidays shall be without additional expense to County. Performance of any work at site at other than normal working hours must be coordinated with Public Works Project Engineer.

C. Contractor shall furnish, erect, maintain and remove such temporary works as may be required.

D. Contractor shall observe, comply with, and be subject to all terms, conditions, requirements and limitations of Construction Documents.

E. At the Work site, Contractor shall give personal superintendence to the Work or shall employ construction superintendent or foreman, experienced in character of work covered by Contract, who shall have full authority to act for Contractor. Understand that such superintendent or foreman shall be acceptable to Engineer and Department.

F. Remove from project or take other corrective action upon notice from Engineer or Department for Contractor's employees whose work is considered by Engineer or Department to be unsatisfactory, careless, incompetent, unskilled or otherwise objectionable.

G. Contractor and subcontractors shall be required to conform to Labor Laws of State of Wisconsin and various acts amendatory and supplementary thereto and to other laws, ordinances and legal requirements applicable to the Work.

H. Presence and observation of the Work by Engineer or Public Works Project Engineer shall not relieve Contractor of any obligations.

14. WEATHER CONDITIONS

A. In event of temporary suspension of work, or during inclement weather, or whenever Engineer shall direct, Contractor shall, and shall cause subcontractors to protect carefully all work and materials against damage or injury from weather. If, in opinion of Engineer or Department, any work or materials that have been damaged or injured due to failure on part of Contractor or any subcontractors so to protect the Work, such materials shall be removed and replaced at expense of Contractor.

15. PROTECTION OF WORK AND PROPERTY

A. Contractor shall at all times safely guard County's property from injury or loss in connection with this Contract. Contractor shall at all times safely guard and protect the Work, and adjacent property, from damage. Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in Contract, or by County, or County's duly authorized representative.

B. Contractor may act diligently, without previous instructions from Engineer and / or Department, in emergency that threatens loss or injury of property, or safety of life. Contractor shall notify Engineer and / or Department immediately thereafter. Promptly submit any claim for compensation by Contractor due to such extra work to Engineer and / or Department for approval as provided for in Article 18 herein.

16. INSPECTION AND TESTING OF MATERIALS

A. Authorized representatives and agents of County government shall have access at all times to the Work wherever it is in preparation or progress and Contractor shall provide facilities for such access and for inspection.

B. Should it be considered necessary or advisable at any time before final acceptance of the Work to make examination of work already completed, by removing or tearing out same, Contractor shall upon request, promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any aspect, due to fault of Contractor or subcontractors thereof, Contractor shall assume all expenses of such examination and of satisfactory reconstruction. Contractor will be reimbursed for such examination and replacement in accordance with Article 18 - A.3., of these General Conditions of Contract if such work is found to meet requirements of Contract.

C. If Specifications, Engineer's, or Public Works Project Engineer's instructions require any work to be specially tested or approved, Contractor shall give Engineer and Public Works Project Engineer timely notice of its readiness for testing or inspection. Test all materials and

equipment requiring testing in accordance with accepted or specified standards, as applicable. Engineer shall recommend laboratory or inspection agency and Department will select and pay for all initial laboratory inspection services. Should retesting be required, due to failure of initial testing, cost of such retesting shall be borne by Contractor.

D. Cost of any testing performed by manufacturers or Contractor for substantiating acceptability of proposed substitution of materials and equipment, or necessary conformance testing in conjunction with manufacturing processes or factory assemblage, shall be borne by Contractor or manufacturer responsible.

17. REPORTS, RECORDS AND DATA

A. Contractor shall submit to Engineer and Public Works Project Engineer such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, invoices, records and other data as either may request concerning work performed or to be performed under this Contract.

18. CHANGES IN THE WORK

A. Make no changes, except in cases of emergency, in the Work covered by approved Construction Documents without having prior written approval of Department. Charges or credits for the Work covered by approved change shall be determined by one of these methods:
   1. Unit bid prices previously approved.
   2. Agreed lump sum based on actual cost of:
      a) Labor, including foremen, and all fringe benefits that are associated with their wages.
      b) Materials entering permanently into the Work.
      c) Ownership or rental cost of construction tools and equipment during time of use on extra work.
      d) Power and consumable supplies for operation of power equipment.
      e) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance.
      f) Social Security and old age and unemployment contributions.
      g) Add to cost under (2), fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of actual cost of work performed with their own labor force. Fee shall be compensation to cover cost of supervision, overhead, bond, profit and any other general expense.
      h) On that portion of the Work under (2) done under subcontract, Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit and any other general expense.
      i) Department may require correct amount of costs with supporting vouchers; Contractor shall keep and present in such form as directed.
   3. Cost-plus work, with not-to-exceed dollar limit, based on actual cost of:
      a) Labor, including foremen, and all fringe benefits that are associated with their wages.
      b) Materials entering permanently into the Work.
      c) Ownership or rental cost of construction tools and equipment during time of use on extra work. Rental cost cannot exceed fifty percent (50%) replacement value of rented equipment.
      d) Power and consumable supplies for operation of power equipment.
      e) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance.
      f) Social Security and old age and unemployment contributions.

g) To cost under (3), there shall be added fixed fee to be agreed upon but not to exceed fifteen percent (15%) of actual cost of work performed with their own labor force. Fee shall be compensation to cover cost of supervision, overhead, bond, profit, and any other general expense.
h) On that portion of the Work under (3) done under subcontract, Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit, and any other general expense.
i) Contractor shall keep and present, in such form as directed, correct amount of cost together with such supporting vouchers as may be required by Department.

B. If Contractor claims that by any instructions given by Engineer, Department, by drawings or otherwise, regarding performance of the Work or furnishing of material under Contract, involves extra cost, Contractor shall give Department written notice of cost thereof within two (2) weeks after receipt of such instructions and in any event before proceeding to execute work, unless delay in executing work would endanger life or property.

C. No claim for extra work or cost shall be allowed unless it was done in pursuance of written Change Order from Engineer and approved by Department, as previously mentioned, and claim presented with payment request submitted after changed or extra work is completed.

D. Negotiation of cost for change in the Work shall not be cause for Contractor to delay prosecution of the Work if Contractor has been authorized in writing by Public Works Project Engineer to proceed.

19. EXTRAS

A. Without invalidating Contract, Department may order extra work or make changes by altering, adding to or deducting from the Work, contract sum being adjusted in accordance with Article 18 herein.

20. TIME FOR COMPLETION

A. Contractor agrees that the Work shall be prosecuted regularly and diligently and complete the Work as stated in Construction Documents.

21. CORRECTION OF WORK

A. All work, all materials whether incorporated in the Work or not, and all processes of manufacture shall at all times and places be subject to inspection of Engineer and Public Works Project Engineer who shall be judge of quality and suitability of the Work, materials, and processes of manufacture for purposes for which they are used. Should they fail to meet Engineer's and Public Works Project Engineer's approval they shall be reconstructed, made good, replaced or corrected, by Contractor at Contractor's expense. Immediately remove all rejected material from site.

B. If Contractor defaults or neglects to carry out the Work in accordance with Construction Documents or fails to perform any provision of Contract, Department may, after ten (10) days' written notice to Contractor and without prejudice to any other remedy County may have, make good such deficiencies. In such case, appropriate Change Order shall be issued deducting from Contractor's payments then or thereafter, cost of correcting such deficiencies, including cost of Engineer's additional services made necessary by such default, neglect or

failure.

22. RIGHT OF DEPARTMENT TO TERMINATE CONTRACT

A. In event that any provisions of this Contract are violated by Contractor or by any subcontractors, County may serve written notice upon Contractor and Surety of its intention to terminate Contract, such notice to contain reasons for such intention to terminate Contract, and unless within ten (10) days after serving of such notice upon Contractor, such violation or delay shall cease and satisfactory arrangement or correction be made, Contract shall, upon expiration of said ten (10) days, cease and terminate.

B. In event of any such termination, County shall immediately serve notice thereof upon Surety and Contractor, and Surety shall have right to take over and perform Contract subject to County's approval; provided, however, that if Surety does not commence performance thereof within ten (10) days from date of mailing to such Surety of notice of termination, County may take over the Work and prosecute same to completion by contract, or by force account, at expense of Contractor; Contractor and Surety shall be liable to County for any excess cost occasioned County thereby, and in such event County may take possession of and utilize in completing the Work, such materials and equipment as may be on the Work site and therefore necessary.

23. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

A. Contractor shall be responsible for Construction Schedule and coordination. Immediately after execution and delivery of Contract and before making first payment, Contractor shall notify all subcontractors to furnish all required information to develop Construction Schedule. Contractor and all subcontractors associated with the Work shall furnish following information from each Division of Specifications:
   1. List of construction activities;
   2. Start, finish and time required for completion of each activity;
   3. Sequential relationships between activities;
   4. Identify all long lead-time items, key events, meetings or activities such as required submittals, fabrication and delivery, procurement of materials, installation and testing;
   5. Weekly definition of extent of work and areas of activity for each trade or Subcontract; and
   6. Other information as determined by Public Works Project Engineer.

B. In addition to above requested items, Contractor shall request delivery dates for all County-furnished equipment, materials or labor. This shall include any work handled by Department under separate contracts such as asbestos abatement, air and water balancing, etc. Indicate on Construction Schedule these associated delivery and installation dates.

C. Progress Reporting:
   1. Contractor shall update and publish Construction Schedule on weekly basis. Revisions to Schedule shall be by Contractor and made in same detail as original Schedule and accompanied by explanation of reasons for revision; and shall be subject to approval by Department.
   2. Failure of Contractor to keep Schedule in updated format shall result in County hiring firm specializing in construction schedule development and deducting those costs associated with updating process from payments due Contractor.
   3. Contractor shall submit actual percentage of each activity completed, estimated future progress, and anticipated completion time.

D. Responsibility for timely completion requires:
   1. Contractor and subcontractors understand that performance of each is interdependent upon performance of others.
   2. Whenever it becomes apparent from current schedule, that phasing or progress completion dates will not be met, Contractor must take some or all following actions at no additional cost to County:
      a) Increase construction manpower in such quantities and crafts as will eliminate backlog of work.
      b) Increase number of working hours per shift, shifts per working day, working days per week, amount of construction equipment, or any combination of foregoing to eliminate backlog of work.
      c) Reschedule work (yet remain in conformance with Drawings and Specifications).
   3. Prior to proceeding with any of above actions, Contractor shall notify Public Works Project Engineer.

E. Maintain current Construction Schedule at all times. Revise Construction Schedule in same detail as original and accompany with explanation of reasons for revision. Schedule shall be subject to approval by Engineer and Public Works Project Engineer.

24. PAYMENTS TO CONTRACTOR

A. Contractor shall provide:
   1. Detailed estimate giving complete breakdown of contract price by Specification Division; and
   2. Periodic itemized estimates of work done for purpose of making partial payments thereon.

   Submit these estimates for approval first to Engineer, then to Public Works Project Engineer. Costs employed in making up any of these schedules are for determining basis of partial payments and not considered as fixing basis for additions to or deductions from Contract price.

B. County will make partial payments to Contractor for value, proportionate to amount of Contract, of all labor and material incorporated in the Work during preceding calendar month upon receipt of Application and Certificate for Payment form from Engineer and approval of Department.

C. Contractor shall submit for approval first to Engineer, and then to Public Works Project Engineer all Application and Certificate for Payment forms. If requested, Application and Certificate for Payment shall be supported by such additional evidence as may be required, showing Contractor's right to payment claimed.

D. Application and Certificate for Payment for preparatory work and materials delivered and suitably stored at site to be incorporated into the Work at some future period, will be given due consideration. Requesting payment for materials stored off site, may be rejected, however, if deemed essential for reasons of job progress, protection, or other sufficient cause, requests will be considered, conditional upon submission by Contractor of bills of sale, photographs and such other procedures as will adequately protect County's interest such as storage in bonded warehouse with adequate coverage. If there is any error in payment, Contractor is obligated to notify Department immediately, but no longer than ten (10) days from receipt of payment.

E. Payments by County will be due within forty-five (45) days after receipt by Department of Application and Certificate for Payment.

F. County will retain five percent (5%) of each Application and Certificate for Payment until final completion and acceptance of all the Work covered by Contract. However, anytime after fifty percent (50%) of the Work has been furnished and installed at site, County will make remaining payments in full if Engineer and Public Works Project Engineer find that progress of the Work corresponds with Construction Schedule. If Engineer and Public Works Project Engineer find that progress of the Work does not correspond with Construction Schedule, County may retain up to ten percent (10%) of each Application and Certificate for Payment for the Work completed.

G. All material and work covered by partial payments made shall become sole property of County, but this provision shall not be construed as relieving Contractor from sole responsibility for care and protection of materials and work upon which payments have been made, or restoration of any damaged work, or as waiver of right of County to require fulfillment of all of terms of Contract.

H. County will make final payment within sixty (60) days after final completion of the Work, and will constitute acceptance thereof. Submit Equal Benefits Compliance Payment Certification with final pay request. Payment may be denied if Certification is not included.

I. County may make payment in full, including retained percentages and less authorized deductions, upon completion and acceptance of each Division where price is stated separately in Contract.

J. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit(s) as required to prove that all debts and claims against this Work are paid in full or otherwise satisfied, and give final evidence of release of all liens against the Work and County. If Wisconsin Prevailing Wage Rate Determination is required for this Work, use “Prime Contractor Affidavit of Compliance With Prevailing Wage Rate Determination” and “Agent or Subcontractor Affidavit of Compliance With Prevailing Wage Rate Determination” (if applicable). Forms of such affidavits are included in Specification Section 01310 of these Contract Documents.

25. WITHHOLDING OF PAYMENTS

A. County, after having served written notice on said Contractor, may either pay directly any unpaid bills of which Department has written notice, or withhold from Contractor’s unpaid compensation sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged; whereupon, payment to Contractor shall be resumed in accordance with terms of this Contract, but in no event shall these provisions be construed to impose any obligations upon County to either Contractor or Contractor’s Surety.

B. In paying any unpaid bills of Contractor, County shall be deemed agent of Contractor, and any payment so made by County, shall be considered as payment made under Contract by County to Contractor and County shall not be liable to Contractor for any such payment made in good faith.

C. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from all claims growing out of lawful

demands of subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in performance of this Contract.

D. At Department's request, Contractor shall furnish satisfactory evidence that all obligations of nature designated above have been paid, discharged or waived.

26. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

A. Making of final payment shall constitute waiver of all claims by County except those arising from:
   1. Unsettled lien;
   2. Faulty or defective work appearing after substantial completion;
   3. Failure of the Work to comply with requirements of Construction Documents; or
   4. Terms of any special guarantees required by Construction Documents.

B. Acceptance of final payment shall constitute waiver of all claims by Contractor.

27. PAYMENTS BY CONTRACTOR

A. Contractor shall pay following not later than fifth (5^{th}) day following each payment received from County:
   1. All transportation and utility services rendered;
   2. All materials, tools, and other expendable equipment that have been delivered at site of the Work to extent of ninety percent (90%) of cost thereof, and balance of cost thereof when said balance is paid to Contractor; and
   3. Each subcontractor, respective amount allowed Contractor because of work performed by subcontractor to extent of subcontractor's interest therein.

28. CONTRACT SECURITY

A. Contractor shall furnish Performance and Payment Bonds in amount at least equal to one hundred percent (100%) of Contract price as security for faithful performance of this Contract and payment of all persons performing labor on project under this Contract and furnishing materials in connection with this Contract.

B. Sample Performance and Payment Bonds that Contractor will be required to execute is bound into these Construction Documents. Before construction Contract is consummated, completed Performance and Payment Bonds must be approved by Department.

29. ASSIGNMENTS

A. Contractor shall not assign whole or any part of this Contract or any moneys due or to become due hereunder without written consent of Department. In case Contractor assigns all or any part of any moneys due or to become due under this Contract, instrument of assignment shall contain clause substantially to effect that it is agreed that right of assignee in and to any moneys due or to become due to Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for performance of the Work called for in this Contract.

30. MUTUAL RESPONSIBILITY OF CONTRACTORS

A. If, through acts of neglect on part of Contractor or any subcontractor shall suffer loss or damage on the Work, Contractor agrees to settle with such subcontractor by agreement or arbitration if such other subcontractor will so settle. If such subcontractor shall assert any claim against County on account of any damage alleged to have been sustained, Department shall notify Contractor, who shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives against any such claim.

31. SEPARATE CONTRACTS

A. Department may award other contracts for the Work and all Contractors shall fully cooperate with each other and carefully adjust their work to that provided under other contracts as may be directed by Department. No Contractor shall commit or permit any act that will interfere with performance of the Work by any other Contractor.

B. Contractor shall coordinate the Work with those of other Contractors. Cooperation will be required in arrangement for storage of materials and in detailed execution of the Work. Contractor, including subcontractors, shall keep informed of progress and detail work of others and shall notify Engineer or Department immediately of lack of progress or defective workmanship on part of others. Failure of Contractor to keep informed of the Work progressing on site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by Contractor of status of the Work as being satisfactory for proper coordination with Contractor's own work.

32. SUBCONTRACTS

A. Contractor may use services of specialty subcontractors on those parts of the Work that, under normal contracting practices, are performed by specialty subcontractors.

B. Contractor shall not award any work to any subcontractor without prior approval of Department. Qualifications of subcontractors shall be same as qualifications of Contractor. Request for subcontractor approval shall be submitted to Department fifteen (15) days before start of subcontractor's work. If subcontractors are changed or added, Contractor shall notify Department in writing.

C. Contractor shall be as fully responsible to County for acts and omissions of subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for acts and omissions of persons directly employed by Contractor.

D. Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to Contractor by terms of General Conditions of Contract and other Construction Documents insofar as applicable to work of subcontractors and to give Contractor same power as regards terminating any subcontract that Department may exercise over Contractor under any provision of Construction Documents.

E. Nothing contained in this Contract shall create any contractual relation between any subcontractor and County.

F. Contractor shall insert in all subcontracts, Articles 26, 33, 43 and 45, respectively entitled: "Withholding of Payments", "Subcontracts", "Affirmative Action Provision and Minority / Women / Disadvantaged Business Enterprises", and "Minimum Wages", and shall further require all subcontractors to incorporate physically these same Articles in all subcontracts.

33. PUBLIC WORKS PROJECT ENGINEER'S AUTHORITY

A. Public Works Project Engineer shall:
   1. Administer and ensure compliance with Construction Documents;
   2. Provide responsible on-site observations of construction and have authority to request work and to stop work whenever necessary to insure proper enforcement of Construction Documents;
   3. Convene and chair project meetings and foreman's coordination meetings when necessary to coordinate resolution of conflicts between Contractors, Architects, Engineers, Consultants, and Department; and
   4. Check and inspect material, equipment and installation procedures of all trades for proper workmanship and for compliance with Drawings, Specifications and Shop Drawings, permit no material on project site that is not satisfactory and reject work not in compliance with Construction Documents.

34. ENGINEER'S AUTHORITY

A. Engineer is retained by, and is responsible to Department acting for County.

B. Engineer shall determine amount, quality, acceptability, and fitness of several kinds of work and materials that are provided under this Contract and shall decide all questions that may arise in relation to said work and construction thereof.

C. Engineer shall decide meaning and intent of any portion of Specifications and of any Drawings where they may be found obscure or be in dispute.

D. Engineer shall provide responsible observation of construction. Engineer has authority to stop the Work whenever such stoppage may be necessary to insure proper execution of Construction Documents.

E. Engineer shall be interpreter of conditions of Construction Documents and judge of its performance.

F. Within reasonable time, Engineer shall make decisions on all matters relating to progress of the Work or interpretation of Construction Documents.

G. Engineer's decisions are subject to review by Public Works Project Engineer.

35. GENERAL GUARANTEE

A. Neither final certificate of payment nor any provision in Construction Documents nor partial or entire occupancy of premises by County shall constitute acceptance of work not done in accordance with Construction Documents or relieve Contractor of liability in respect to any expressed warranties or responsibility for faulty materials or workmanship.
   1. In no event shall making of any payment required by Contract constitute or be construed as waiver by County of any breach of covenants of Contract or waiver of any default of Contractor and making of any such payment by County while any such default or breach shall exist shall in no way impair or prejudice right of County with respect to recovery of damages or other remedy as result of such breach or default.

B. Contractor shall remedy and make good all defective workmanship and materials and pay for any damage to other work resulting there from, which appear within period of one (1) year from date of substantial completion, providing such defects are not clearly due to abuse or misuse by County. Department will give notice of observed defects with reasonable promptness.

C. Guarantee on work executed after certified date of substantial completion will begin on date when such work is inspected and approved by Engineer and Public Works Project Engineer.

D. Where guarantees or warrantees are required in sections of Specifications for periods in excess of one (1) year, such longer terms shall apply; however, Contractor's Performance and Payment Bonds shall not apply to any guarantee or warranty period in excess of one (1) year.

36. CONFLICTING CONDITIONS

A. Any provision in any of Construction Documents which may be in conflict or inconsistent with any Articles in these General Conditions of Contract or Supplementary Conditions shall be void to extent of such conflict or inconsistency.

B. In case of ambiguity or conflict between Drawings and Specifications, Specifications shall govern.

C. Printed dimensions shall be followed in preference to measurements by scale. Large-scale drawings take precedence over small-scale drawings. Dimensions on Drawings and details are subject to field measurements of adjacent work.

37. NOTICE AND SERVICE THEREOF

A. Any notice to Contractor from Department relative to any part of this Contract shall be in writing and considered delivered and service thereof completed, when said notice is posted, by certified or registered mail, to Contractor at Contractor's last given address, or delivered in person to said Contractor, or Contractor's authorized representative on the Work.

38. PROTECTION OF LIVES AND HEALTH

A. In order to protect lives and health of Contractor's employees under Contract, Contractor shall comply with all pertinent provisions of Wisconsin Administrative Code, Rules of Department of Commerce, relating to Safety and Health.

B. Contractor alone shall be responsible for safety, efficiency and adequacy of Contractor's tools, equipment and methods, and for any damage that may result from their failure or their improper construction, maintenance or operation.

39. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES

A. Affirmative Action Provisions.
   1. During term of their Contract, Contractor agrees not to discriminate on basis of race, religion, color, sex, handicap, age, sexual preference, marital status, physical appearance, or national origin against any person, whether recipient of services (actual or potential), employee, or applicant for employment. Such equal opportunity shall include but not be limited to following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). Contractor agrees to post in conspicuous places, these affirmative action standards so as to be visible to all employees, service recipients and applicants for this paragraph. Listing of prohibited bases for discrimination shall no be construed to amend in any fashion state or federal law setting forth additional bases and exceptions shall be permitted only to extent allowable in state or federal law.
   2. Contractor is subject to this Article only if Contractor has ten (10) or more employees and receives $10,000.00 or more in annual aggregate contracts with County. Contractor shall file and Affirmative Action Plan with Dane County Contract Compliance Officer in accord with Chapter 19 of Dane County Code of Ordinances. Such plan must be filed within fifteen (15) days of effective date of this Contract and failure to do so by said date shall constitute ground for immediate termination of Contract by County. Contractor shall also, during term of this Contract, provide copies of all announcements of employment opportunities to County's Contract Compliance Office, and shall report annually number of persons, by race, sex and handicap status, who apply for employment and, similarly classified, number hired and number rejected.
   3. Contact Dane County Contract Compliance Officer at Dane County Contract Compliance Office, 210 Martin Luther King, Jr. Blvd., Room 421, Madison, WI 53703, 608/266-4114.
   4. In all solicitations for employment placed on Contractor's behalf during term of this Contract, Contractor shall include statement to effect Contractor is "Equal Opportunity Employer". Contractor agrees to furnish all information and reports required by County's Contract Compliance Officer as same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and provision of this Contract.

B. Minority / Women / Disadvantaged / Emerging Small Business Enterprises.
   1. Chapter 19.508 of Dane County Code of Ordinances is official policy of Dane County regarding utilization of, to fullest extent of, Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs) Disadvantage Business Enterprises (DBEs) and Emerging Small Business Enterprises (ESBEs).
   2. Contractor may utilize MBEs / WBEs / DBEs / ESBEs as subcontractors or suppliers. List of subcontractors will be required of low bidder as stated in this Contract. List shall indicate which are MBEs / WBEs / DBEs / ESBEs and percentage of subcontract awarded, shown as percentage of total dollar amount of bid.

40. COMPLIANCE WITH FAIR LABOR STANDARDS

A. During term of this Contract, Contractor shall report to County Contract Compliance Officer, within ten (10) days, any allegations to, or findings by National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that Contractor has violated statute or regulation regarding labor standards or relations. If investigation by Contract Compliance Officer results in final determination that matter adversely affects Contractor's responsibilities under this Contract, and which recommends termination, suspension or cancellation of this Contract, County may take such action.

B. Contractor may appeal any adverse finding by Contract Compliance Officer as set forth in Dane County Ordinance 25.015(11)(c) through (e).

C. Contractor shall post this statement in prominent place visible to employees: "As condition of receiving and maintaining contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation or union organizing."

41. DOMESTIC PARTNERSHIP BENEFITS

A. Contractor agrees to provide same economic benefits to all of its employees with domestic partners as it does to employees with spouses, or cash equivalent if such benefit cannot reasonably be provided. Contractor agrees to make available for County inspection Contractor's payroll records relating to employees providing services on or under this Contract or subcontract. If any payroll records of Contractor contain any false, misleading or fraudulent information, or if Contractor fails to comply with provisions of Chapter 25.016, Dane County Ordinances, contract compliance officer may withhold payments on Contract; terminate, cancel or suspend Contract in whole or in part; or, after due process hearing, deny Contractor right to participate in bidding on future County contracts for period of one year after first violation is found and for period of three years after second or subsequent violation is found.

42. USE AND OCCUPANCY PRIOR TO ACCEPTANCE

A. Contractor agrees to use and occupancy of portion or unit of the Work before formal acceptance by Department, provided Department:
   1. Secures written consent of Contractor; except when in opinion of Public Works Project Engineer, Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other Contract requirements.
   2. Secures endorsement from insurance carrier and consent of Surety permitting occupancy of building or use of the Work during remaining period of construction, or, secures consent of Surety.
   3. Assumes all costs and maintenance of heat, electricity and water.
   4. Accepts all work completed within that portion or unit of the Work to be occupied, at time of occupancy.

43. MINIMUM WAGES

A. Contractor shall post, at appropriate conspicuous point on site of project, schedule showing all determined minimum wage rates for various classes of laborers and mechanics to be engaged in the Work under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by laborers and mechanics so engaged.

B. Specification Section 01310 in Construction Documents lists wage determinations required by State Law.

C. If, after award of Contract, it becomes necessary to employ any person in trade or occupation not classified in wage determinations, such person shall be paid at not less than such rate as shall be determined by Wisconsin Department of Workforce Development. Such approved minimum rate shall be retroactive to time of initial employment of such person in such trade or occupation. Contractor shall notify Department of Contractor's intention to employ persons in trades or occupations not so classified in sufficient time for Department to obtain approved rates for such trades or occupations.

D. Specified wage rates are minimum rates only, and Department will not consider any claims for additional compensation made by Contractor because of payment by Contractor of any wage rate in excess of applicable rate contained in this Contract. Contractor shall adjust any disputes in regard to payment of wages in excess of those specified in this Contract.

E. Submit required affidavit(s) to Department of Public Works, Highway & Transportation, as requested and with final application for payment for work under said contract. Affidavit(s) shall clearly indicate name, trade or occupation, and paid wages of every laborer, workman or mechanic employed by Contractor and all subcontractors during billing period including accurate record of number of hours worked by each employee and actual wages paid as stipulated in Wisconsin Statue 66.0903. If Wisconsin Prevailing Wage Rate Determination is required for this Work, use "Prime Contractor Affidavit of Compliance With Prevailing Wage Rate Determination" and "Agent or Subcontractor Affidavit of Compliance With Prevailing Wage Rate Determination" (if applicable). Forms of such affidavits are included in Specification Section 01310 of these Contract Documents.

44. CLAIMS

A. No claim may be made until Department's Associate Public Works Director has reviewed Engineer's decision as provided for in Article 35 of General Conditions of Contract. If any claim remains unresolved after such review by Department's Associate Public Works Director, claim may be filed under Wisconsin Statute 893.80. Work shall progress during period of any dispute or claim. Unless specifically agreed between parties, venue will be in Dane County, Wisconsin.

45. ANTITRUST AGREEMENT

A. Contractor and County recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by County. Therefore, Contractor hereby assigns to County any and all claims for such overcharges as to goods and materials purchased in connection with this Contract, except as to overcharges which result from antitrust violations commencing after price is established under this Contract and any change order thereto.

46. INSURANCE

A. Contractor Carried Insurance:
   1. Contractor shall not commence work under this Contract until Contractor has obtained all insurance required under this Article and has provided evidence of such insurance to Risk Manager, 425 City-County Building, 210 Martin Luther King Jr. Blvd., Madison, WI 53703. Contractor shall not allow any subcontractor to commence work until insurance

required of subcontractor has been so obtained and approved. Company providing insurance must be licensed to do business in Wisconsin.

2. Worker's Compensation Insurance:
   a) Contractor shall procure and shall maintain during life of this Contract, Worker's Compensation Insurance as required by statute for all of Contractor's employees engaged in work at site of project under this Contract and, in case of any such work sublet, Contractor shall require subcontractor similarly to provide Worker's Compensation Insurance for all of latter's employees to be engaged in such work unless such employees are covered by protection afforded by Contractor's Worker's Compensation Insurance.
   b) If any claim of employees engaged in hazardous work on project under this Contract is not protected under Worker's Compensation Statute, Contractor shall provide and shall cause each subcontractor to provide adequate Employer's Liability Insurance for protection of such of Contractor's employees as are not otherwise protected.
3. Contractor's Public Liability and Property Damage Insurance:
   a) Contractor shall procure and maintain during life of this Contract, Contractor's Public Liability Insurance and Contractor's Property Damage Insurance in amount not less than $1,000,000 bodily injury, including accidental death, to any one person, and subject to same limit for each person, in amount not less than $1,000,000 on account of one accident, and Contractor's Property Damage Insurance in amount not less then $1,000,000 or combined single limit of at least $1,000,000 with excess coverage over and above general liability in amount not less than $5,000,000. Contractor shall add "Dane County" as additional insured for each project.
   b) Contractor's Public Liability and Property Damage Insurance shall include Products, Completed Operation, and Contractual Liability under Insurance Contract. "Contractor shall in all instances save, defend, indemnify and hold harmless County, Designer, and Engineer against all claims, demands, liabilities, damages or any other costs which may accrue in prosecution of the Work and that Contractor will save, defend, indemnify and hold harmless County and Engineer from all damages caused by or as result of Contractor's operations" and each shall be listed as additional insured on Contractor's and sub-contractors' insurance policies.
   c) Obligations of Contractor under Article 48.A.2)b) shall not extend to liability of Engineer, agents or employees thereof, arising out of:
      1) Preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications; or
      2) giving of or failure to give directions or instructions by Engineer, agents or employees thereof provided such giving or failure to give is primary cause of injury or damage.
   d) Contractor shall procure and shall maintain during life of this Contract, Comprehensive Automobile Liability Insurance covering owned, non-owned and hired automobiles for limits of not less than $1,000,000 each accident single limit, bodily injury and property damage combined with excess coverage over and above general liability in amount not less than $5,000,000.
   e) Contractor shall either:
      1) Require each subcontractor to procure and to maintain during life of subcontract, subcontractor's Public Liability Property Damage Insurance, and Comprehensive Automobile Liability Insurance of type and in same amount specified in preceding paragraphs; or
      2) Insure activities of subcontractors in Contractor's own policy.
4. Scope of Insurance and Special Hazards: Insurance required under Article 48.A.2 hereof shall provide adequate protection for Contractor and subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operation be by insured or by anyone directly or indirectly employed by insured and also

against any of special hazards which may be encountered in performance of this Contract as enumerated in Supplementary Conditions.

5. Proof of Carriage of Insurance: Contractor shall furnish Risk Manager with certificates showing type, amount, class of operations covered, effective dates, dates of expiration of policies and "Dane County" listed as additional insured. Such certificates shall also contain (substantially) following statement: "Insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by Risk Manager."

B. Indemnification / Hold Harmless:

1. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives and Designer from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from performance of the Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, and is caused in whole or in part by any act or omission of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by part indemnified hereunder.
2. In any and all claims against Dane County, its boards, commissions, agencies, officers, employees and representatives or by any employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, indemnification obligation under this Contract shall not be limited in any way by any limitation on amount or type of damages, compensation or benefits payable by or for Contractor or any subcontractor under worker's compensation acts, disability benefits or other employee benefit acts.
3. Obligations of Contractor under this Contract shall not extend to liability of Engineer, its agents or employees arising out of:
   a) Preparation or approval of maps, drawings, opinion, reports, surveys, change orders, designs or specifications; or
   b) Giving of or failure to give directions or instruction by Engineer, its agents or employees provided such giving or failure to give is primary cause of injury or damage.
4. Dane County shall not be liable to Contractor for damages or delays resulting from work by third parties or by injunctions or other restraining orders obtained by third parties.

47. WISCONSIN LAW CONTROLLING

A. It is expressly understood and agreed to by parties hereto that in event of any disagreement or controversy between parties, Wisconsin law shall be controlling.

SECTION 00800
SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the General Conditions of the Contract and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

SC-1 REPORTING AND RESOLVING DISCREPANCIES

If CONTRACTOR proceeds with work that CONTRACTOR had actual knowledge or should have known that a conflict, error, or discrepancy in the Contract Documents exists, correction of work constructed without such notification to OWNER/ENGINEER shall be at CONTRACTOR's expense.

SC-2 SUBSURFACE AND PHYSICAL CONDITIONS

In the preparation of the drawings and specification, DESIGNER has relied upon:

A. The following reports of explorations and tests of subsurface conditions at Dane County No. 2 (Rodefeld) Landfill:

1. Dane County. 2015. Eastern Expansion Phase 10 – Cell 1 Liner Construction Documentation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. November 2015.
2. Request for Bids No. 315034. 2015. Eastern Expansion Phase 10 – Cell 1 Liner Construction, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. June 2015.
3. Dane County. 2014. Eastern Expansion Phase 9 – Cell 1 Liner Construction Documentation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. December 2014.
4. TRC Environmental Corporation. 2014. Addendum No. 1 Eastern Expansion Plan of Operation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. March 2014.
5. TRC Environmental Corporation. 2014. Eastern Expansion Plan of Operation Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. March 2014.
6. Request for Bids No. 314005. 2014. Eastern Expansion Phase 9 – Cell 1 Construction, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. February 2014.
7. TRC Environmental Corporation. 2013a. Eastern Expansion Feasibility Report, Dane County No. 2 (Rodefeld) Landfill License No. 3018, Dane County, Wisconsin. May 24, 2013. The report contains soil boring logs, grain size analysis, ground water levels, and soil descriptions.
8. SEC Donohue Environment and Infrastructure. 1992. Feasibility Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. October 1992.
9. Rust Environment and Infrastructure. 1993. Plan of Operation Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. November 1993. The report contains soil boring logs, grain size analysis, ground water levels, and soil descriptions.
10. RMT, Inc. 1982. Feasibility Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. September 1982. The report contains soil boring logs, grain size analysis, ground water levels, and soil descriptions.
11. RMT, Inc. 1984. Plan of Operation Report, Dane County Landfill Expansion Rodefeld Site No. 2, License No. 3018, Dane County, Wisconsin. February 1984.

Copies of these reports are available for review at the address of the OWNER/ENGINEER. Contact information for scheduling an appointment for reviewing the information is contained in the Instructions to Bidders.

OWNER/ENGINEER OR DESIGNER accepts no responsibility for accuracy of the soil data or water level information. CONTRACTOR shall assure itself by personal examination as to subsurface conditions. Borings were used by DESIGNER for design purposed only.

SC-3 OTHER WORK

Select Clay Fill placed in the stockpile and/or hauled from the clay borrow site will be used by CONTRACTOR to construct the Select Clay Fill liner. Clay soil laboratory test results from clay samples collected at the Borrow site where the Select Clay Fill will be obtained is included in Appendix A. CONTRACTOR will be responsible for finish grading, seeding, fertilizing and mulching the Select Clay Fill stockpile area after borrowing from the stockpile is complete, along with all other areas disturbed during construction and stockpiles that contain excess soil from the Phase 10 – Cell 2 excavated soil.

OWNER will perform all necessary clearing and grubbing and will install all required Sediment Control Fence and Logs in accordance with the Drawings and Specification. OWNER will conduct required surface water inspection during and after construction until vegetation has established. CONTRACTOR is responsible for maintaining and replacing Sediment Control Fence and Logs as required until construction is complete and vegetation has established.
OWNER will abandon any necessary existing gas probes and monitoring wells prior to the start of Phase 10 – Cell 2 construction and will replace or extend the existing gas probes and monitoring wells per the Contract Documents.

SC-4 CONSTRUCTION DOCUMENTATION COORDINATE AND ELEVATION TABLES

Attached as Appendix B are the Construction Documentation Coordinate and Elevation Tables to be used by the CONTRACTOR to Document as-constructed coordinate and elevations in accordance with the Contract Documents.

SC-5 CONSTRUCTION QUALITY ASSURANCE PLAN

Attached as Appendix C is the Construction Quality Assurance (CQA) Plan for the Eastern Expansion of the Dane County No. 2 (Rodefeld) Landfill. The CQA Plan has approved by the WDNR for the Eastern Expansion. The CQA Plan includes pre-construction CQA, construction CQA, and post-construction CQA requirements of the OWNER/ENGINEER and the CONTRACTOR. The CQA Plan is provided to assist BIDDER's in determining costs associated with coordinating CQA requirements with the OWNER/ENGINEER to conduct field sampling, field testing, and on-site CQA.

APPENDIX A
CLAY SOIL LABORATORY TEST RESULTS

PHASE 10 – CELL 1
LINER CONSTRUCTION
CLAY LABORATORY TEST RESULTS
(CONSTRUCTED IN 2015)

CLAY LINER BULK SAMPLE LABORATORY TEST RESULTS

Appendix E

Clay Liner Bulk Sample Laboratory Test Results

CGC, Geotechnical Laboratory
Test Results

Date: 9/23/2015
CGC Job # C15337
Tests by: DRW/KJS
Test No.

Job: Dane County Landfill Client: Dane County Public Works

Sample No.	Location	Natural Moisture (%)	Atterberg Limits			Dry Density (pcf)	Average K_V (cm/s)	P200 Content (%)
			Liquid Limit (%)	Plastic Limit (%)	PI			
T-1, Lift 1	382,200N 2,200,700E	21.5	38	21	17	108.1	2.8E-09	84.3
T-2, Lift 1	382,400N 2,200,700E	19.9	35	20	15	104.6	*	80.7
T-3, Lift 1	382,600N 2,200,600E	17.2	35	20	15	108.6	*	82.4
T-4, Lift 1	382,700N 2,200,800E	21.1	36	21	15	107.2	4.9E-09	86.0
T-5, Lift 1	382,300N 2,200,800E	21.8	37	21	16	104.4	*	90.5
T-6, Lift 2	382,650N 2,200,650E	19.0	38	20	18	109.6	5.6E-09	89.0
T-7, Lift 2	382,050N 2,200,650E	18.9	36	20	16	106.8	*	80.3
T-8, Lift 2	382,250N 2,200,830E	18.1	40	20	20	112.7	2.5E-09	91.7
T-9, Lift 2	382,750N 2,200,830E	19.7	38	20	18	106.1	*	91.3
T-10, Lift 2	382,550N 2,200,750E	19.6	38	21	17	107.9	*	93.0
T-11, Lift 3	382,600N 2,200,700E	20.2	38	20	18	109.3	2.3E-08	88.2
T-12, Lift 3	382,100N 2,200,700E	20.1	37	19	18	107.2	*	86.6
T-13, Lift 3	382,100N 2,200,800E	20.2	38	21	17	110.4	6.7E-09	88.8
T-14, Lift 3	382,400N 2,200,800E	20.1	38	20	18	108.4	*	90.9
T-15, Lift 3	382,200N 2,200,600E	19.4	38	20	18	106.0	*	87.6
T-16, Lift 4	382,450N 2,200,650E	20.2	38	19	19	106.4	*	93.1
T-17, Lift 4	382,050N 2,200,750E	19.8	37	19	18	107.5	*	90.1
T-18, Lift 4	382,350N 2,200,750E	18.1	38	20	18	113.0	1.5E-08	90.5
T-19, Lift 4	382,250N 2,200,850E	19.5	37	19	18	107.8	*	87.8
T-20, Lift 4	382,650N 2,200,850E	22.4	36	19	17	106.9	2.7E-09	83.9
B-1, Lift 1	382,100N 2,200,700E	20.9	36	20	16	*	*	63.9
B-2, Lift 1	382,600N 2,200,700E	19.3	35	20	15	*	*	82.1
B-3, Lift 2	382,450N 2,200,650E	21.9	36	21	15	*	*	89.6
B-4, Lift 2	382,050N 2,200,650E	21.9	37	21	16	*	*	89.6
B-5, Lift 3	382,400N 2,200,700E	21.8	37	21	16	*	*	82.0
B-6, Lift 3	382,000N 2,200,800E	22.2	38	20	18	*	*	89.9
B-7, Lift 4	382,650N 2,200,650E	23.6	40	20	20	*	*	88.9
B-8, Lift 4	382,350N 2,200,850E	17.9	39	21	18	*	*	91.7

Notes:
* - Not tested

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	1.8	5.9	26.0	38.1	25.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
3/8	99.4		
#4	97.6		
#8	96.0		
#10	95.8		
#16	94.6		
#30	92.4		
#40	89.9		
#50	85.2		
#80	75.0		
#100	71.3		
#200	63.9		

* (no specification provided)

Material Description

Brown Lean Clay, Some Sand, Trace Gravel

Atterberg Limits

PL= 20 LL= 36 PI= 16

Coefficients

D_{90}= 0.4292 D_{85}= 0.2966 D_{60}= 0.0436
D_{50}= 0.0255 D_{30}= 0.0080 D_{15}= 0.0011
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(8)

Remarks

Location: 382,100N/2,200,700E
Sample Number: B-1, Lift 1

Date: 9/18/15

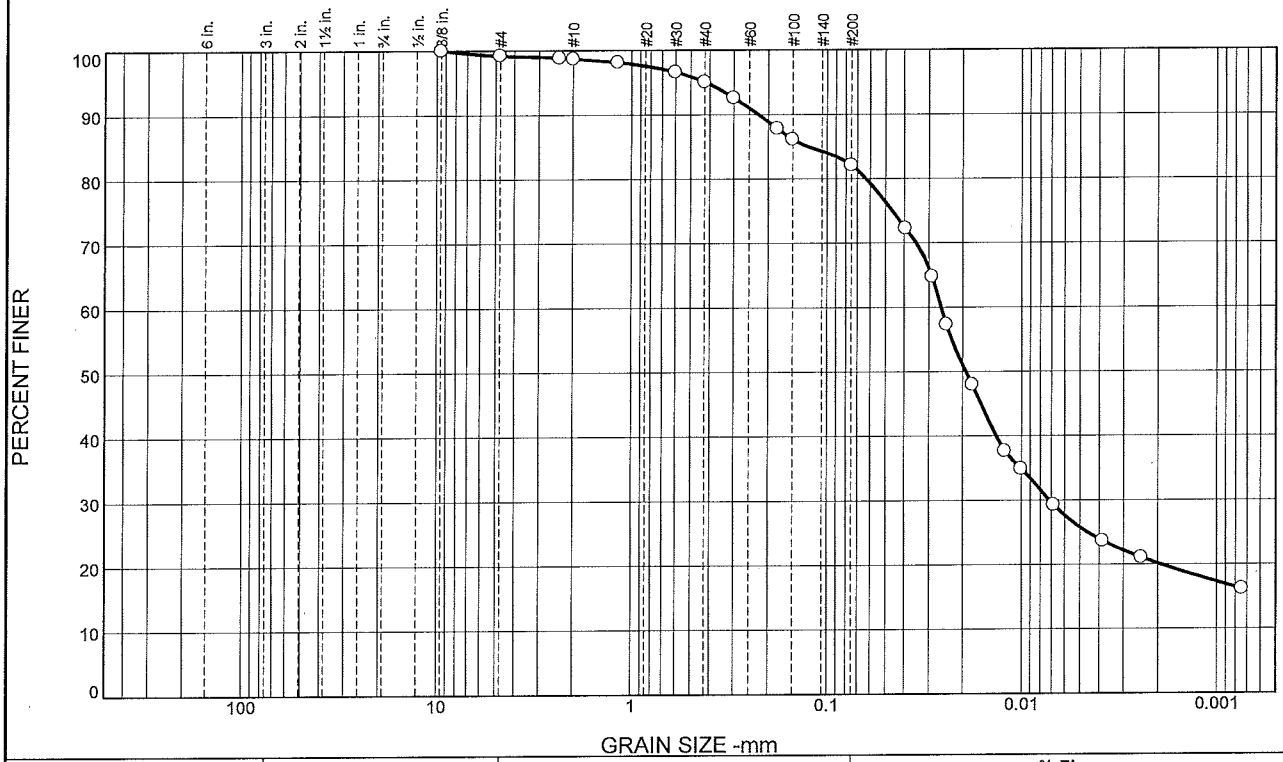
CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.8	0.5	3.6	13.0	56.3	25.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.2		
#8	98.8		
#10	98.7		
#16	98.1		
#30	96.6		
#40	95.1		
#50	92.6		
#80	87.8		
#100	86.1		
#200	82.1		

* (no specification provided)

Material Description

Brown Lean Clay, Some Sand, Trace Gravel

Atterberg Limits

PL= 20 LL= 35 PI= 15

Coefficients

D_{90}= 0.2253 D_{85}= 0.1259 D_{60}= 0.0259
D_{50}= 0.0193 D_{30}= 0.0072 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(12)

Remarks

Location: 382,600N/2,200,700E
Sample Number: B-2, Lift I

Date: 9/18/15

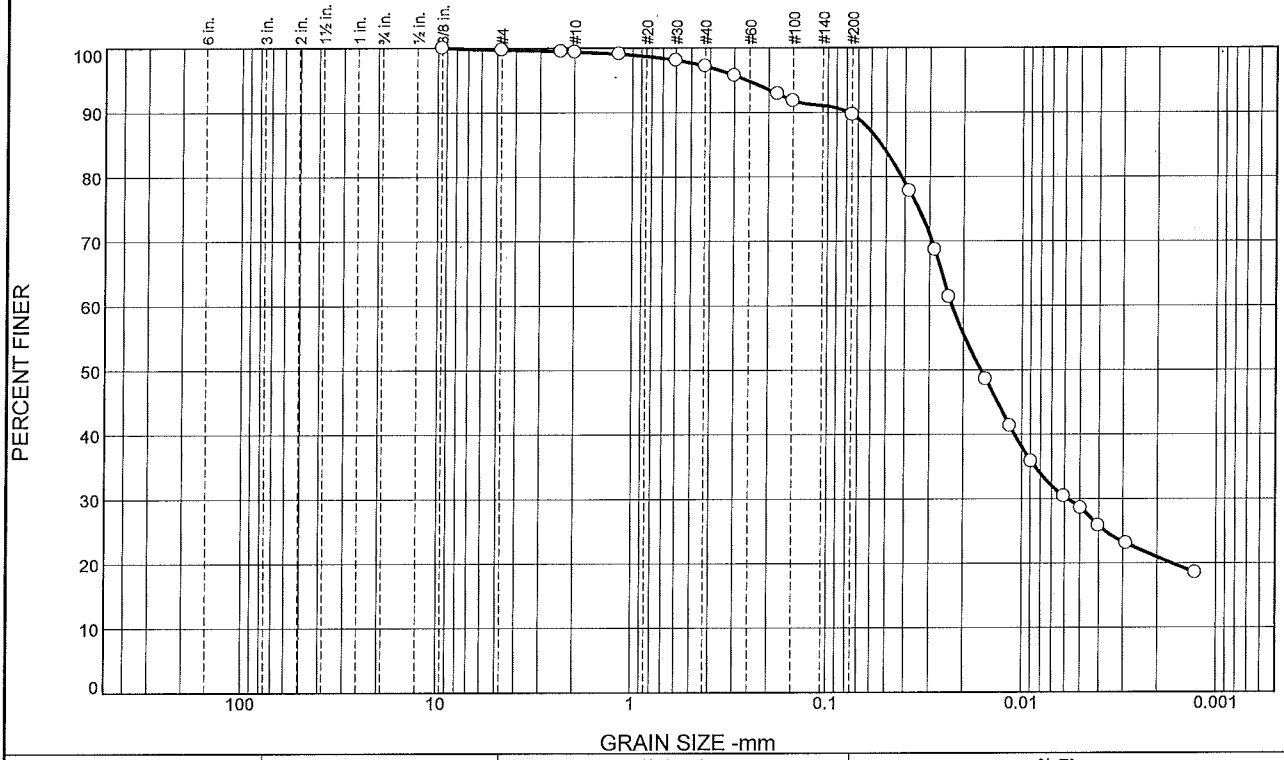
CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill
Project No: C15337

Figure

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.3	2.2	7.6	61.0	28.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.7		
#8	99.5		
#10	99.4		
#16	99.1		
#30	98.1		
#40	97.2		
#50	95.7		
#80	92.9		
#100	91.8		
#200	89.6		

* (no specification provided)

Material Description

Brown Lean Clay, Little Sand, Trace Gravel

Atterberg Limits

PL= 21 LL= 36 PI= 15

Coefficients

D_{90}= 0.0788 D_{85}= 0.0532 D_{60}= 0.0229
D_{50}= 0.0162 D_{30}= 0.0058 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Location: 382,450N/2,200,650E
Sample Number: B-3, Lift 2

Date: 9/18/15

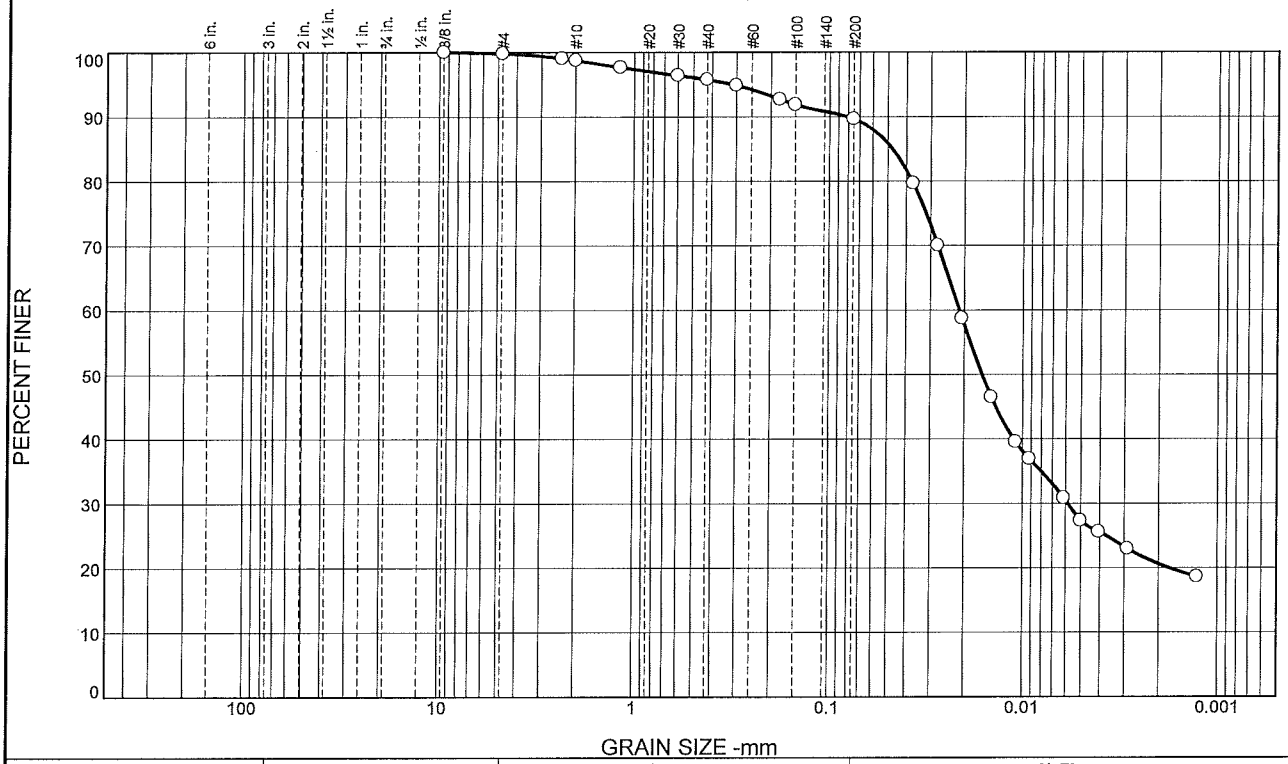
CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	1.1	3.0	6.1	62.3	27.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.8		
#8	99.0		
#10	98.7		
#16	97.7		
#30	96.4		
#40	95.7		
#50	94.8		
#80	92.7		
#100	91.8		
#200	89.6		

* (no specification provided)

Material Description

Brown Lean Clay, Little Sand, Trace Gravel

Atterberg Limits

PL= 21 LL= 37 PI= 16

Coefficients

D_{90}= 0.0816 D_{85}= 0.0474 D_{60}= 0.0213
D_{50}= 0.0162 D_{30}= 0.0059 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(15)

Remarks

Location: 382,050N/2,200,650E
Sample Number: B-4, Lift 2

Date: 9/18/15

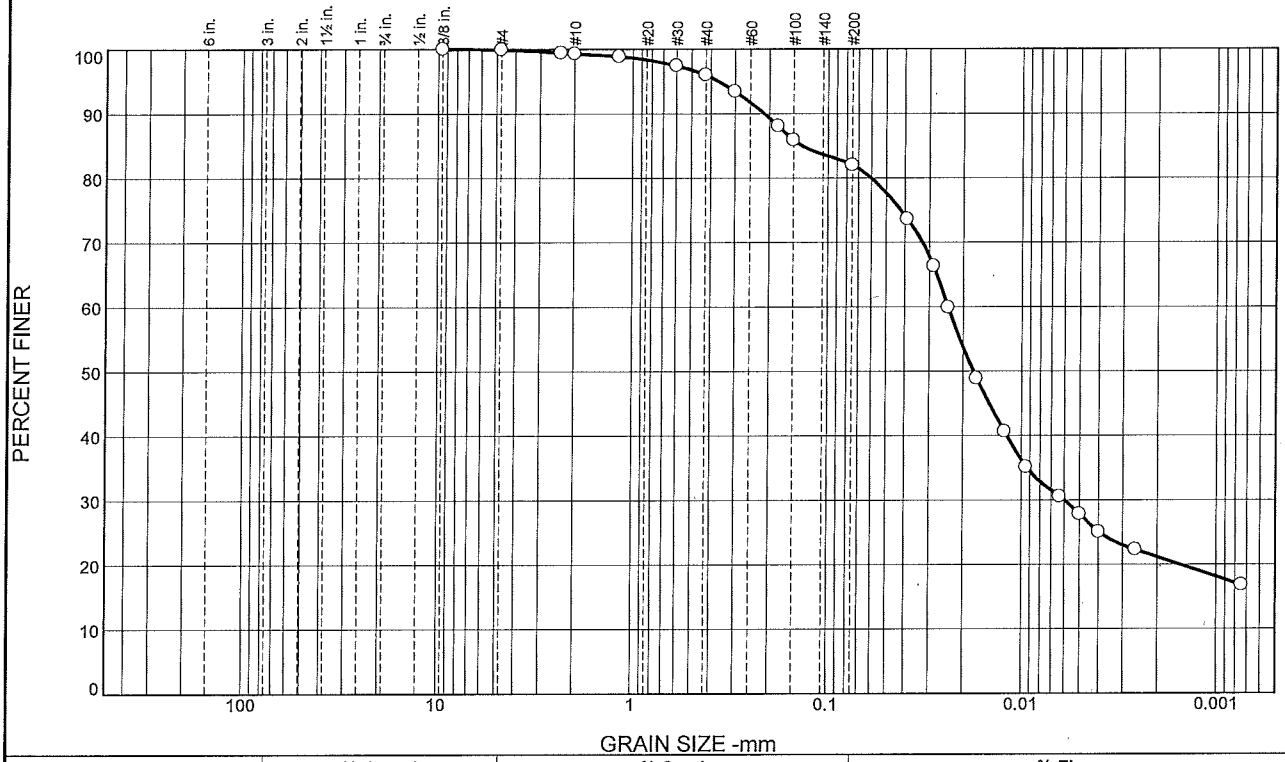
CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.6	3.3	14.0	54.2	27.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.9		
#8	99.4		
#10	99.3		
#16	98.9		
#30	97.4		
#40	96.0		
#50	93.4		
#80	88.0		
#100	85.9		
#200	82.0		

* (no specification provided)

Material Description

Brown Lean Clay, Some Sand, Trace Gravel

Atterberg Limits

PL= 21 LL= 37 PI= 16

Coefficients

D_{90}= 0.2131 D_{85}= 0.1361 D_{60}= 0.0240
D_{50}= 0.0177 D_{30}= 0.0060 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(13)

Remarks

Location: 382,400N/2,200,700E
Sample Number: B-5, Lift 3

Date: 9/18/15

CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.5	2.5	7.1	62.0	27.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	100.0		
#8	99.6		
#10	99.5		
#16	99.1		
#30	98.0		
#40	97.0		
#50	95.3		
#80	92.5		
#100	91.6		
#200	89.9		

* (no specification provided)

Material Description

Brown Lean Clay, Little Sand

Atterberg Limits

PL= 20 LL= 38 PI= 18

Coefficients

D_{90}= 0.0761 D_{85}= 0.0516 D_{60}= 0.0216
D_{50}= 0.0172 D_{30}= 0.0059 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Location: 382,000N/2,200,800E
Sample Number: B-6, Lift 3

Date: 9/21/15

CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.5	2.9	7.7	61.4	27.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.6		
#10	99.5		
#16	99.1		
#30	97.7		
#40	96.6		
#50	95.0		
#80	91.9		
#100	90.8		
#200	88.9		

* (no specification provided)

Material Description

Brown Lean Clay, Little Sand

Atterberg Limits

PL= 20 LL= 40 PI= 20

Coefficients

D_{90}= 0.1025 D_{85}= 0.0538 D_{60}= 0.0222
D_{50}= 0.0163 D_{30}= 0.0060 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(18)

Remarks

Location: 382,650N/2,200,650E
Sample Number: B-7, Lift 4

Date: 9/21/15

CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	1.8	6.3	56.7	35.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.9		
#10	99.8		
#16	99.5		
#30	98.7		
#40	98.0		
#50	97.0		
#80	94.5		
#100	93.6		
#200	91.7		

* (no specification provided)

Material Description

Brown Lean Clay, Little Sand

Atterberg Limits

PL= 21 LL= 39 PI= 18

Coefficients

D_{90}= 0.0637 D_{85}= 0.0468 D_{60}= 0.0196
D_{50}= 0.0136 D_{30}= 0.0028 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Location: 382,350N/2,200,850E
Sample Number: B-8, Lift 3

Date: 9/21/15

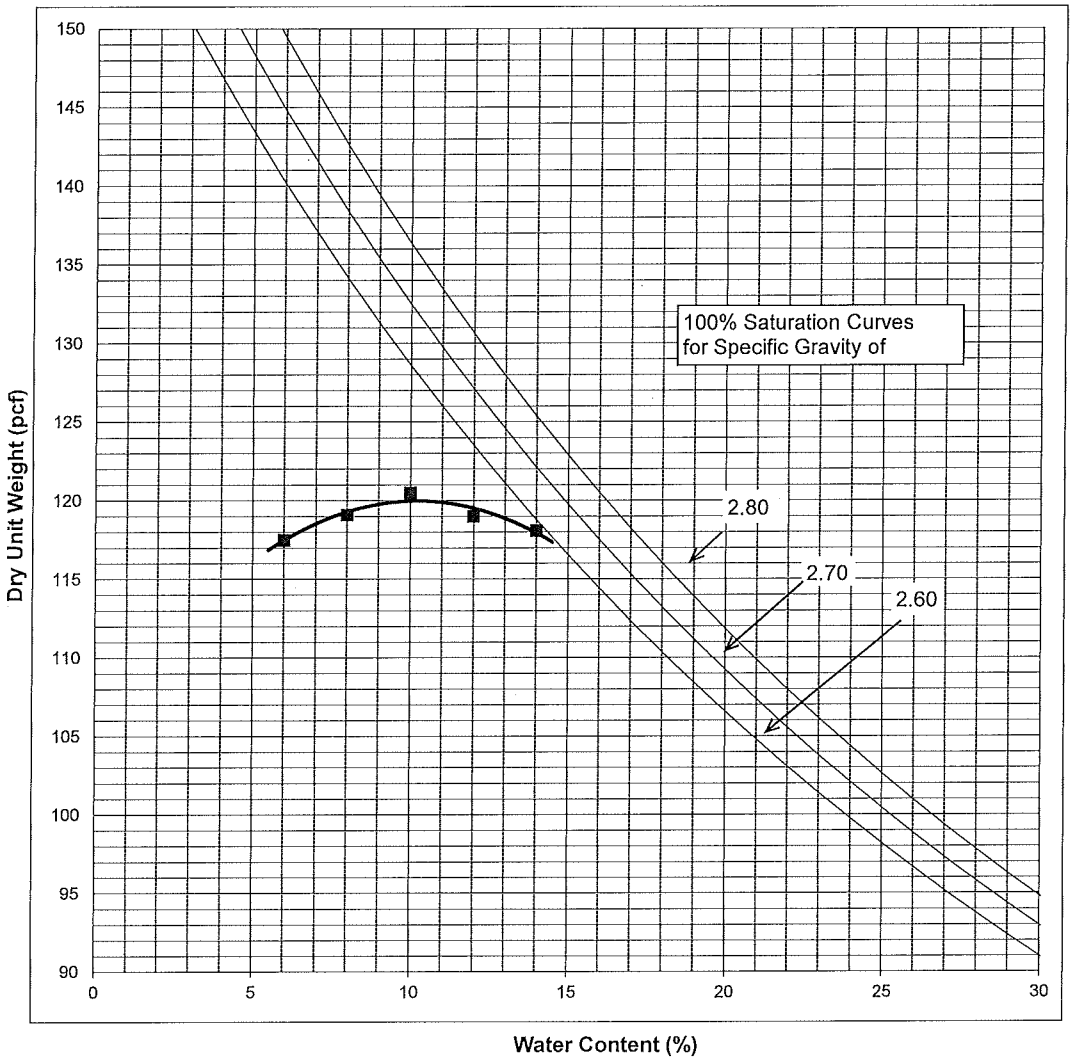
CGC, Inc.

Client: Dane County Public Works
Project: Dane County Landfill

Project No: C15337 **Figure**

Tested By: DRW **Checked By:** DAS

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-1, Lift 1 at 382,100N/2,200,700E		120.5		10.0	
Specimen Description					
Brown Lean Clay, Some Sand, Trace Gravel					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		36	20	16	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	2.4	33.7	63.9	-

PROJECT: Dane County Landfill

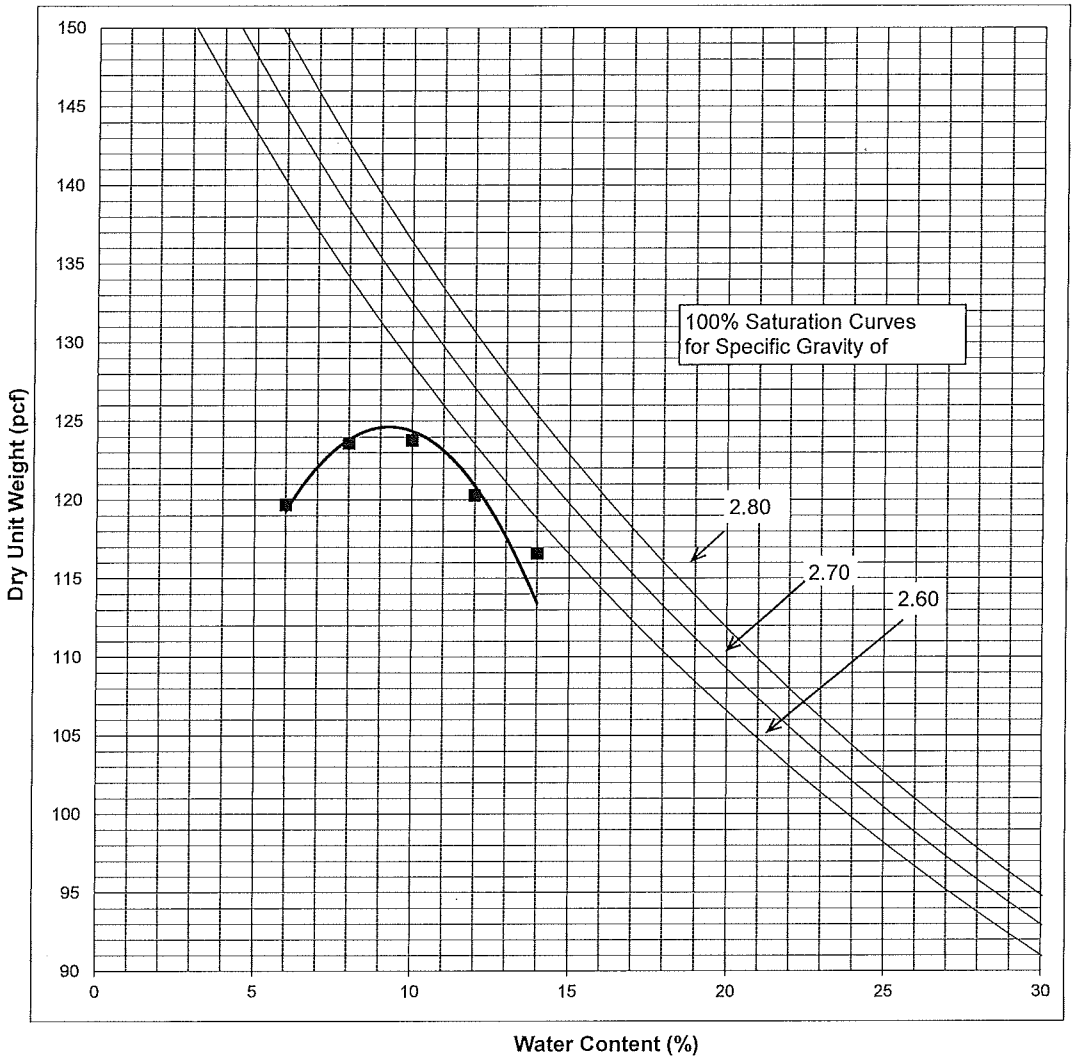
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: CJR	REVIEWED BY: KJS	18-Sep-15

File:15337.B1.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-2, Lift 1 at 382,600N/2,200,700E		125.0		9.0	
Specimen Description					
Brown Lean Clay, Some Sand, Trace Gravel					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		35	20	15	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.8	17.1	82.1	-

PROJECT: Dane County Landfill

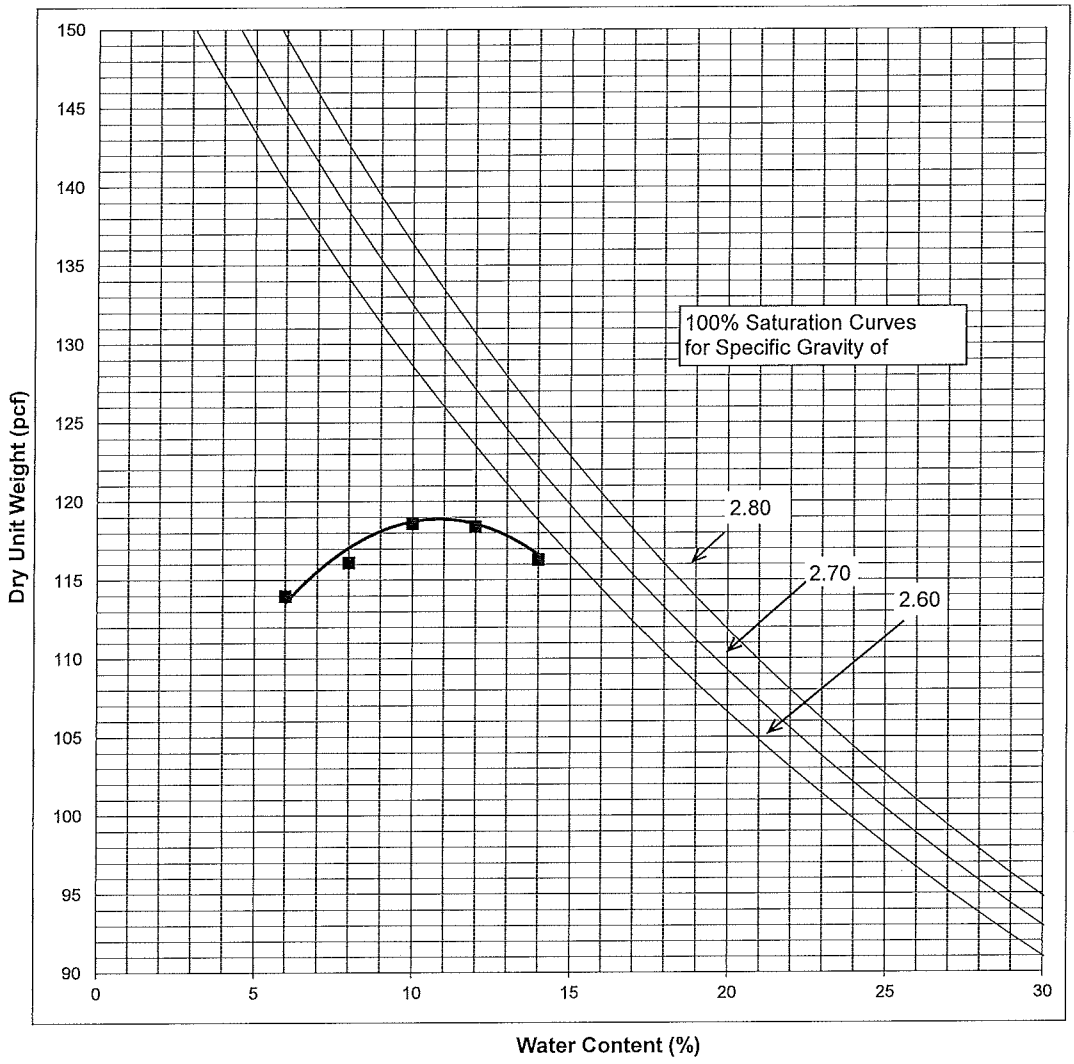
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: CJR	REVIEWED BY: KJS	18-Sep-15

File:15337.B2.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf	Optimum Water Content, %	
B-3, Lift 1 at 382,450N/2,200,650E		119.0	11.0	
Specimen Description				
Brown Lean Clay, Little Sand, Trace Gravel				
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %		
see above		see above		
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		36	21	15	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.3	10.1	89.6	.

PROJECT: Dane County Landfill

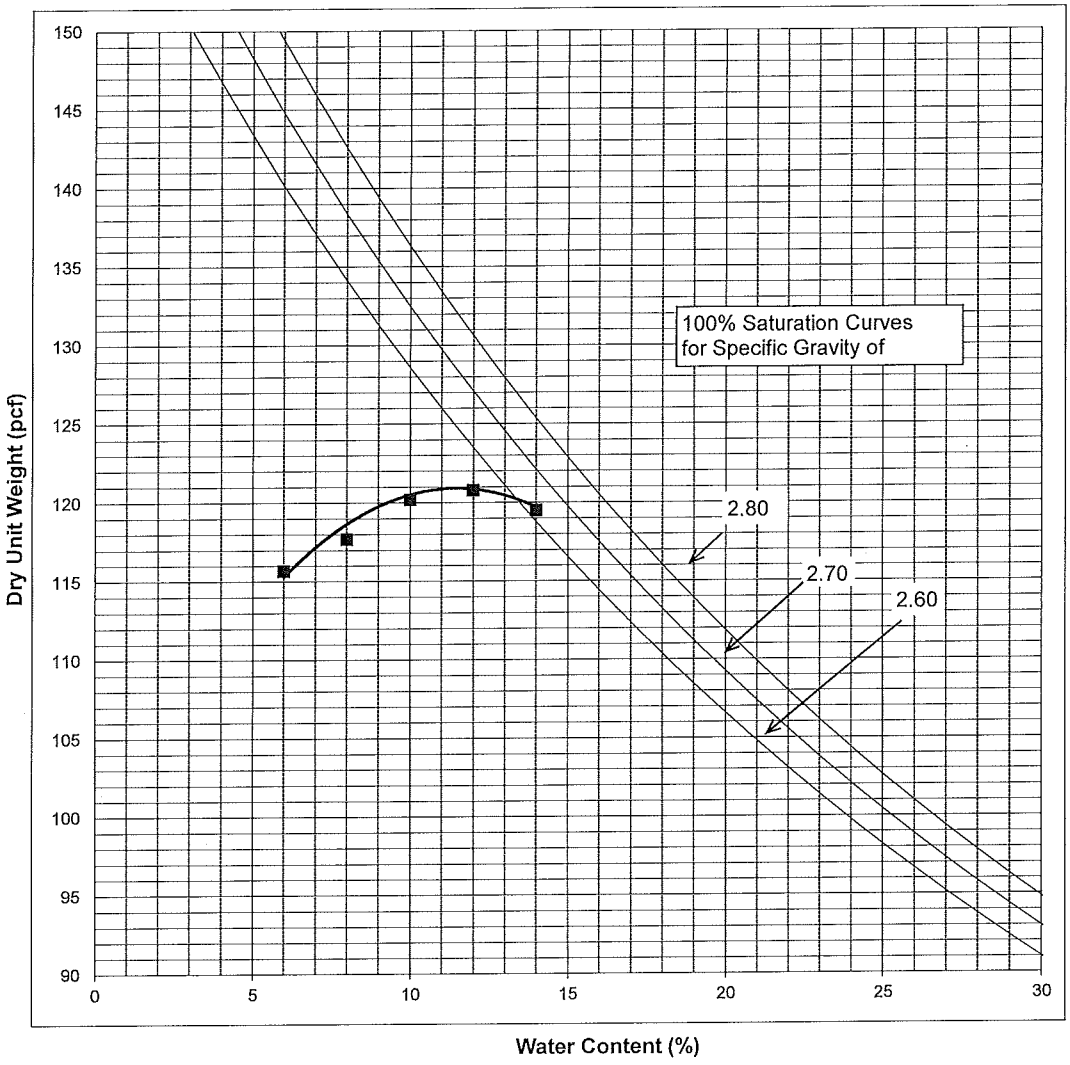
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: KRP	REVIEWED BY: KJS	18-Sep-15

File:15337.B3.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-4, Lift 2 at 382,050N/2,200,650E		121.0		11.5	
Specimen Description					
Brown Lean Clay, Little Sand, Trace Gravel					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		37	21	16	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.2	10.2	89.6	.

PROJECT: Dane County Landfill

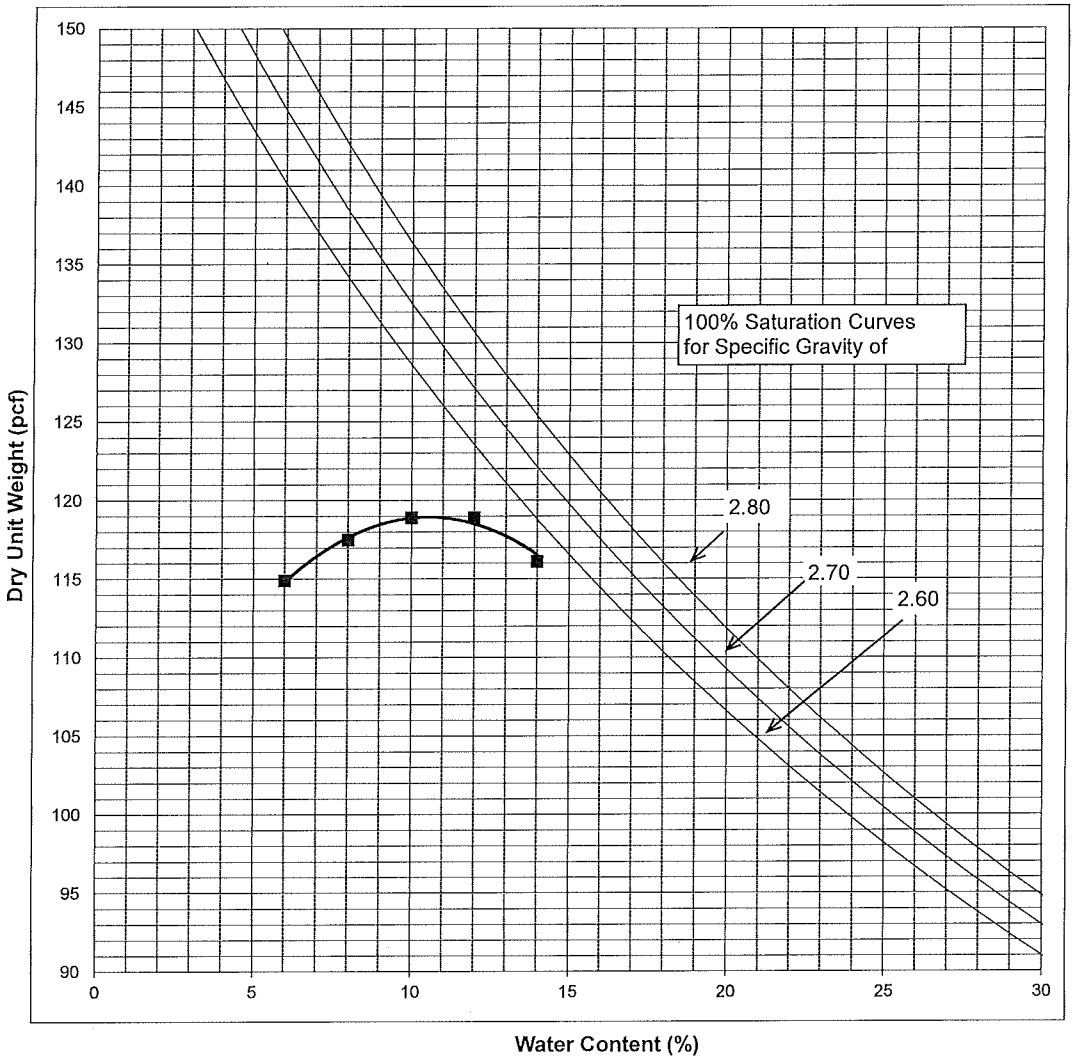
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: KRP	REVIEWED BY: KJS	18-Sep-15

File:15337.B4.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-5, Lift 3 at 382,400N/2,200,700E		119.0		11.0	
Specimen Description					
Brown Lean Clay, Some Sand, Trace Gravel					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		37	21	16	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.1	17.9	82.0	.

PROJECT: Dane County Landfill

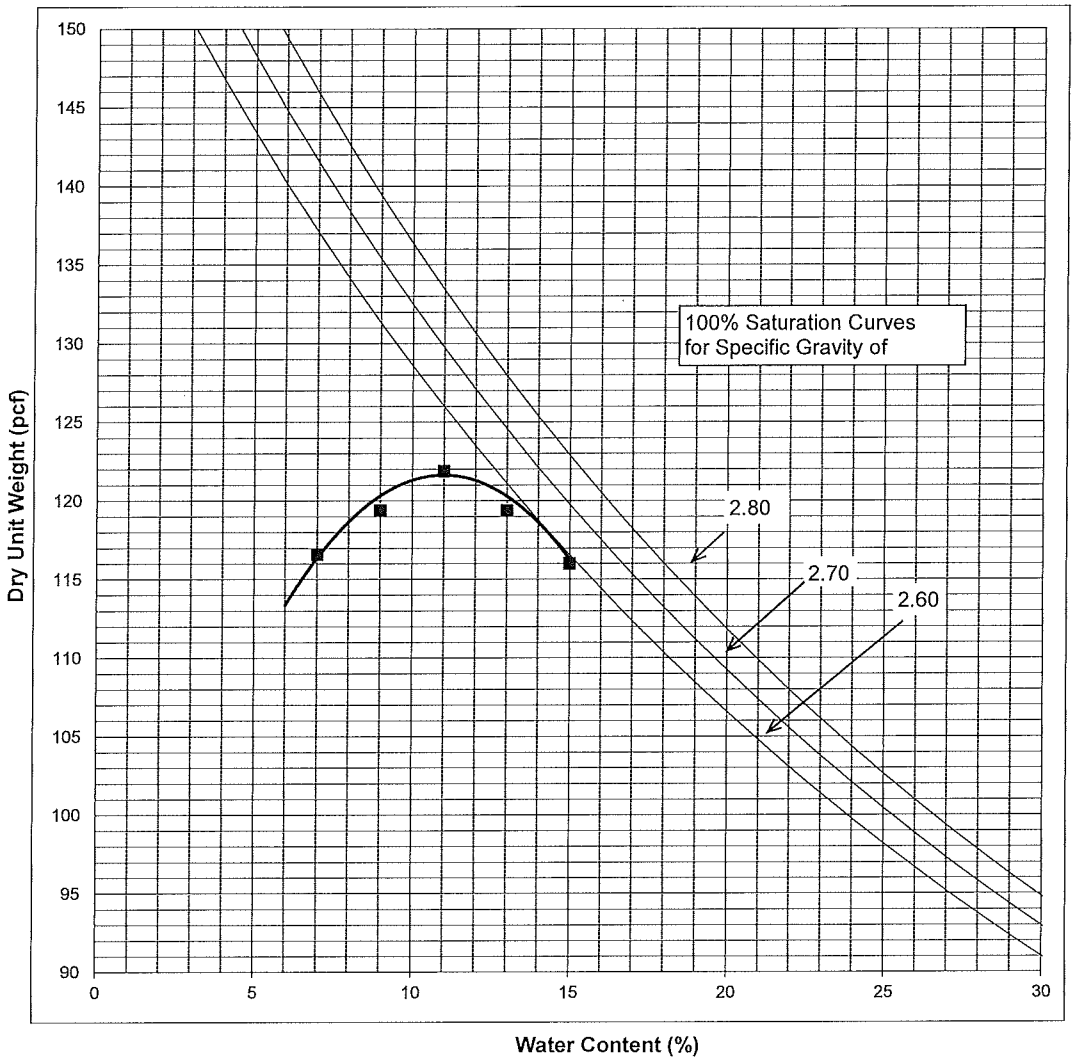
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: CJR	REVIEWED BY: KJS	18-Sep-15

File:15337.B5.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-6, Lift 3 at 382,000N/2,200,800E		122.0		11.0	
Specimen Description					
Brown Lean Clay, Little Sand					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		38	20	18	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.0	10.1	89.9	.

PROJECT: Dane County Landfill

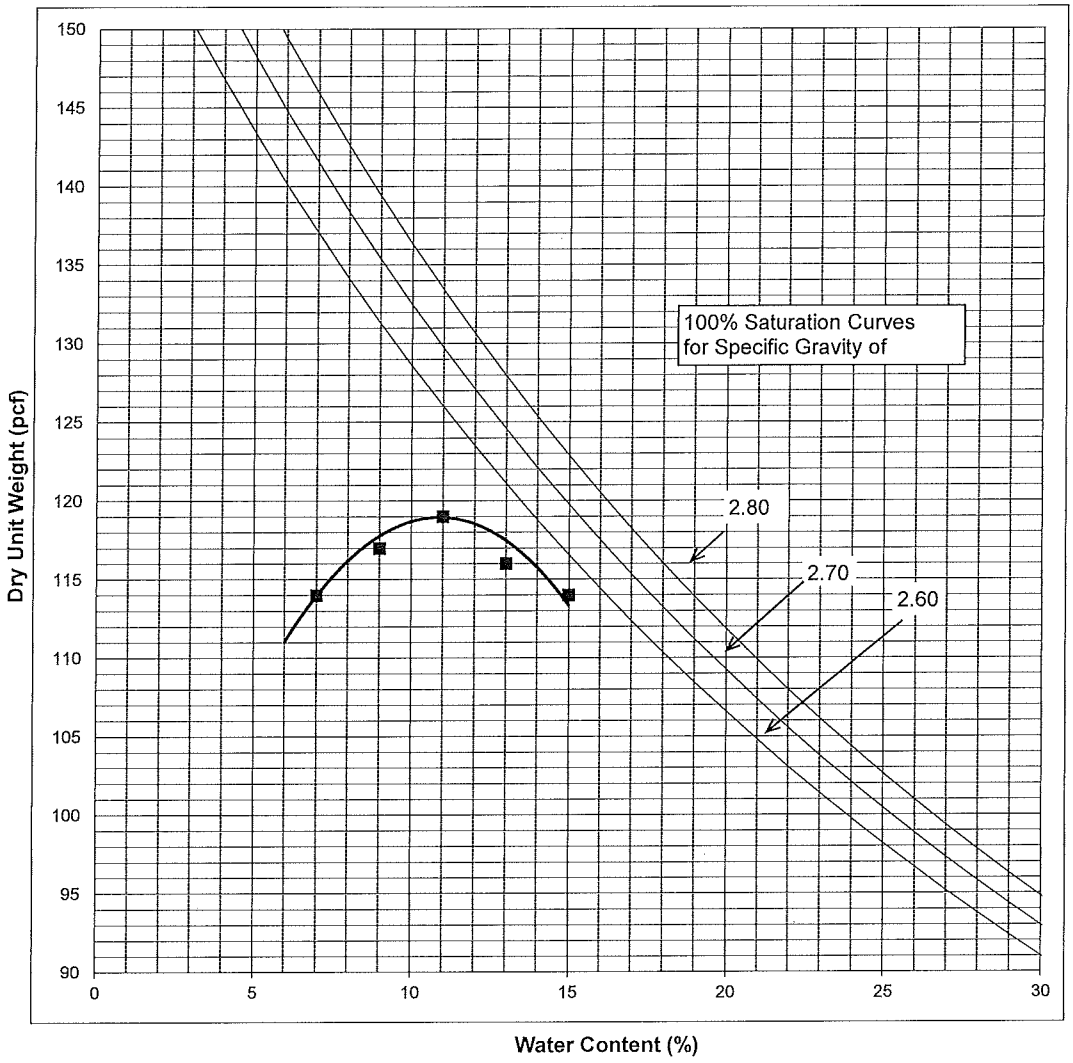
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: KRP	REVIEWED BY: KJS	18-Sep-15

File:15337.B6.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-7, Lift 4 at 382,650N/2,200,650E		119.0		11.0	
Specimen Description					
Brown Lean Clay, Little Sand					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		40	20	20	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.0	11.1	88.9	.

PROJECT: Dane County Landfill

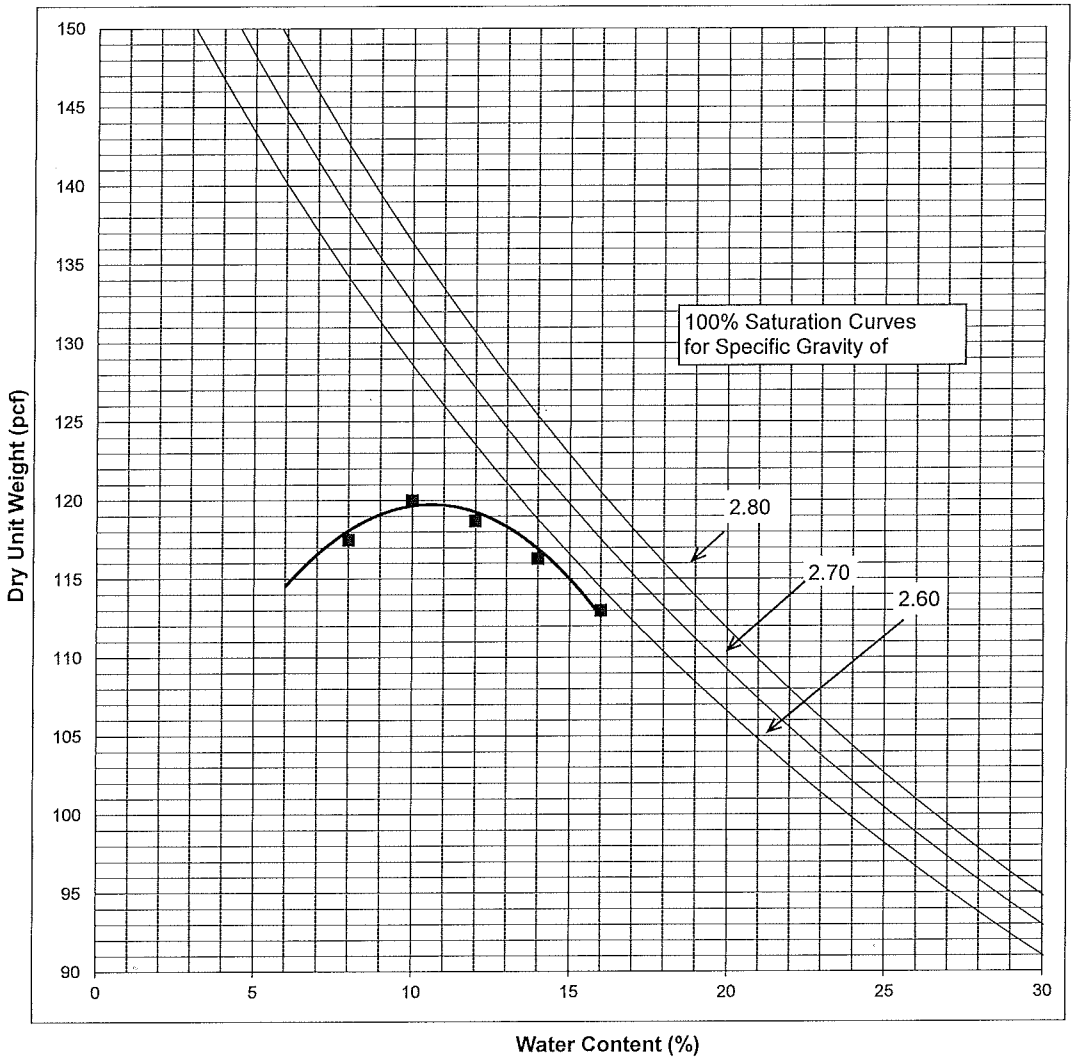
PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

CGC, Inc.	CHECKED BY: TMK	REVIEWED BY: KJS	18-Sep-15

File:15337.B7.xlsx

TEST REPORT



Specimen No.		Maximum Dry Unit Weight, pcf		Optimum Water Content, %	
B-8, Lift 3 at 382,350N/2,200,850E		120.0		10.0	
Specimen Description					
Brown Lean Clay, Little Sand					
Corrected Maximum Dry Unit Weight, pcf		Corrected Optimum Water Content, %			
see above		see above			
Test Method		Liquid Limit	Plastic Limit	Plasticity Index	Specific Gravity
ASTM D1557, Method A		39	21	18	2.7 (est.)
Preparation Method	USCS	% Gravel	% Sand	% Fines	% Oversize
Dry	CL	0.0	8.3	91.7	.

PROJECT: Dane County Landfill

PROJECT NUMBER: C15337

LABORATORY COMPACTION TEST

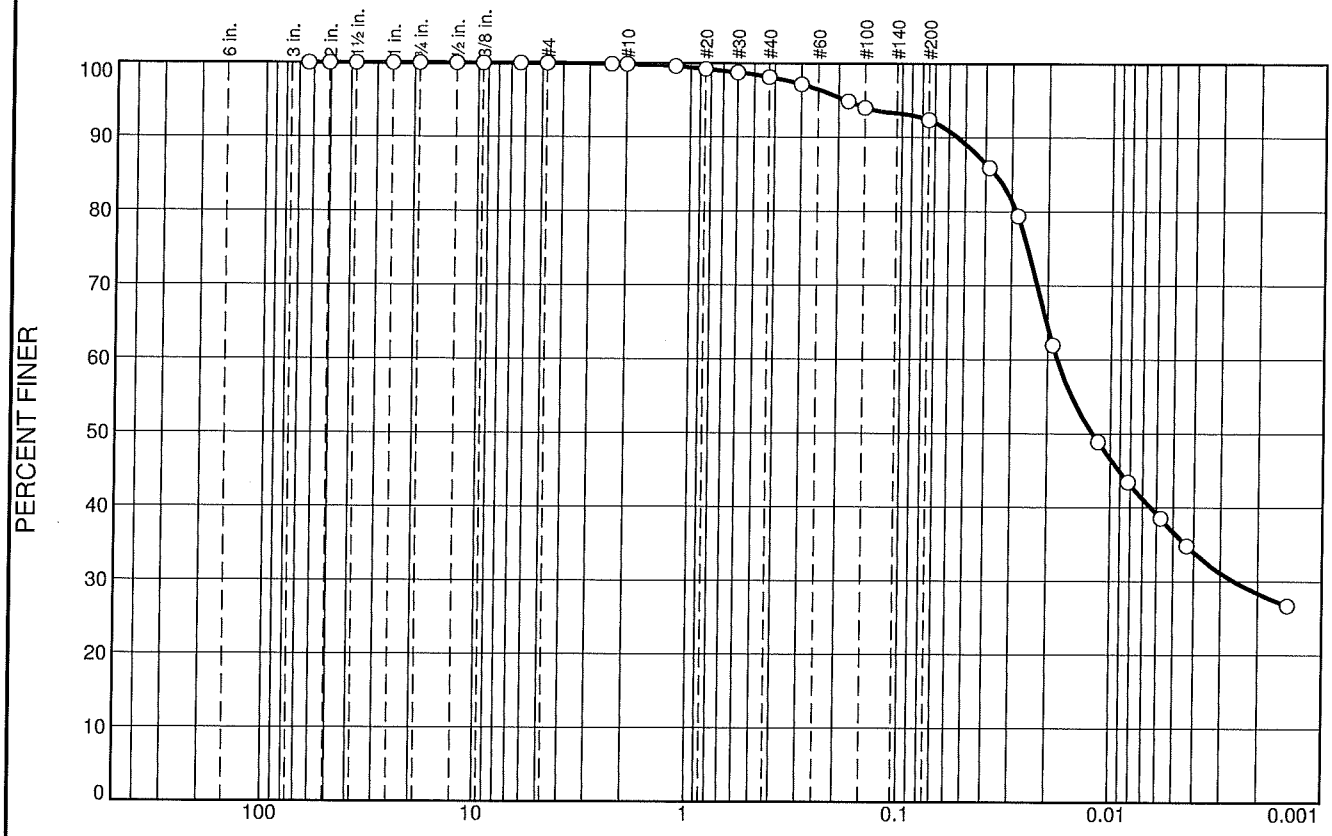
CGC, Inc.	CHECKED BY: TMK	REVIEWED BY: KJS	18-Sep-15

File:15337.B8.xlsx

PHASE 9 – CELL 1
LINER CONSTRUCTION
CLAY LABORATORY TEST RESULTS
(CONSTRUCTED IN 2014)

CLAY LINER SHELBY TUBE SAMPLE LABORATORY TEST RESULTS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	1.8	5.7	55.7	36.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	99.9		
#10	99.9		
#16	99.6		
#20	99.2		
#30	98.8		
#40	98.1		
#50	97.2		
#80	94.9		
#100	94.0		
#200	92.4		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 36 PI= 18

Coefficients

D_{90}= 0.0545 D_{85}= 0.0359 D_{60}= 0.0180
D_{50}= 0.0122 D_{30}= 0.0026 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Source of Sample: Lift 1 **Depth:** 382,600N/2,201,000E
Sample Number: T-1 **Date:** 08-26-14

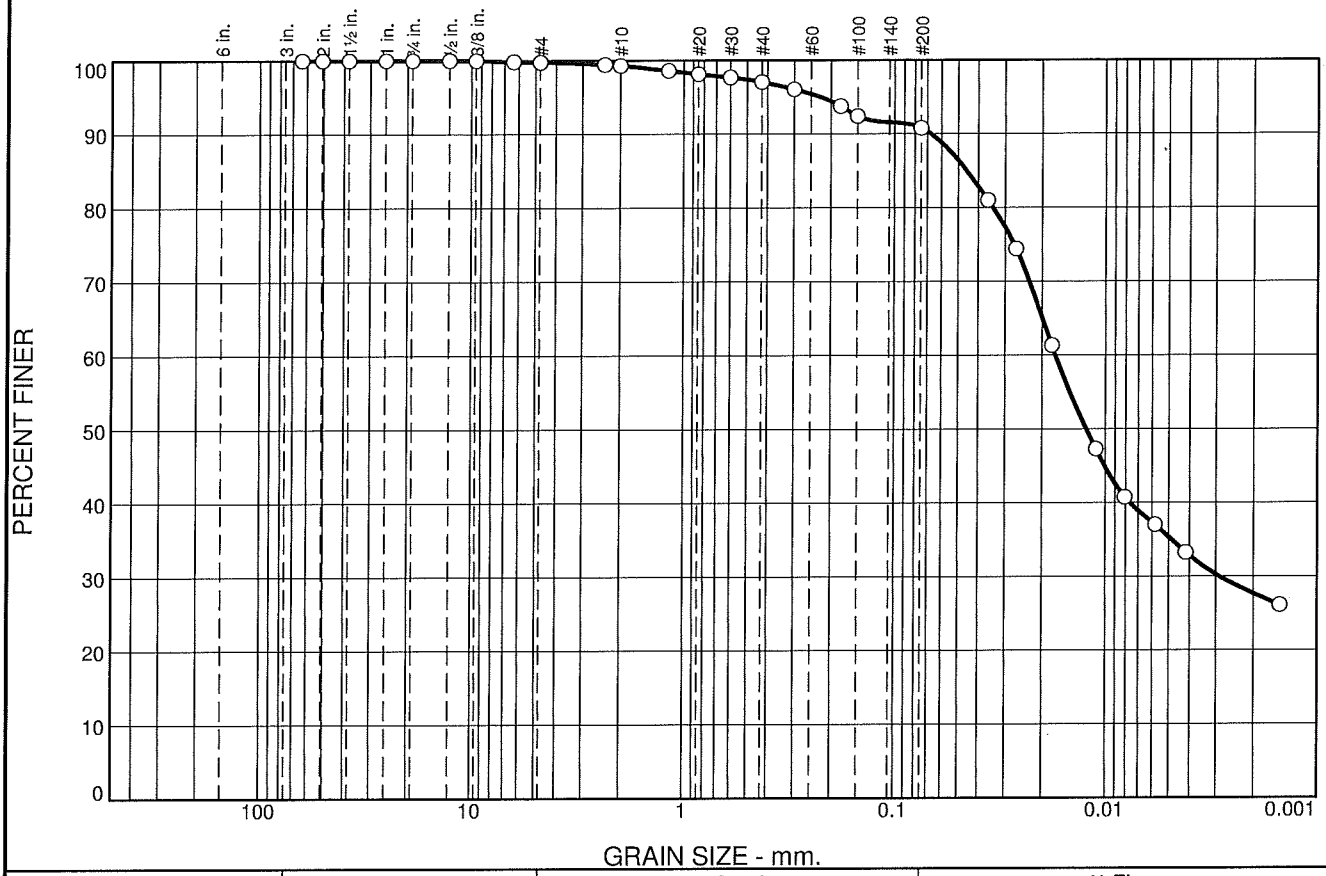
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.4	2.3	6.2	55.5	35.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.8		
#4	99.7		
#8	99.4		
#10	99.3		
#16	98.6		
#20	98.1		
#30	97.7		
#40	97.0		
#50	96.0		
#80	93.7		
#100	92.4		
#200	90.8		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 37 PI= 19

Coefficients

D_{90}= 0.0672 D_{85}= 0.0456 D_{60}= 0.0173
D_{50}= 0.0124 D_{30}= 0.0029 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 1 **Depth:** 382,500N/2,200,900E
Sample Number: T-2 **Date:** 09-02-14

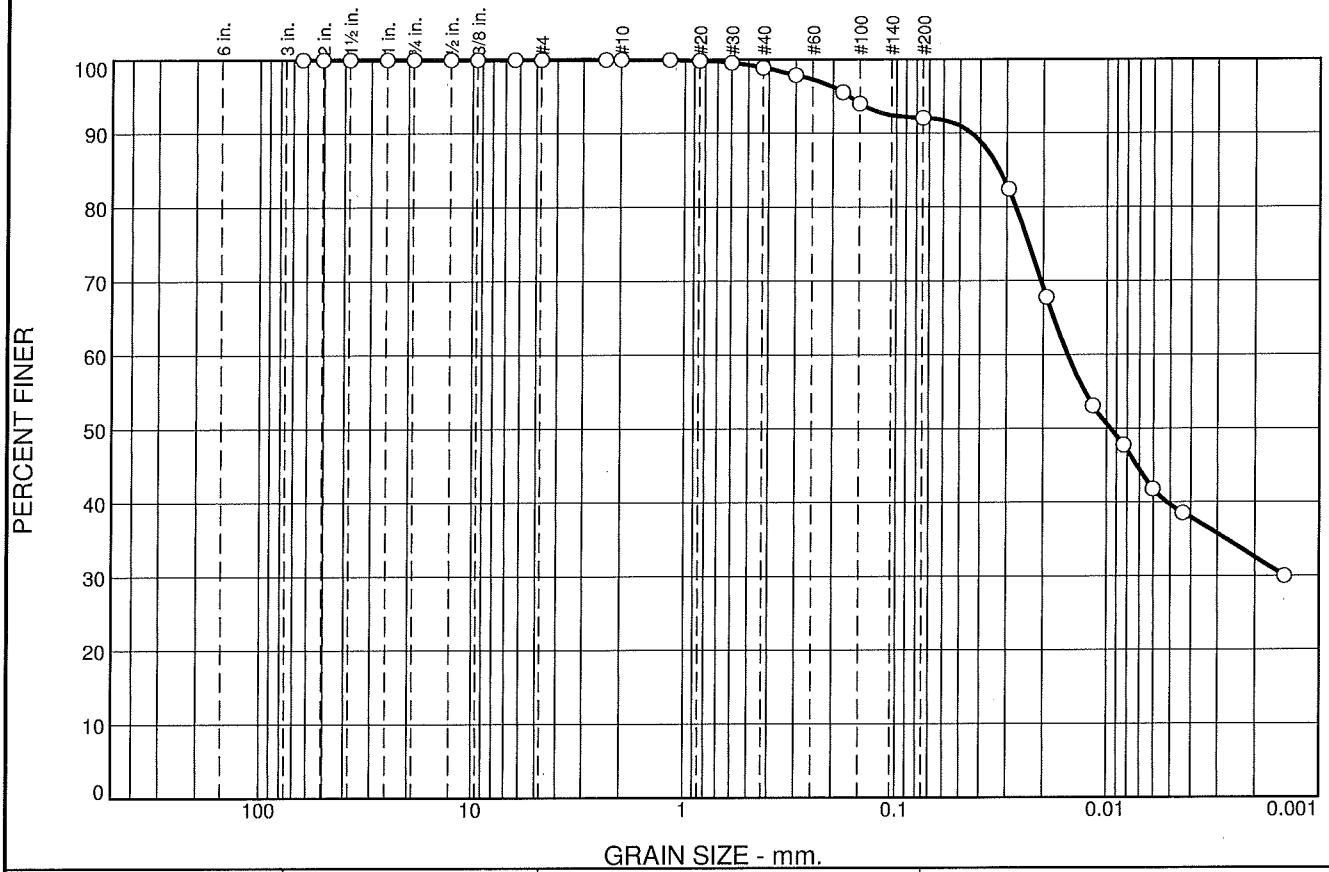
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.1	6.8	52.5	39.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	100.0		
#10	100.0		
#16	100.0		
#20	99.9		
#30	99.6		
#40	98.9		
#50	97.9		
#80	95.5		
#100	94.0		
#200	92.1		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 37 PI= 19

Coefficients

D_{90}= 0.0441 D_{85}= 0.0324 D_{60}= 0.0153
D_{50}= 0.0096 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 1 **Depth:** 382,100N/2,201,100E
Sample Number: T-3 **Date:** 08-26-14

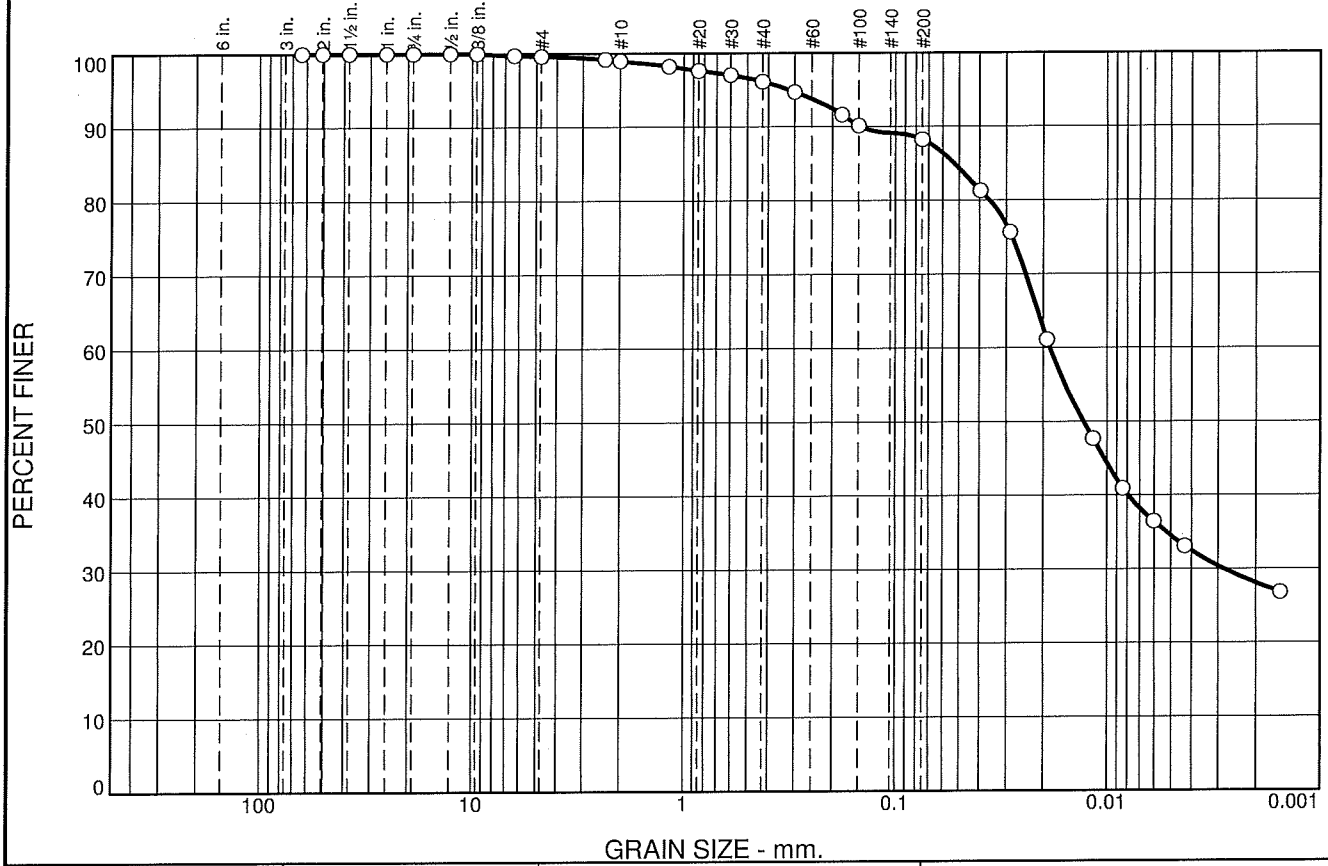
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	0.6	2.9	7.8	53.8	34.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.7		
#4	99.6		
#8	99.2		
#10	99.0		
#16	98.2		
#20	97.6		
#30	97.0		
#40	96.1		
#50	94.7		
#80	91.6		
#100	90.1		
#200	88.3		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 39 PI= 21

Coefficients

D_{90}= 0.1469 D_{85}= 0.0529 D_{60}= 0.0186
D_{50}= 0.0129 D_{30}= 0.0028 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(18)

Remarks

Source of Sample: Lift 1 **Depth:** 382,000N/2,200,900E
Sample Number: T-4 **Date:** 09-03-14

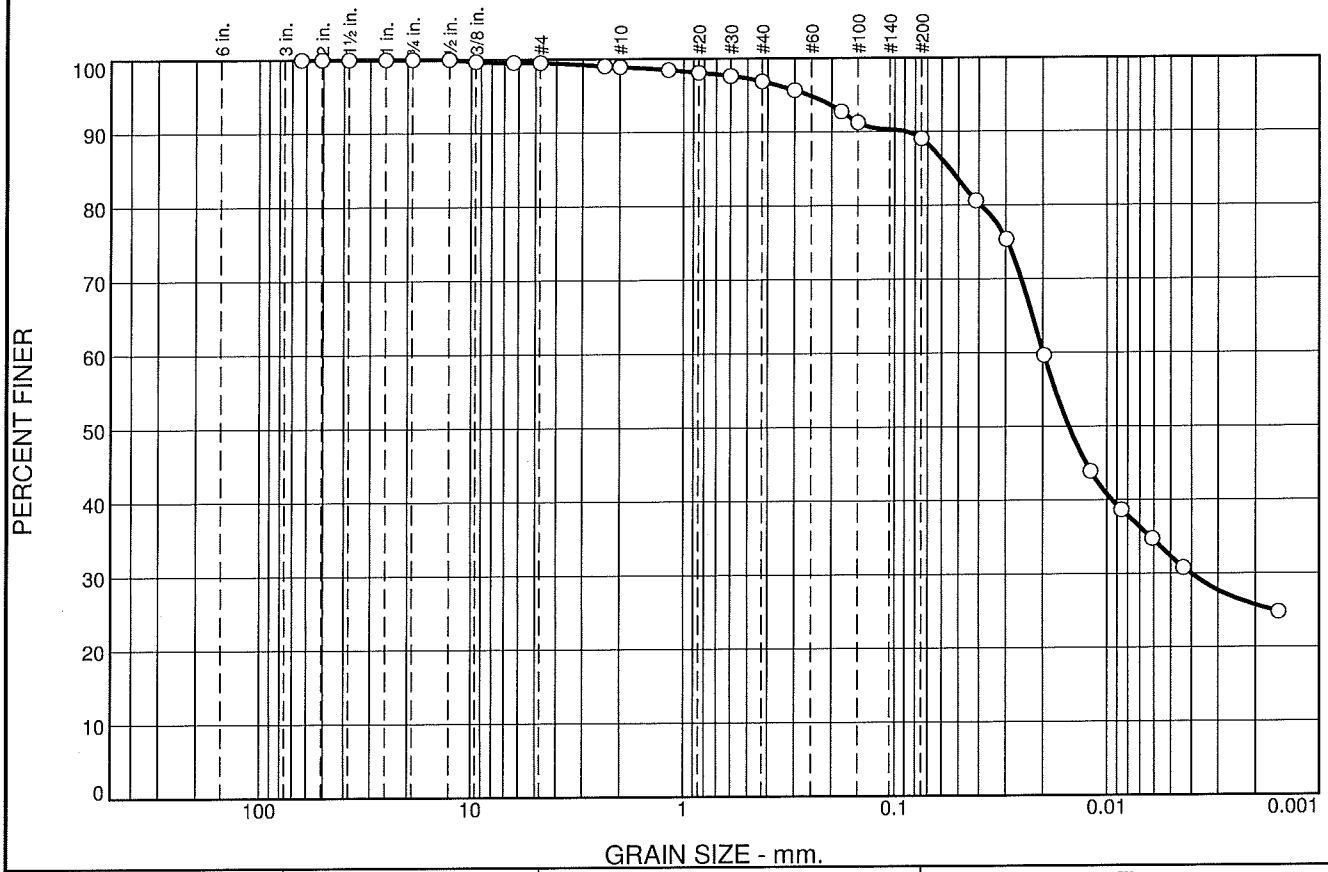
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.5	0.6	2.0	7.9	56.7	32.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	99.7		
.25	99.6		
#4	99.5		
#8	99.0		
#10	98.9		
#16	98.5		
#20	98.1		
#30	97.6		
#40	96.9		
#50	95.7		
#80	92.8		
#100	91.2		
#200	89.0		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 38 PI= 19

Coefficients

D_{90}= 0.0890 D_{85}= 0.0552 D_{60}= 0.0199
D_{50}= 0.0151 D_{30}= 0.0040 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 1 **Depth:** 382,700N/2,201,100E
Sample Number: T-5 **Date:** 09-03-14

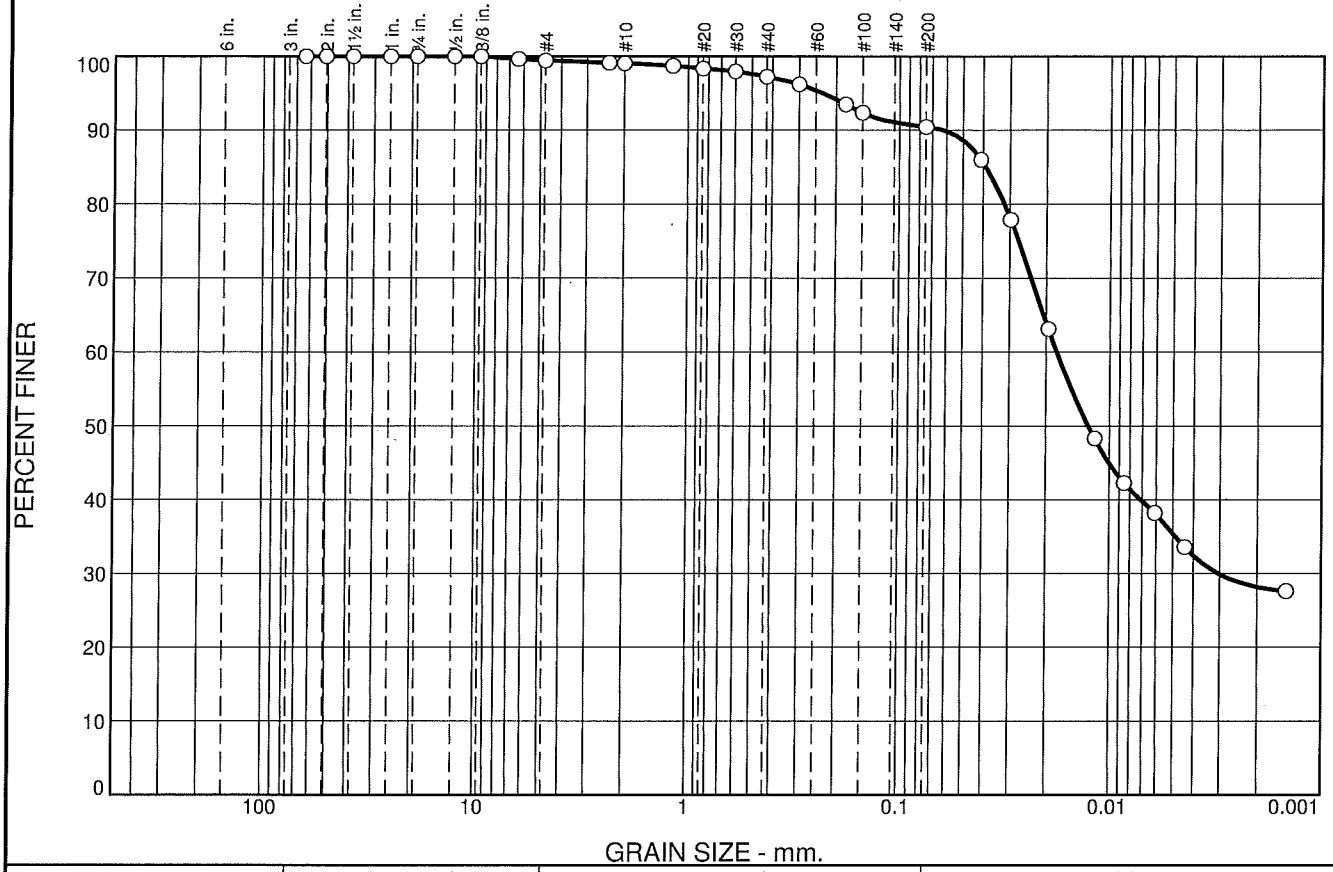
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.6	0.3	1.9	6.7	55.1	35.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.6		
#4	99.4		
#8	99.1		
#10	99.1		
#16	98.7		
#20	98.4		
#30	98.0		
#40	97.2		
#50	96.2		
#80	93.5		
#100	92.4		
#200	90.5		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 21 LL= 41 PI= 20

Coefficients

D_{90}= 0.0624 D_{85}= 0.0388 D_{60}= 0.0179
D_{50}= 0.0126 D_{30}= 0.0030 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-7-6(19)

Remarks

Source of Sample: Lift 1 **Depth:** 382,300N/2,201,100E
Sample Number: T-6 **Date:** 08-26-14

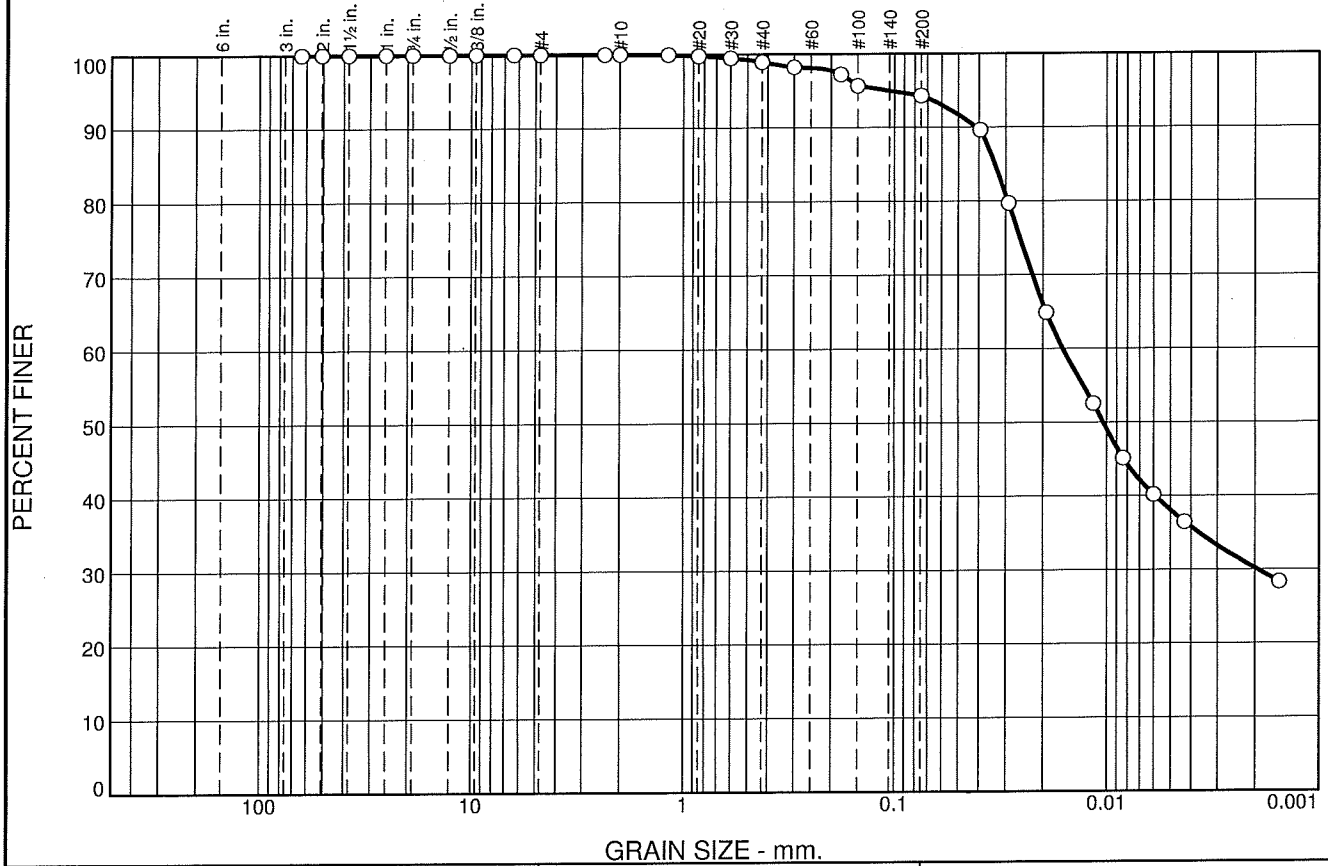
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.1	4.6	56.2	38.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	100.0		
#10	100.0		
#16	99.9		
#20	99.8		
#30	99.4		
#40	98.9		
#50	98.2		
#80	97.2		
#100	95.7		
#200	94.3		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 39 PI= 20

Coefficients

D_{90}= 0.0411 D_{85}= 0.0336 D_{60}= 0.0161
D_{50}= 0.0104 D_{30}= 0.0020 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(19)

Remarks

Source of Sample: Lift 1 **Depth:** 382,800N/2,201,200E
Sample Number: T-7 **Date:** 09-03-14

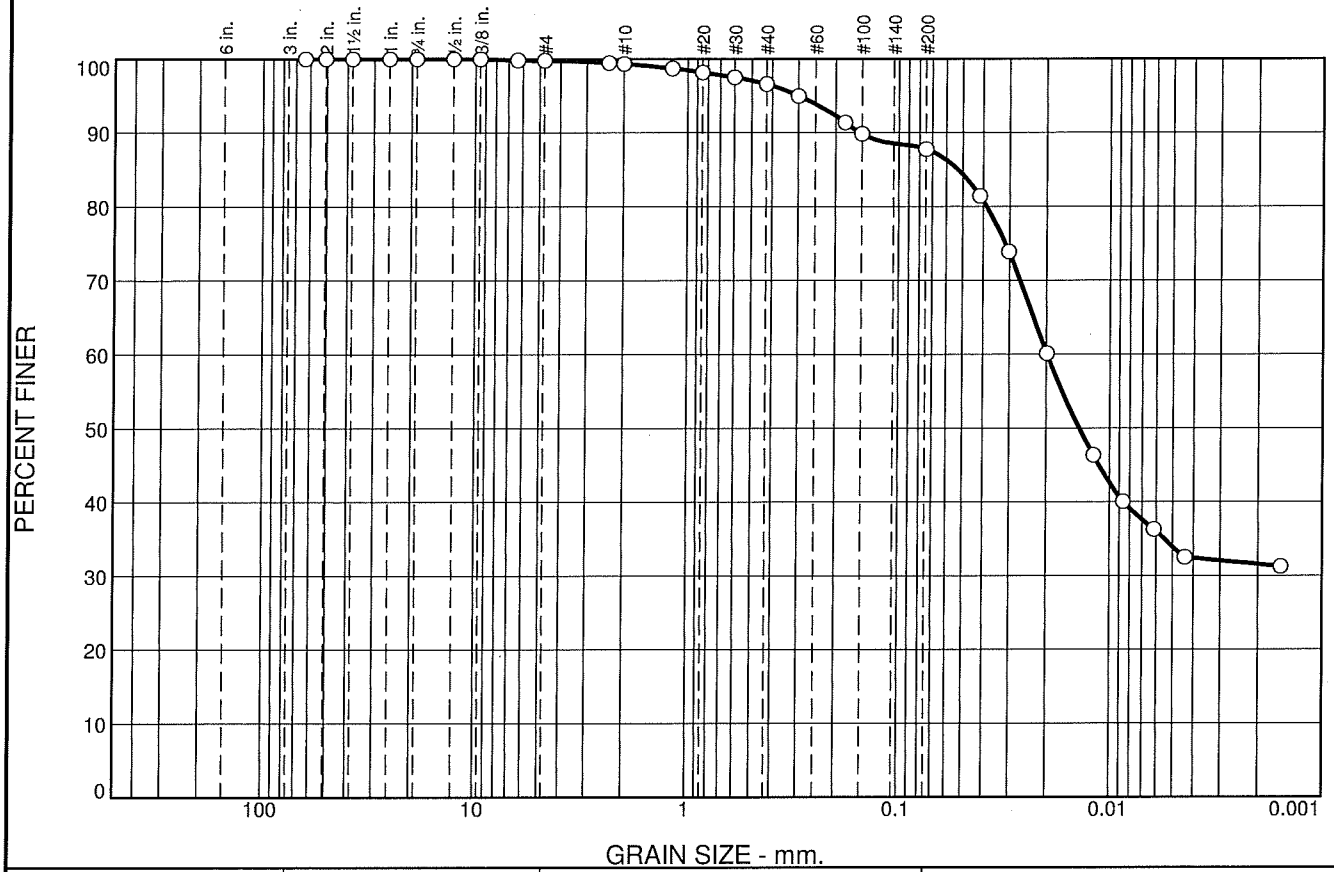
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.5	2.7	8.8	53.9	33.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.9		
#4	99.8		
#8	99.5		
#10	99.3		
#16	98.7		
#20	98.2		
#30	97.5		
#40	96.6		
#50	95.0		
#80	91.4		
#100	89.8		
#200	87.8		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 39 PI= 20

Coefficients

D_{90}= 0.1535 D_{85}= 0.0528 D_{60}= 0.0198
D_{50}= 0.0140 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(18)

Remarks

Source of Sample: Lift 1 **Depth:** 382,400N/2,201,200E
Sample Number: T-8 **Date:** 09-03-14

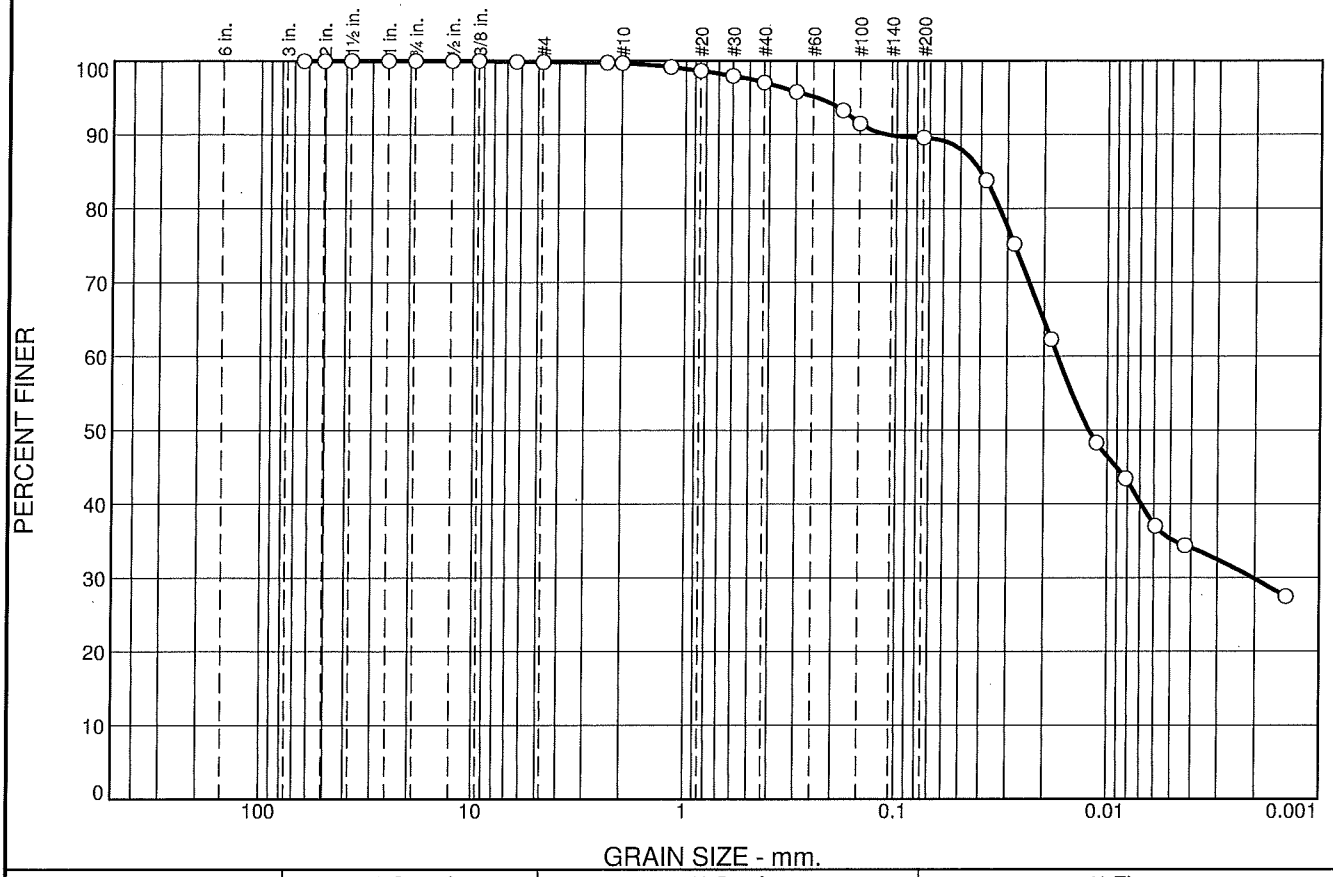
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.2	2.6	7.5	54.4	35.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.9		
#4	99.9		
#8	99.7		
#10	99.7		
#16	99.2		
#20	98.6		
#30	98.0		
#40	97.1		
#50	95.8		
#80	93.3		
#100	91.5		
#200	89.6		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 39 PI= 21

Coefficients

D_{90}= 0.1124 D_{85}= 0.0401 D_{60}= 0.0173
D_{50}= 0.0122 D_{30}= 0.0020 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(19)

Remarks

Source of Sample: Lift 2
Sample Number: T-9

Date: 08-26-14

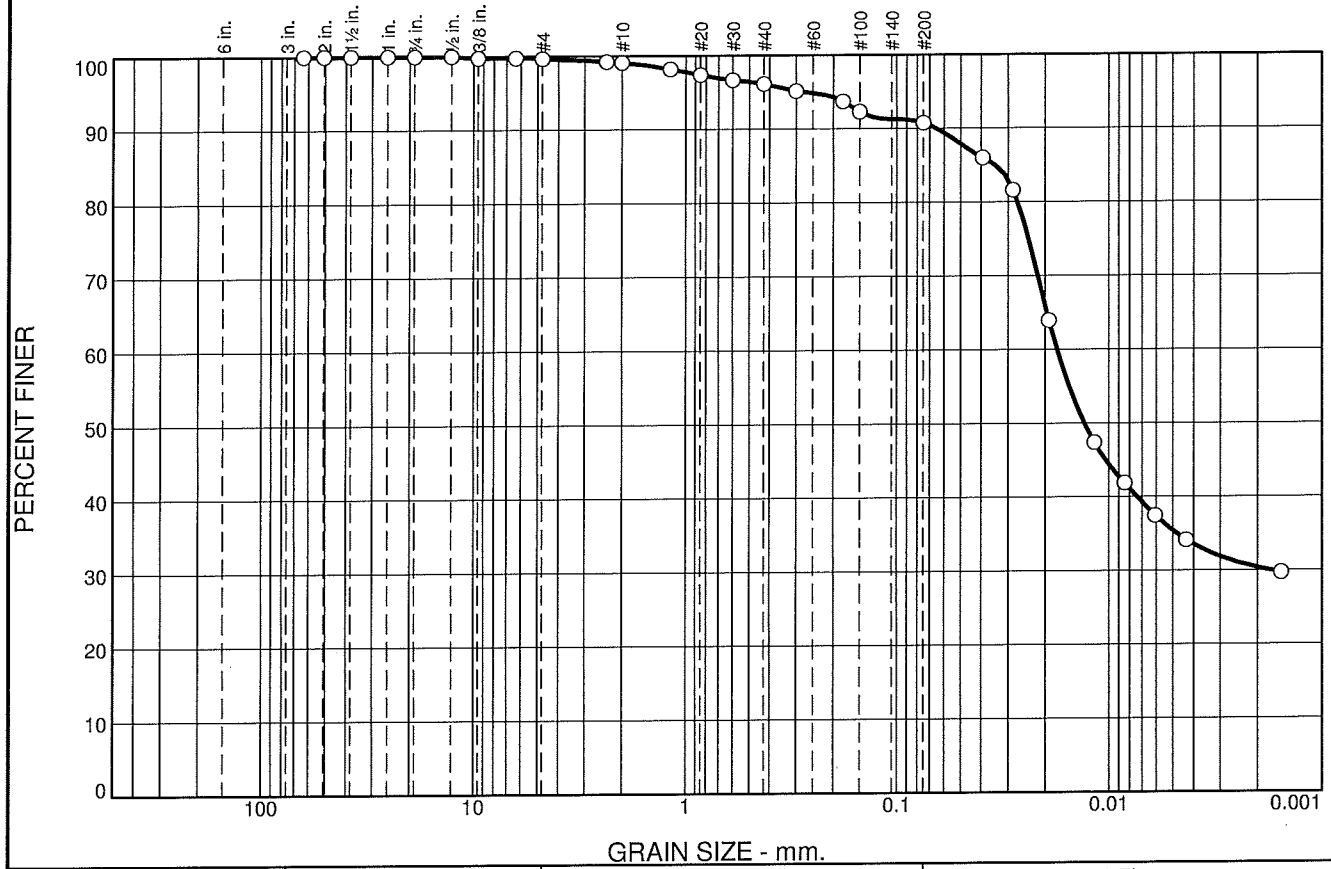
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	0.5	3.0	5.3	55.4	35.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	99.8		
.25	99.8		
#4	99.6		
#8	99.2		
#10	99.1		
#16	98.2		
#20	97.4		
#30	96.7		
#40	96.1		
#50	95.1		
#80	93.7		
#100	92.3		
#200	90.8		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 38 PI= 19

Coefficients

D_{90}= 0.0651 D_{85}= 0.0343 D_{60}= 0.0176
D_{50}= 0.0131 D_{30}= 0.0017 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 2 **Depth:** 382,250N/2,200,850E
Sample Number: T-10 **Date:** 09-03-14

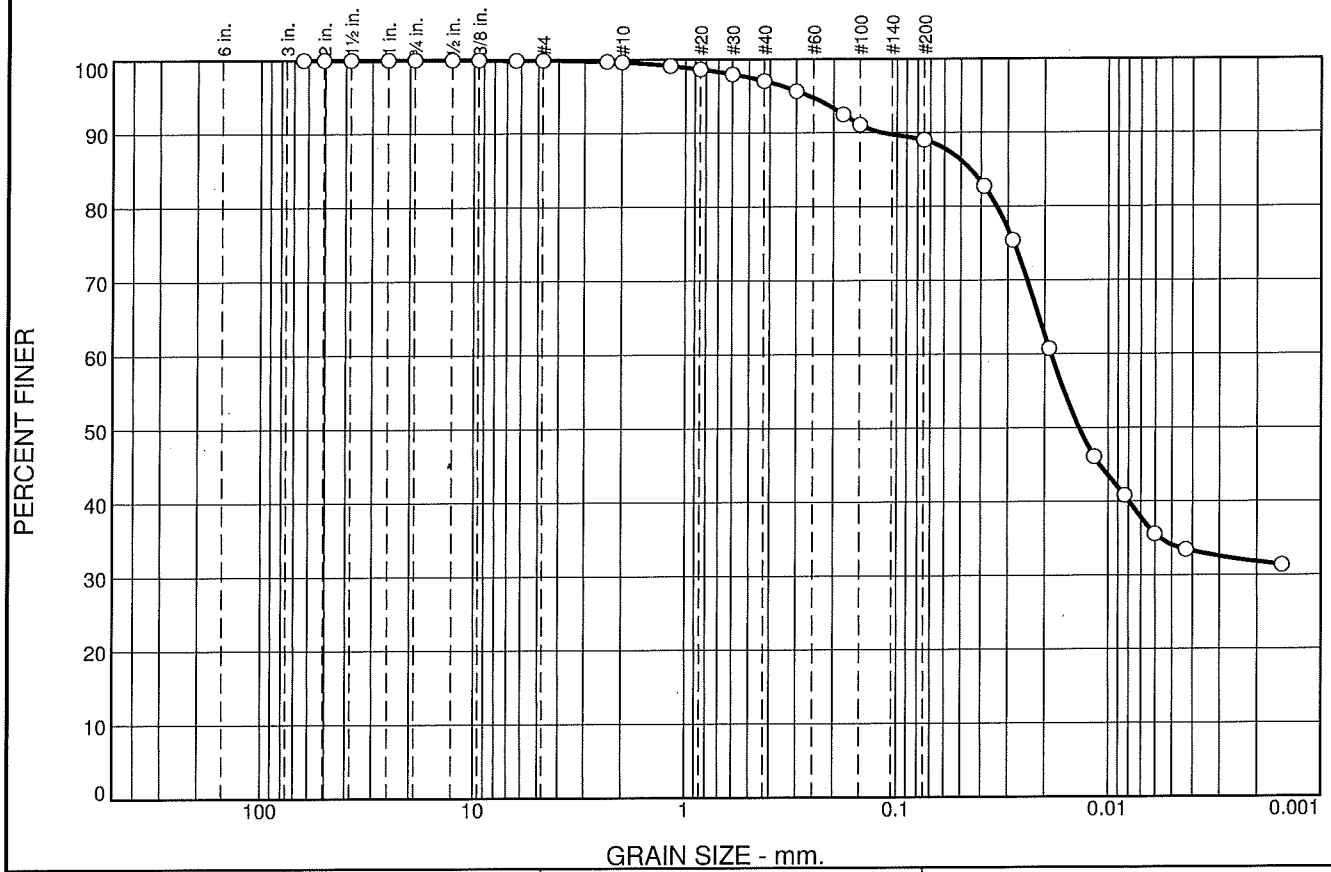
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.3	2.6	8.0	54.9	34.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.9		
#4	99.9		
#8	99.7		
#10	99.6		
#16	99.1		
#20	98.6		
#30	98.0		
#40	97.0		
#50	95.7		
#80	92.5		
#100	91.1		
#200	89.0		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 39 PI= 20

Coefficients

D_{90}= 0.1177 D_{85}= 0.0449 D_{60}= 0.0187
D_{50}= 0.0137 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(18)

Remarks

Source of Sample: Lift 2 **Depth:** 382,450N/2,200,950E
Sample Number: T-11 **Date:** 09-03-14

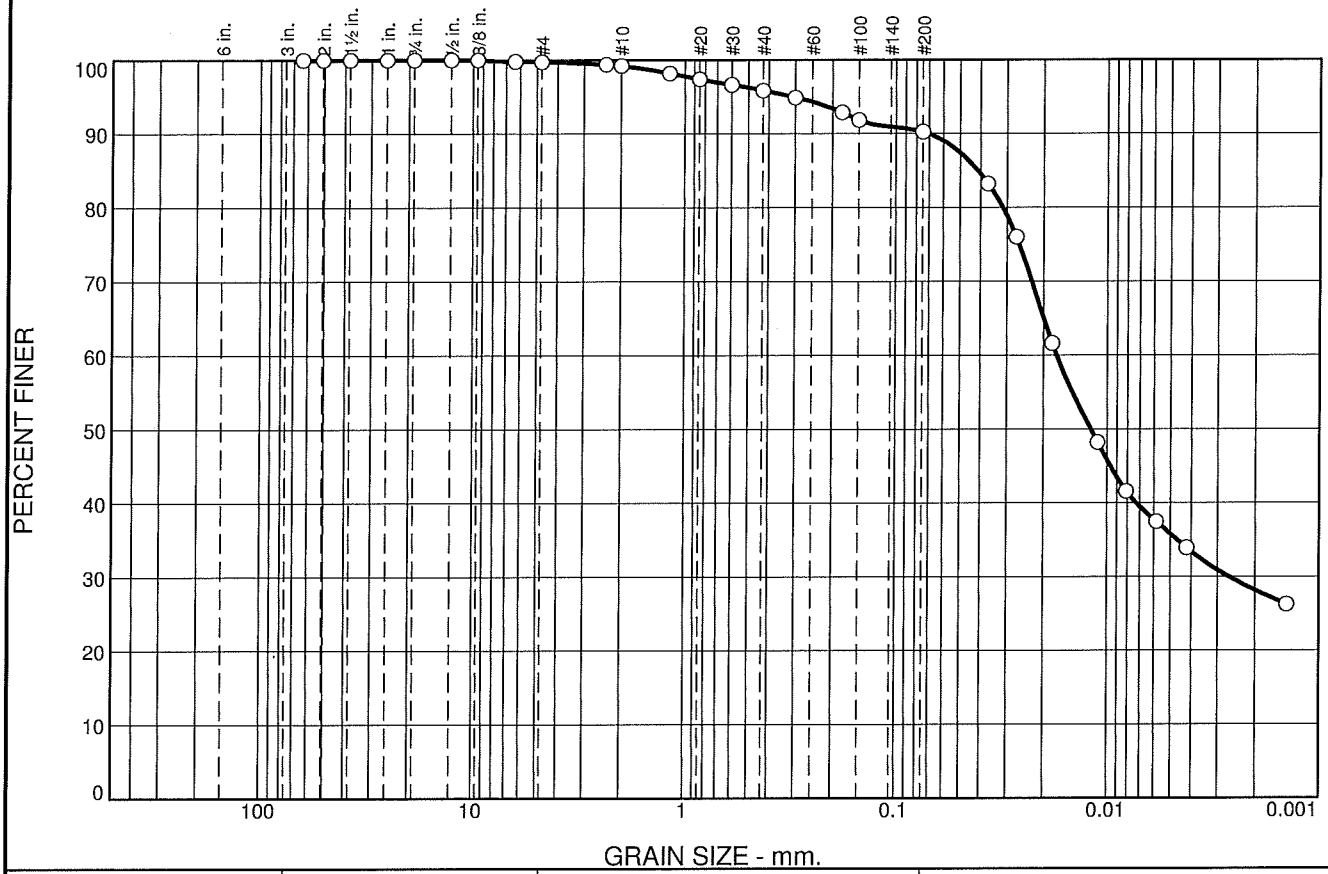
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.5	3.3	5.7	54.4	35.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.8		
#4	99.7		
#8	99.4		
#10	99.2		
#16	98.2		
#20	97.4		
#30	96.6		
#40	95.9		
#50	94.9		
#80	92.9		
#100	91.8		
#200	90.2		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 17 LL= 41 PI= 24

Coefficients

D_{90}= 0.0706 D_{85}= 0.0412 D_{60}= 0.0174
D_{50}= 0.0120 D_{30}= 0.0027 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-7-6(22)

Remarks

Source of Sample: Lift 2
Sample Number: T-12

Date: 08-26-14

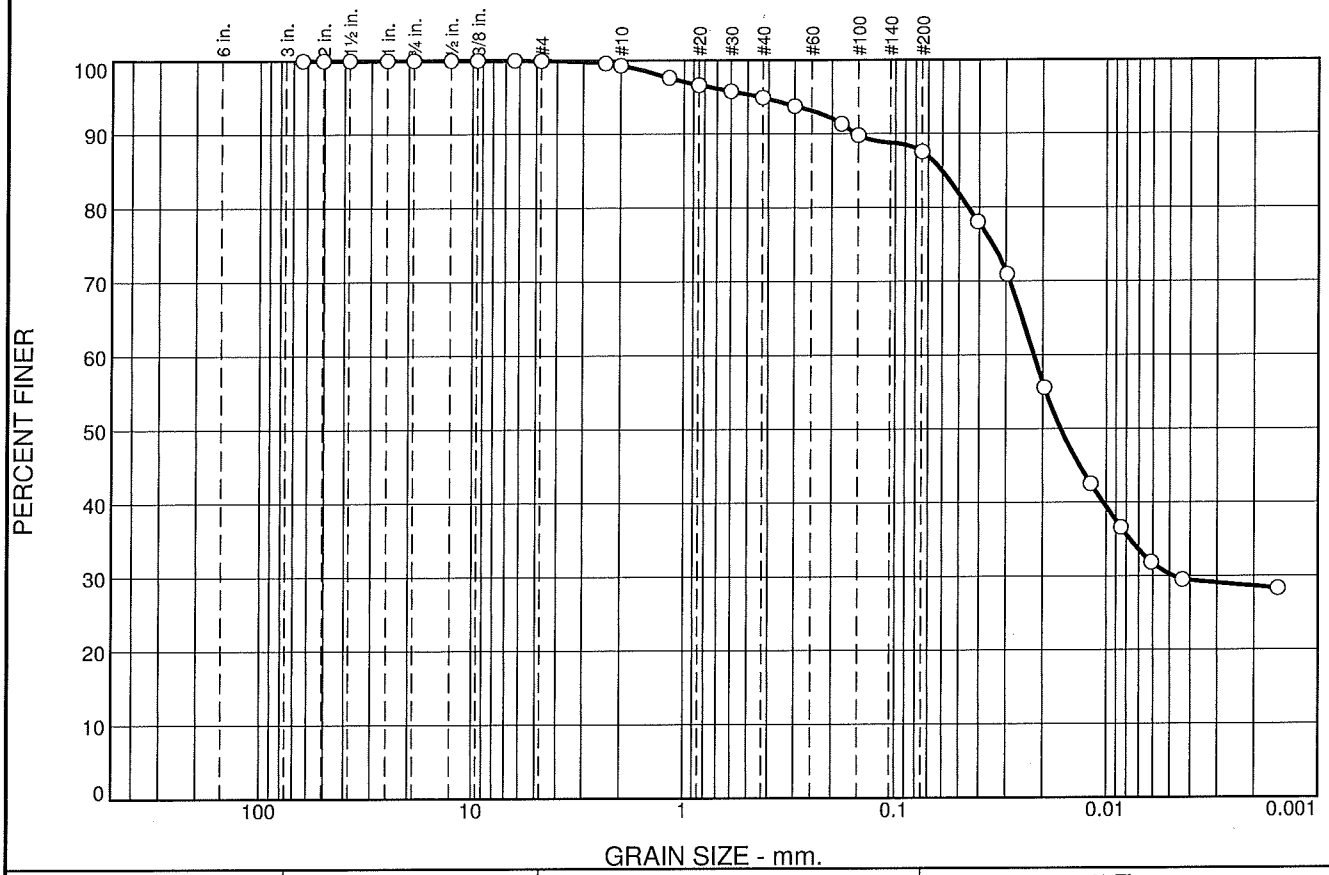
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.7	4.4	7.3	57.4	30.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	99.6		
#10	99.3		
#16	97.6		
#20	96.6		
#30	95.8		
#40	94.9		
#50	93.7		
#80	91.3		
#100	89.8		
#200	87.6		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 20 LL= 38 PI= 18

Coefficients

D_{90}= 0.1540 D_{85}= 0.0604 D_{60}= 0.0221
D_{50}= 0.0165 D_{30}= 0.0048 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Source of Sample: Lift 2 **Depth:** 382,650N/2,201,050E
Sample Number: T-13

Date: 09-03-14

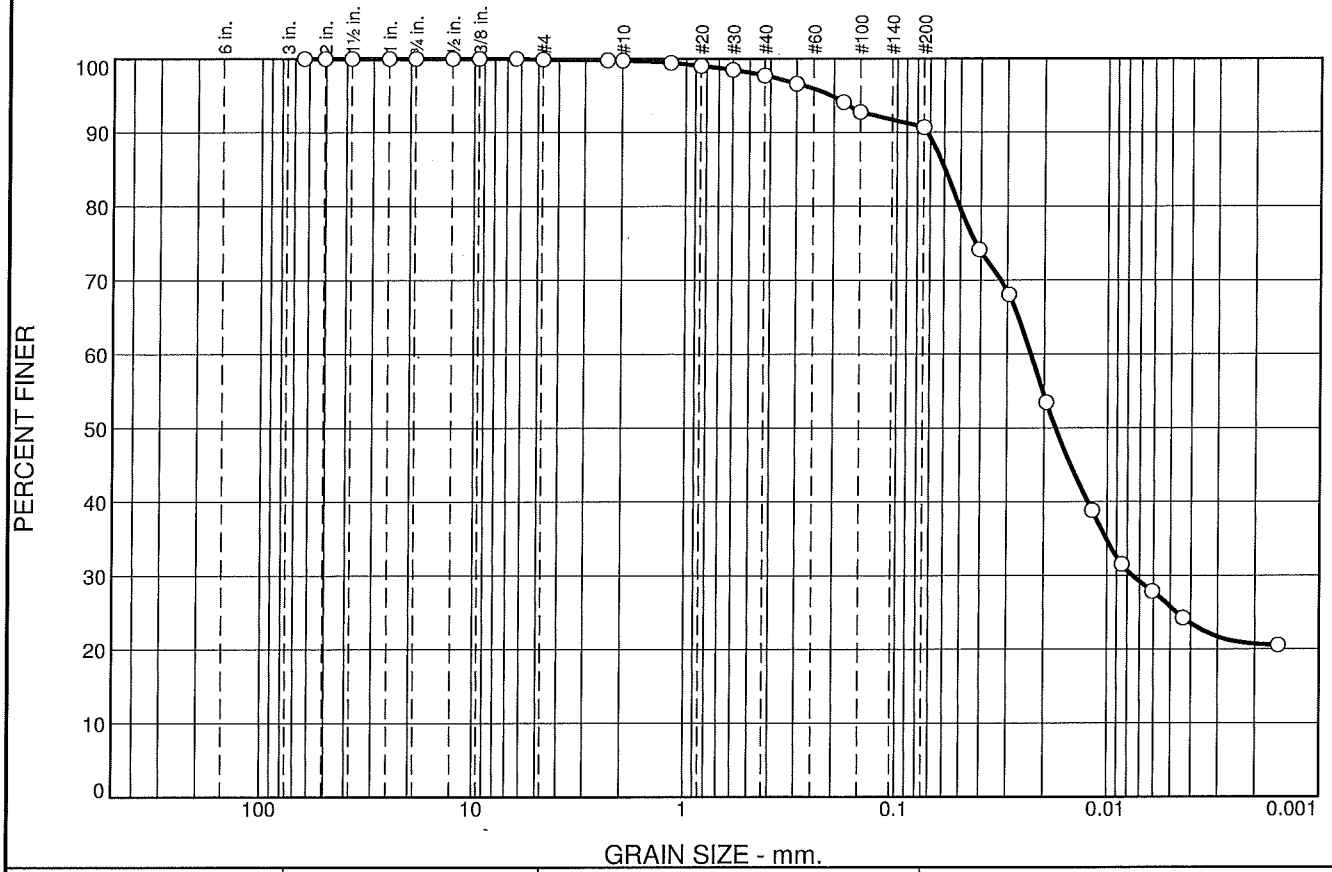
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.1	2.1	7.0	64.9	25.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	99.9		
#8	99.8		
#10	99.8		
#16	99.4		
#20	99.0		
#30	98.5		
#40	97.7		
#50	96.6		
#80	94.1		
#100	92.8		
#200	90.7		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 40 PI= 22

Coefficients

D_{90}= 0.0721 D_{85}= 0.0594 D_{60}= 0.0232
D_{50}= 0.0177 D_{30}= 0.0076 D_{15}=
D_{10}= C_u= C_c=

Classification

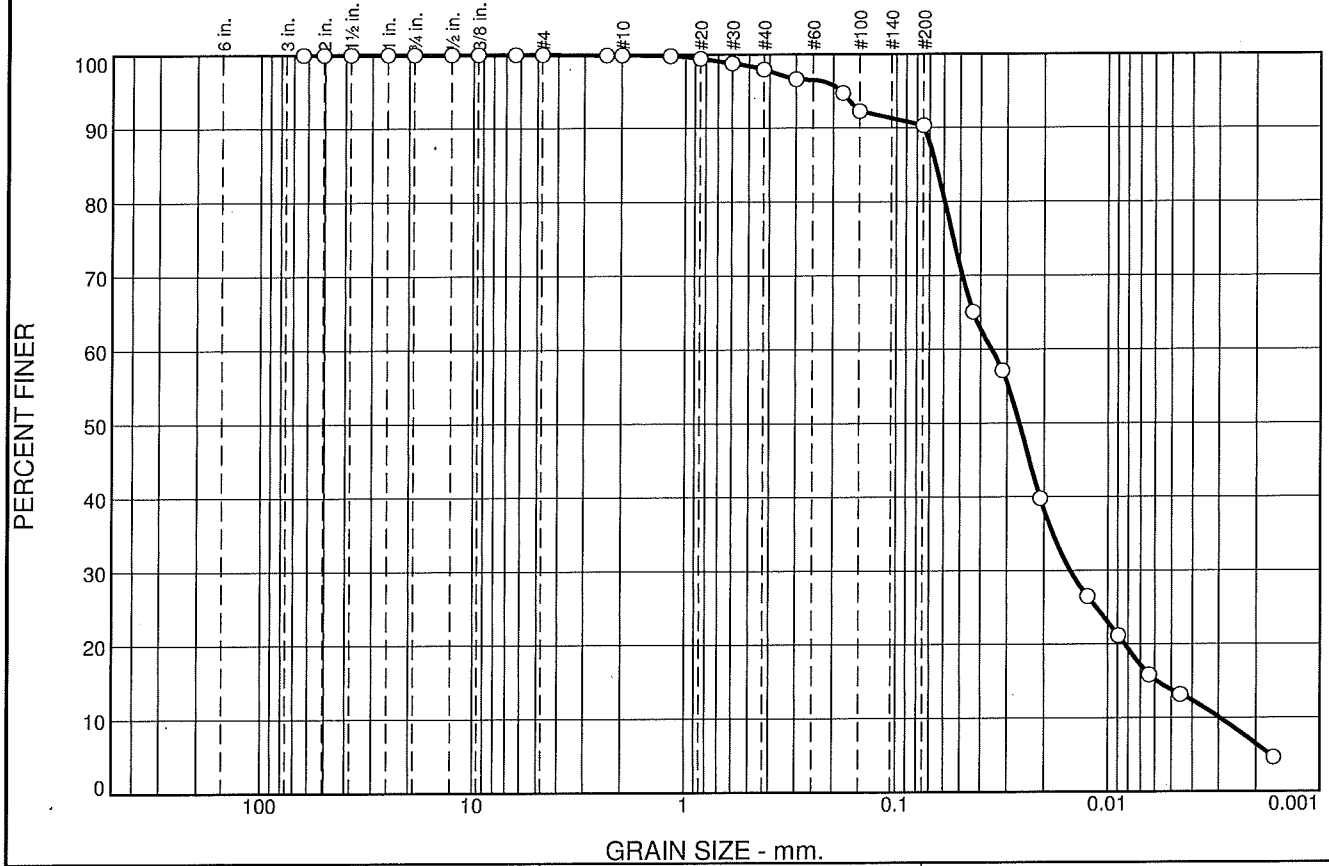
USCS= CL AASHTO= A-6(20)

Remarks

Source of Sample: Lift 2 **Depth:** 382,250N/2,201,050E
Sample Number: T-14 **Date:** 09-03-14

TRC Environmental Corp.	**Client:** Dane County
	Project: Dane County Rodefeld
Madison, Wisconsin	**Project No:** 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	1.9	7.6	76.6	13.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	99.9		
#10	99.9		
#16	99.8		
#20	99.4		
#30	98.8		
#40	98.0		
#50	96.7		
#80	94.8		
#100	92.3		
#200	90.4		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 38 PI= 19

Coefficients

D_{90}= 0.0741 D_{85}= 0.0654 D_{60}= 0.0354
D_{50}= 0.0262 D_{30}= 0.0150 D_{15}= 0.0059
D_{10}= 0.0030 C_u= 11.99 C_c= 2.15

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 2 **Depth:** 382,150N/2,201,150E
Sample Number: T-15 **Date:** 9-8-14

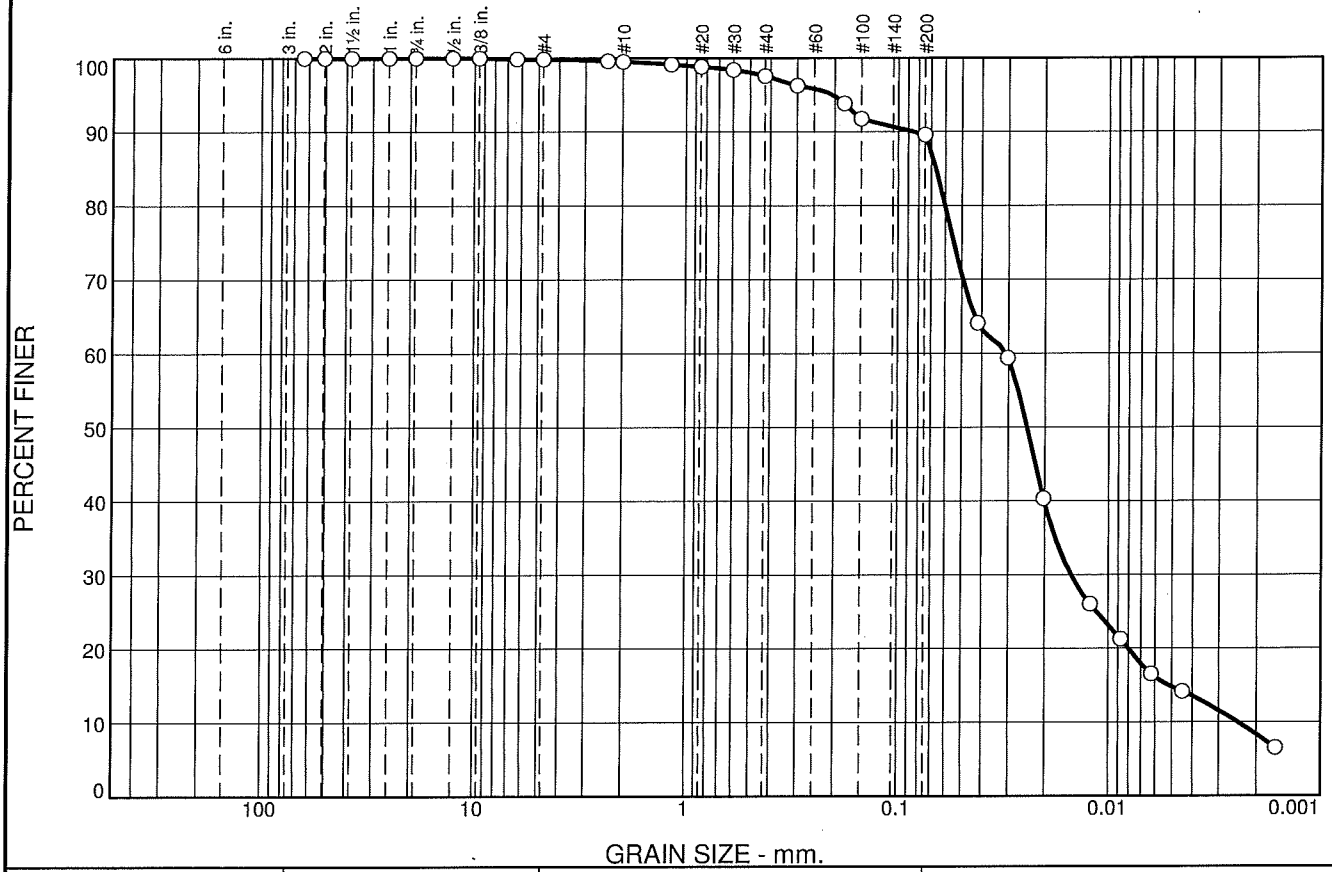
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.3	1.9	8.0	74.8	14.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.9		
#4	99.8		
#8	99.6		
#10	99.5		
#16	99.1		
#20	98.8		
#30	98.4		
#40	97.6		
#50	96.3		
#80	93.8		
#100	91.8		
#200	89.6		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 38 PI= 19

Coefficients

D_{90}= 0.0855 D_{85}= 0.0665 D_{60}= 0.0310
D_{50}= 0.0243 D_{30}= 0.0150 D_{15}= 0.0052
D_{10}= 0.0025 C_u= 12.63 C_c= 2.97

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 2 **Depth:** 382,750N/2,201,150E
Sample Number: T-16 **Date:** 9-8-14

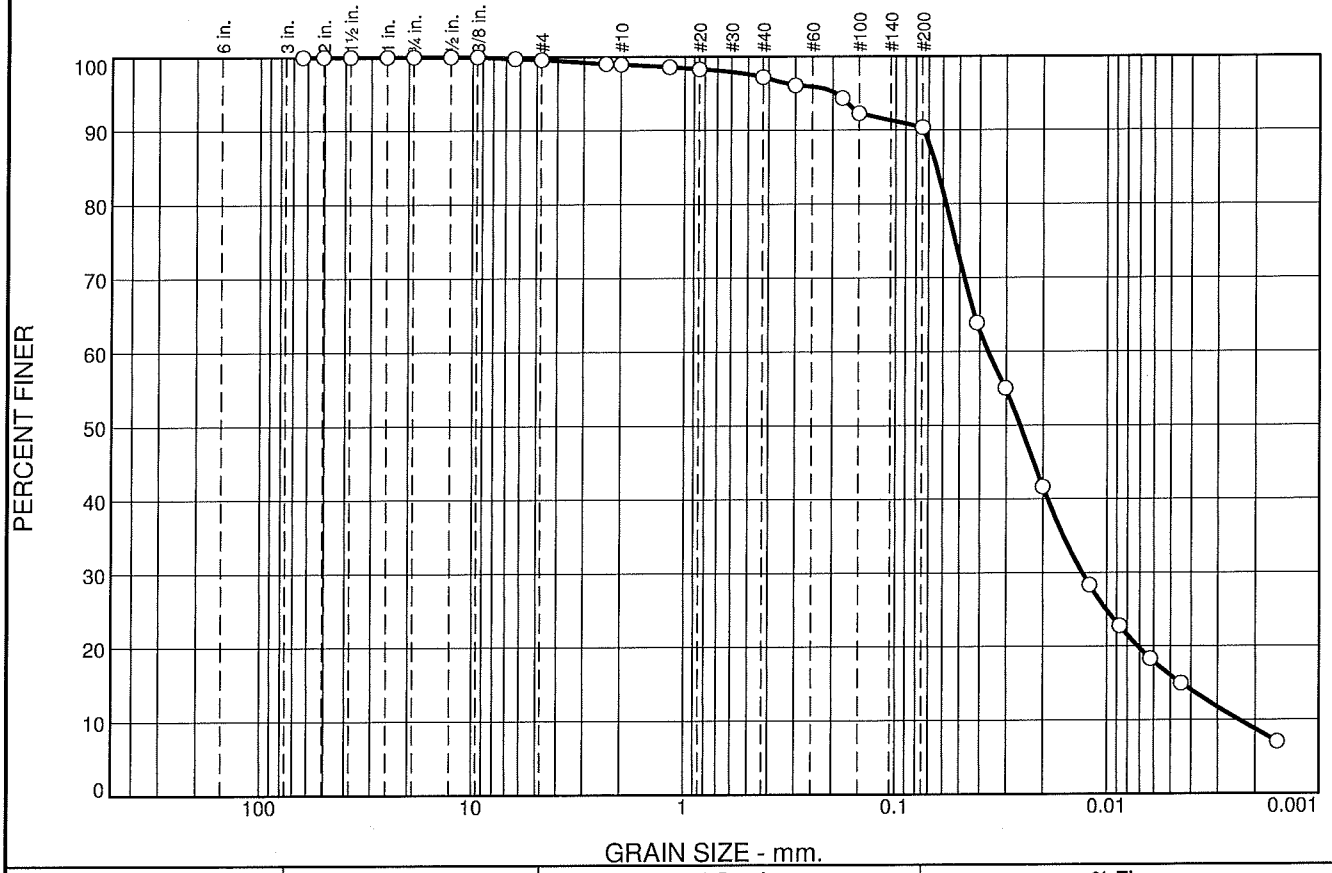
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	0.6	1.8	6.8	74.3	16.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
.25	99.7		
#4	99.6		
#8	99.0		
#10	99.0		
#16	98.6		
#20	98.3		
#40	97.2		
#50	96.1		
#80	94.3		
#100	92.3		
#200	90.4		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 21 LL= 37 PI= 16

Coefficients

D_{90}= 0.0740 D_{85}= 0.0645 D_{60}= 0.0366
D_{50}= 0.0257 D_{30}= 0.0131 D_{15}= 0.0045
D_{10}= 0.0024 C_u= 15.42 C_c= 1.97

Classification

USCS= CL AASHTO= A-6(15)

Remarks

Source of Sample: Lift 3 **Depth:** 382,500N/2,201,200E
Sample Number: T-17 **Date:** 9-15-14

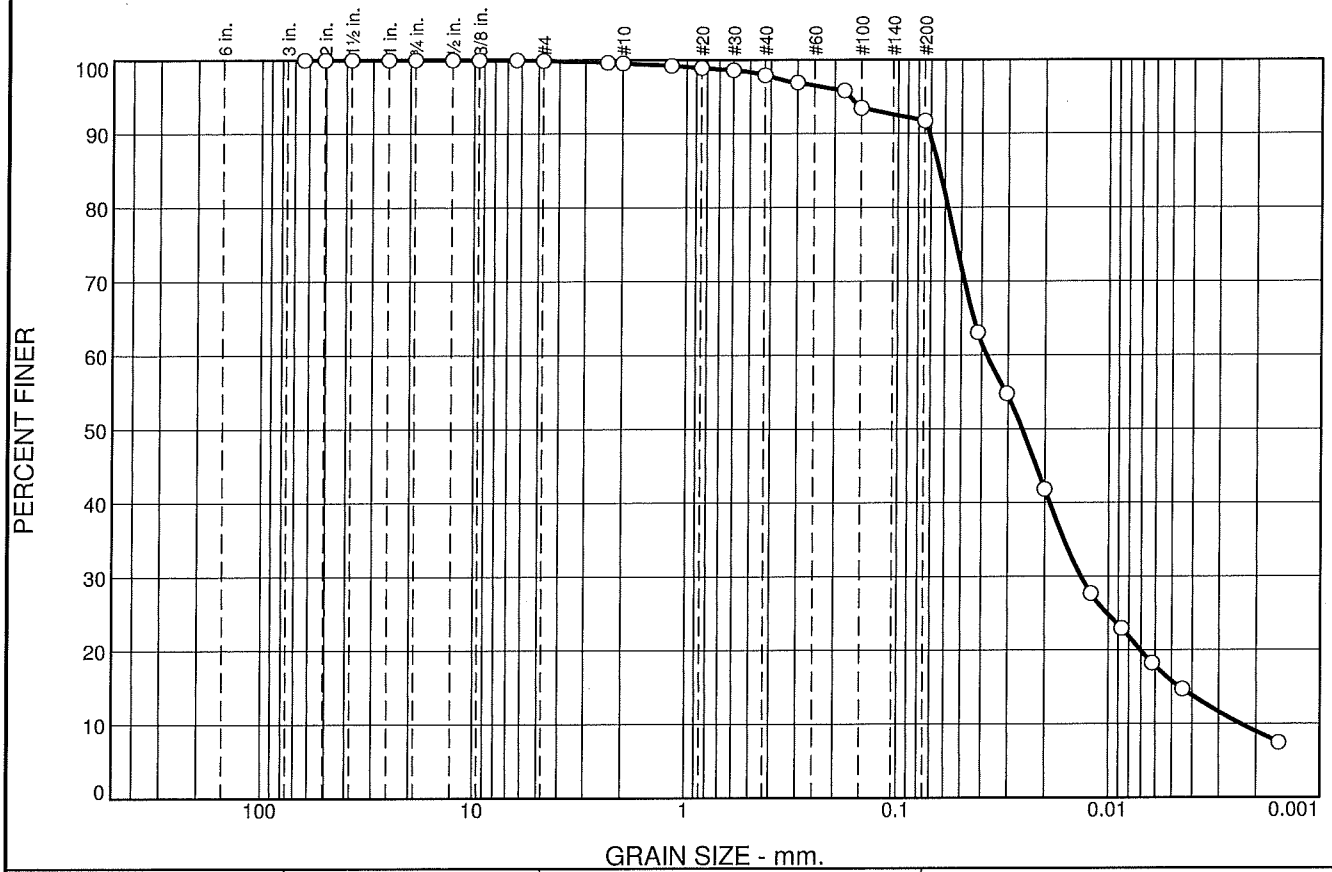
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.4	1.6	6.2	75.9	15.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	100.0		
0.375	100.0		
0.25	100.0		
#4	99.9		
#8	99.6		
#10	99.5		
#16	99.2		
#20	98.9		
#30	98.6		
#40	97.9		
#50	96.9		
#80	95.9		
#100	93.5		
#200	91.7		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 21 LL= 38 PI= 17

Coefficients

D_{90}= 0.0712 D_{85}= 0.0636 D_{60}= 0.0380
D_{50}= 0.0257 D_{30}= 0.0135 D_{15}= 0.0046
D_{10}= 0.0024 C_u= 16.14 C_c= 2.04

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Source of Sample: Lift 3 **Depth:** 382,200N/2,201,000E
Sample Number: T-18 **Date:** 9-12-14

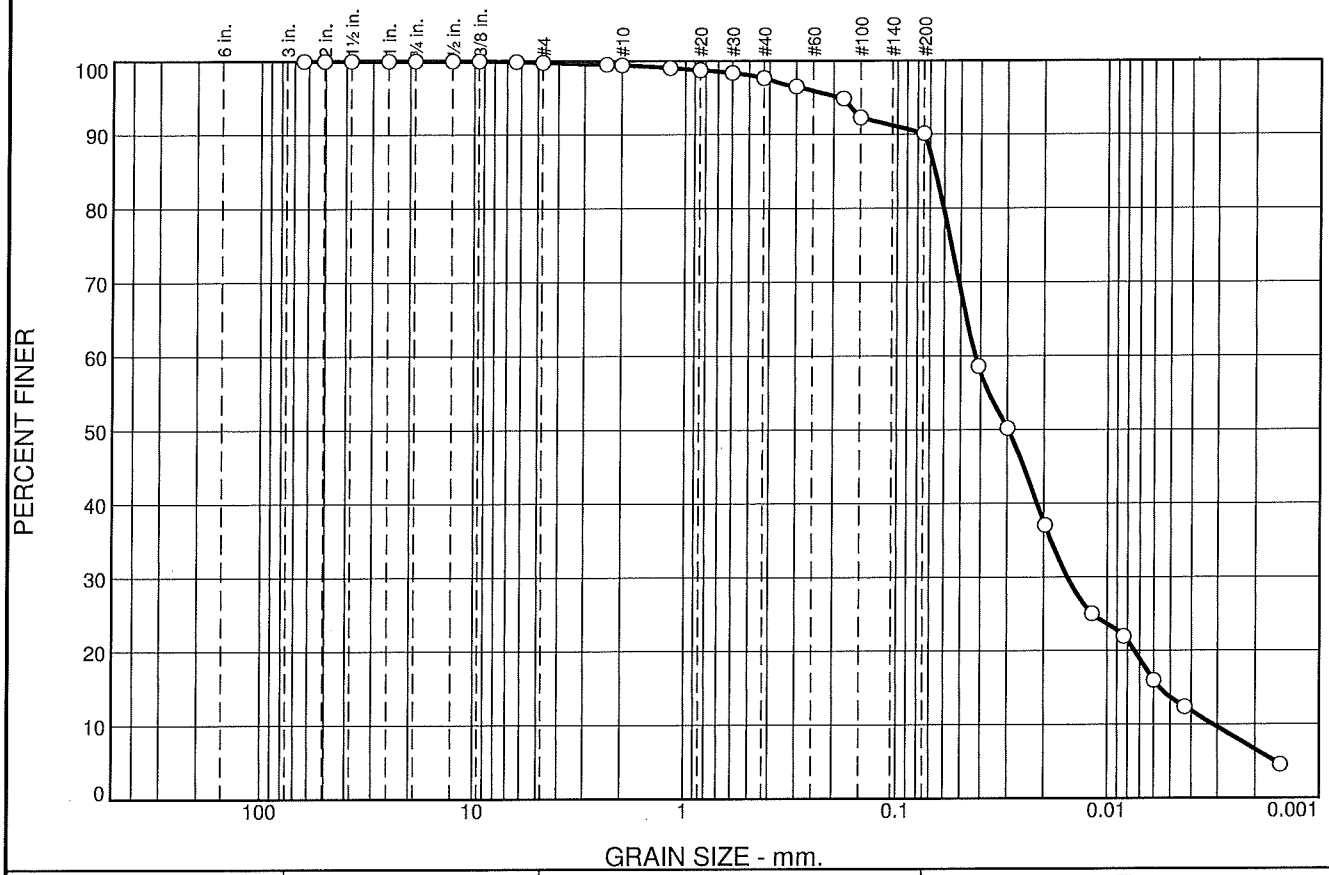
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.4	1.7	7.5	76.5	13.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	100.0		
0.375	100.0		
0.25	99.9		
#4	99.8		
#8	99.5		
#10	99.4		
#16	99.1		
#20	98.8		
#30	98.4		
#40	97.7		
#50	96.5		
#80	94.9		
#100	92.3		
#200	90.2		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 22 LL= 37 PI= 15

Coefficients

D_{90}= 0.0746 D_{85}= 0.0662 D_{60}= 0.0424
D_{50}= 0.0297 D_{30}= 0.0155 D_{15}= 0.0056
D_{10}= 0.0031 C_u= 13.52 C_c= 1.80

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Source of Sample: Lift 3 **Depth:** 382,200N/2,201,000E
Sample Number: T-19 **Date:** 9-15-14

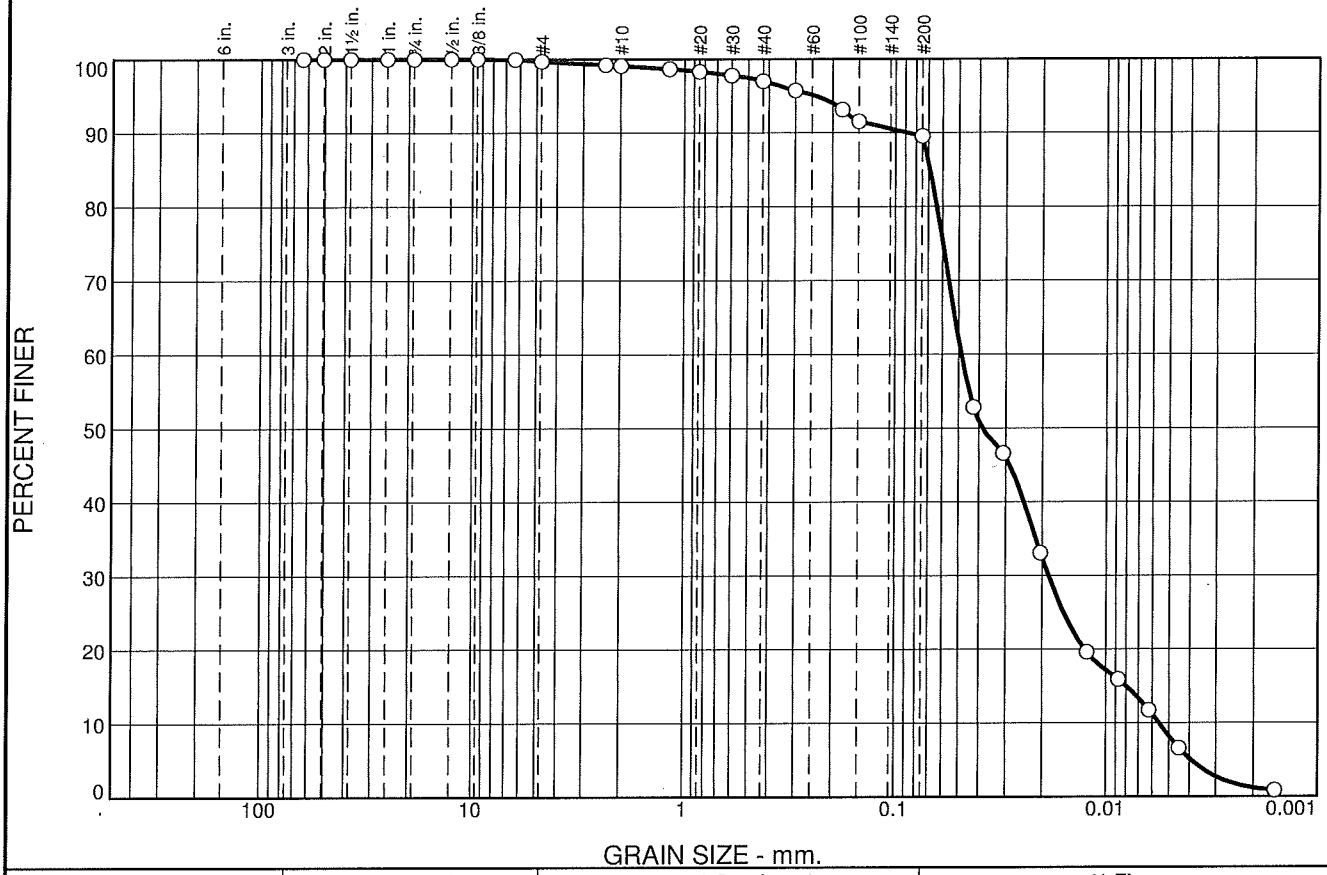
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.6	2.1	7.5	81.3	8.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	100.0		
0.375	100.0		
0.25	100.0		
#4	99.7		
#8	99.2		
#10	99.1		
#16	98.7		
#20	98.3		
#30	97.8		
#40	97.0		
#50	95.7		
#80	93.1		
#100	91.6		
#200	89.5		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 20 LL= 36 PI= 16

Coefficients

D_{90}= 0.0879 D_{85}= 0.0688 D_{60}= 0.0485
D_{50}= 0.0386 D_{30}= 0.0187 D_{15}= 0.0080
D_{10}= 0.0056 C_u= 8.70 C_c= 1.29

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Source of Sample: Lift 3 **Depth:** 382,300N/2,200,900E
Sample Number: T-20 **Date:** 09-15-14

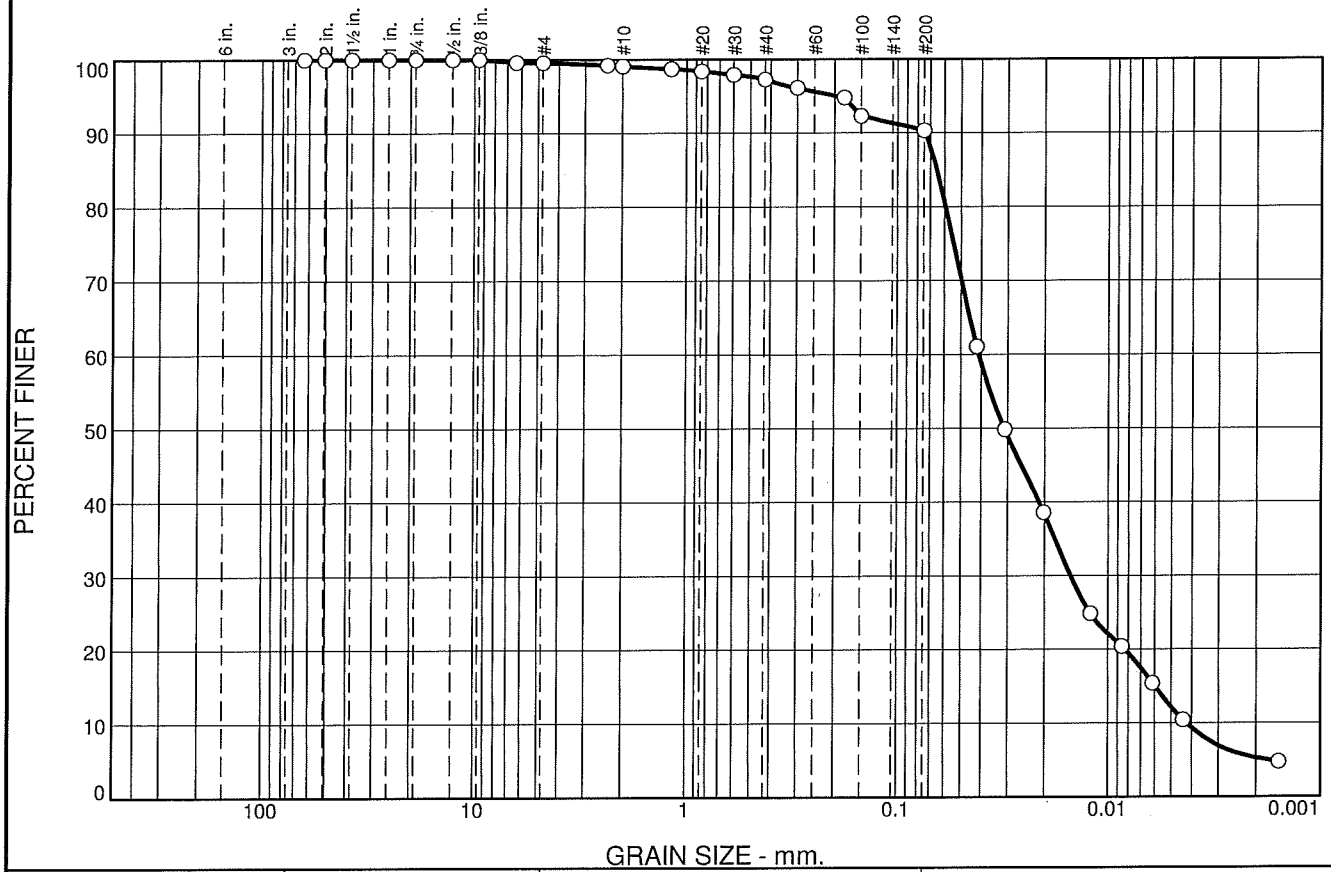
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.5	0.4	1.8	6.9	78.2	12.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	100.0		
0.375	100.0		
0.25	99.6		
#4	99.5		
#8	99.2		
#10	99.1		
#16	98.7		
#20	98.4		
#30	97.9		
#40	97.3		
#50	96.1		
#80	94.8		
#100	92.3		
#200	90.4		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 17 LL= 43 PI= 26

Coefficients

D_{90}= 0.0741 D_{85}= 0.0652 D_{60}= 0.0412
D_{50}= 0.0311 D_{30}= 0.0150 D_{15}= 0.0060
D_{10}= 0.0042 C_u= 9.69 C_c= 1.29

Classification

USCS= CL AASHTO= A-7-6(24)

Remarks

Source of Sample: Lift 3 **Depth:** 382,500N/2,201,000E
Sample Number: T-21 **Date:** 09-15-14

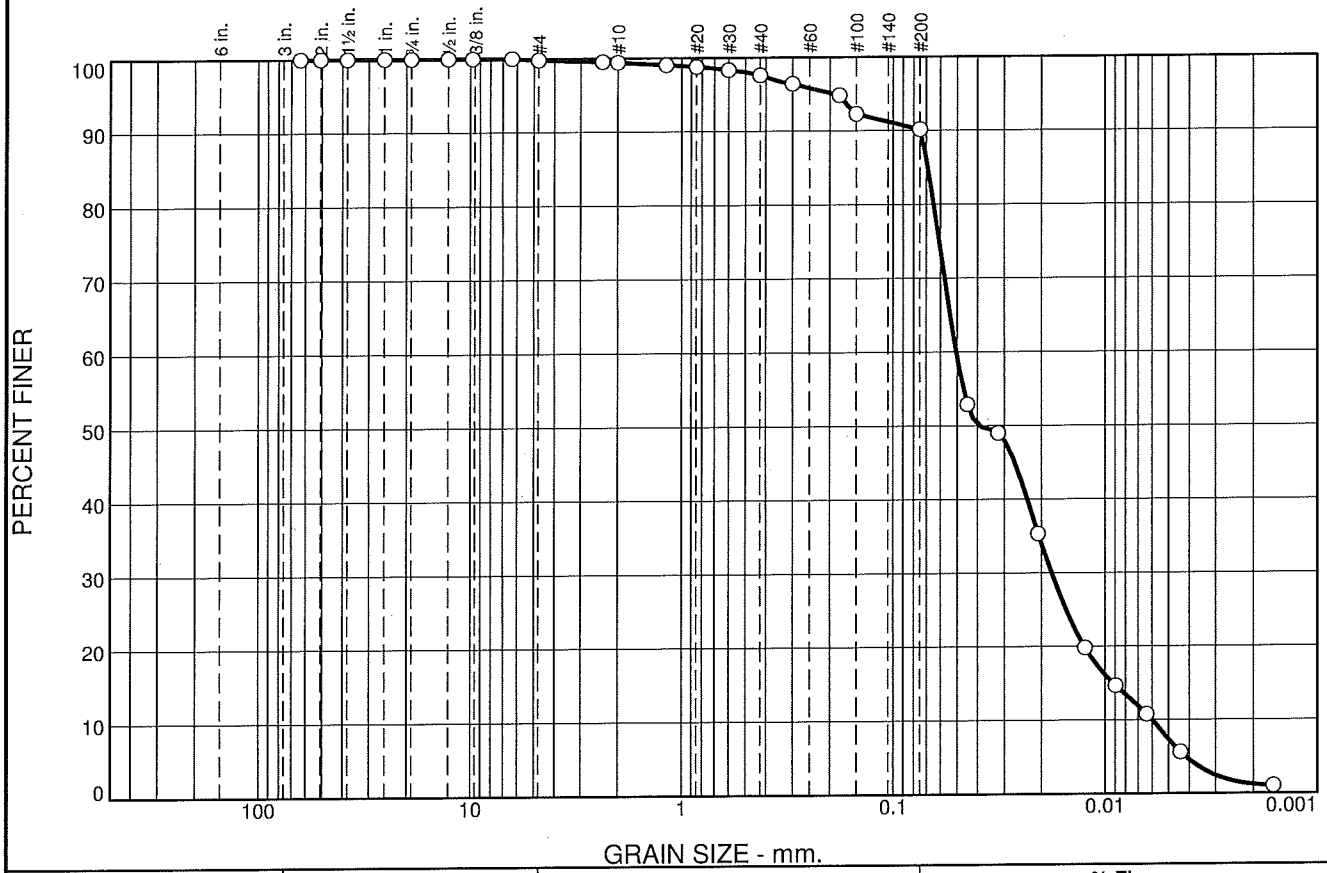
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.4	1.8	7.4	82.8	7.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	100.0		
0.385	100.0		
0.25	100.0		
#4	99.8		
#8	99.5		
#10	99.4		
#16	99.1		
#20	98.8		
#30	98.3		
#40	97.6		
#50	96.4		
#80	94.9		
#100	92.3		
#200	90.2		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 38 PI= 19

Coefficients

D_{90}= 0.0748 D_{85}= 0.0690 D_{60}= 0.0506
D_{50}= 0.0394 D_{30}= 0.0179 D_{15}= 0.0092
D_{10}= 0.0060 C_u= 8.44 C_c= 1.06

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 3 **Depth:** 382,700N/2,200,900E
Sample Number: T-22 **Date:** 09-15-14

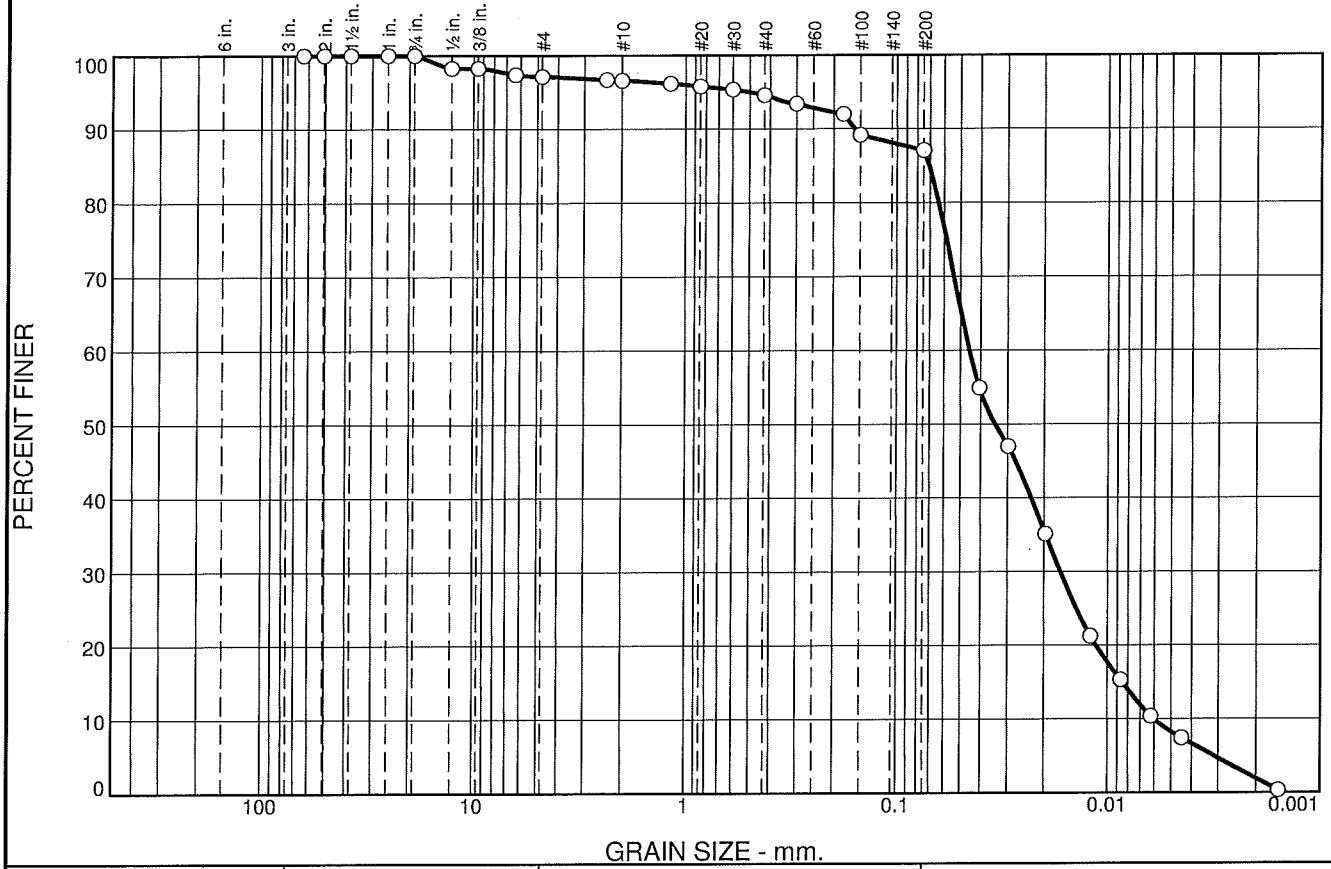
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.9	0.5	2.0	7.5	78.8	8.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	98.3		
0.375	98.3		
0.25	97.4		
#4	97.1		
#8	96.7		
#10	96.6		
#16	96.2		
#20	95.8		
#30	95.3		
#40	94.6		
#50	93.4		
#80	92.0		
#100	89.2		
#200	87.1		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 38 PI= 20

Coefficients

D_{90}= 0.1594 D_{85}= 0.0708 D_{60}= 0.0453
D_{50}= 0.0343 D_{30}= 0.0168 D_{15}= 0.0085
D_{10}= 0.0060 C_u= 7.52 C_c= 1.03

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 3 **Depth:** 382,600N/2,201,100E
Sample Number: T-23 **Date:**

TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.8	7.9	78.0	12.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
0.75	100.0		
0.50	100.0		
0.375	100.0		
0.25	100.0		
#4	100.0		
#8	100.0		
#10	100.0		
#16	99.7		
#20	99.4		
#30	99.0		
#40	98.2		
#50	97.0		
#80	95.8		
#100	92.6		
#200	90.3		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 38 PI= 20

Coefficients

D_{90}= 0.0743 D_{85}= 0.0668 D_{60}= 0.0444
D_{50}= 0.0313 D_{30}= 0.0139 D_{15}= 0.0059
D_{10}= 0.0043 C_u= 10.35 C_c= 1.01

Classification

USCS= CL AASHTO= A-6(18)

Remarks

Source of Sample: Lift 3 **Depth:** 382,000N/2,201,100E
Sample Number: T-24 **Date:**

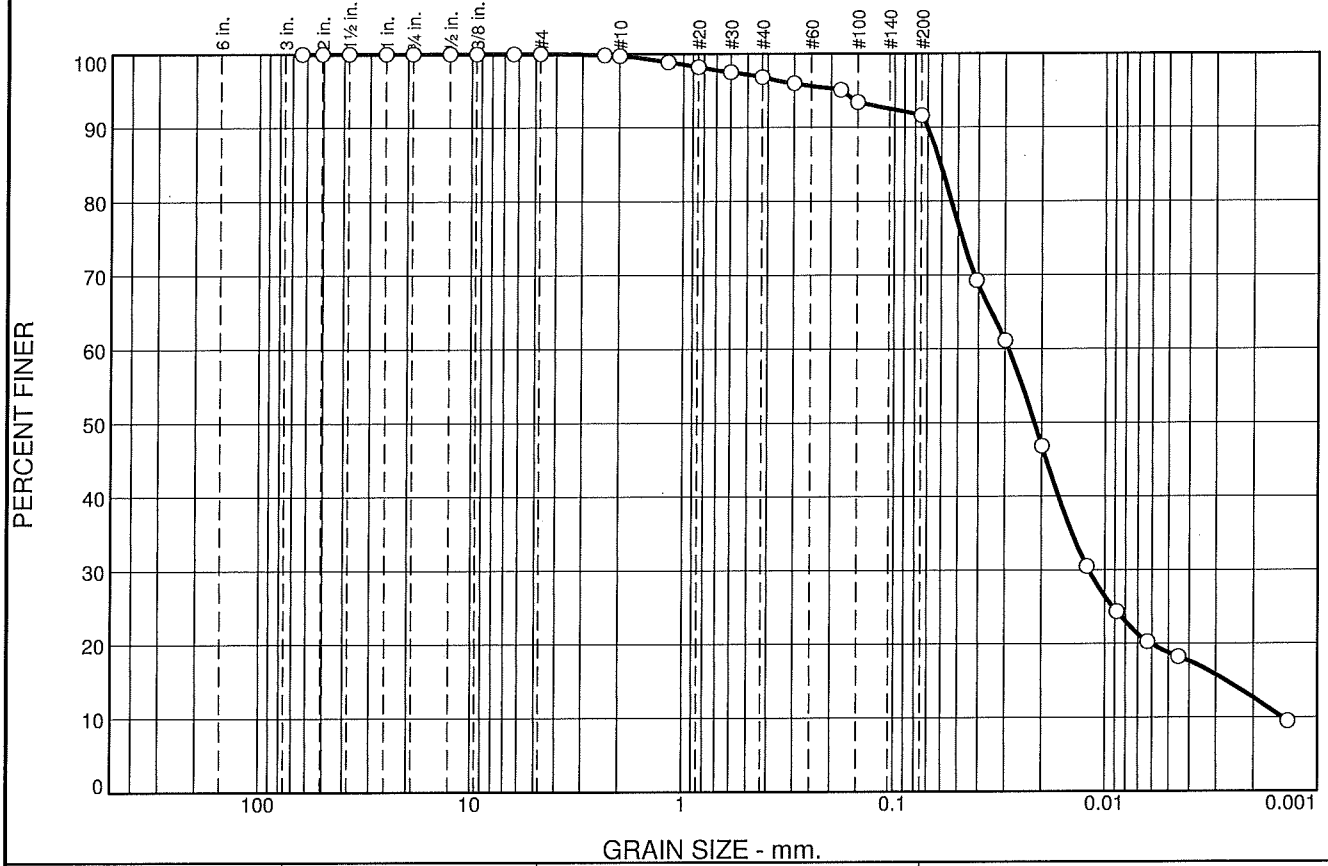
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.3	2.9	5.1	72.9	18.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	99.8		
#10	99.7		
#16	98.9		
#20	98.2		
#30	97.5		
#40	96.8		
#50	96.0		
#80	95.1		
#100	93.4		
#200	91.7		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 21 LL= 39 PI= 18

Coefficients

D_{90}= 0.0702 D_{85}= 0.0607 D_{60}= 0.0288
D_{50}= 0.0217 D_{30}= 0.0119 D_{15}= 0.0027
D_{10}= 0.0015 C_u= 19.79 C_c= 3.41

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 4 **Depth:** 382,450N/2,200,950E
Sample Number: T-25 **Date:** 09-18-14

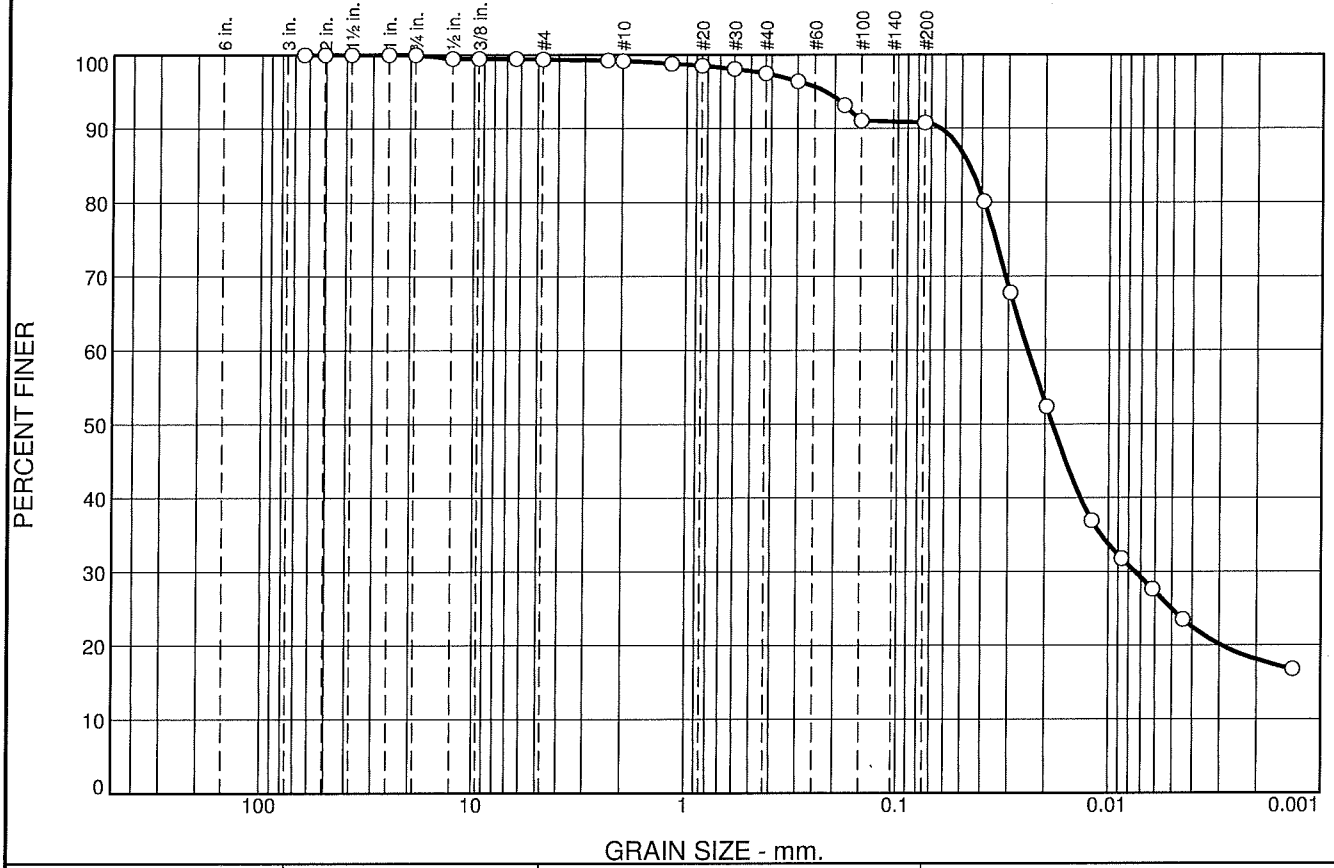
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.6	0.2	1.7	6.7	65.8	25.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	99.5		
.375	99.5		
.25	99.5		
#4	99.4		
#8	99.2		
#10	99.2		
#16	98.8		
#20	98.5		
#30	98.1		
#40	97.5		
#50	96.4		
#80	93.2		
#100	91.0		
#200	90.8		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 20 LL= 38 PI= 18

Coefficients

D_{90}= 0.0627 D_{85}= 0.0460 D_{60}= 0.0242
D_{50}= 0.0184 D_{30}= 0.0075 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(17)

Remarks

Source of Sample: Lift 4 **Depth:** 382,550N/2,200,850E
Sample Number: T-26 **Date:** 09-18-14

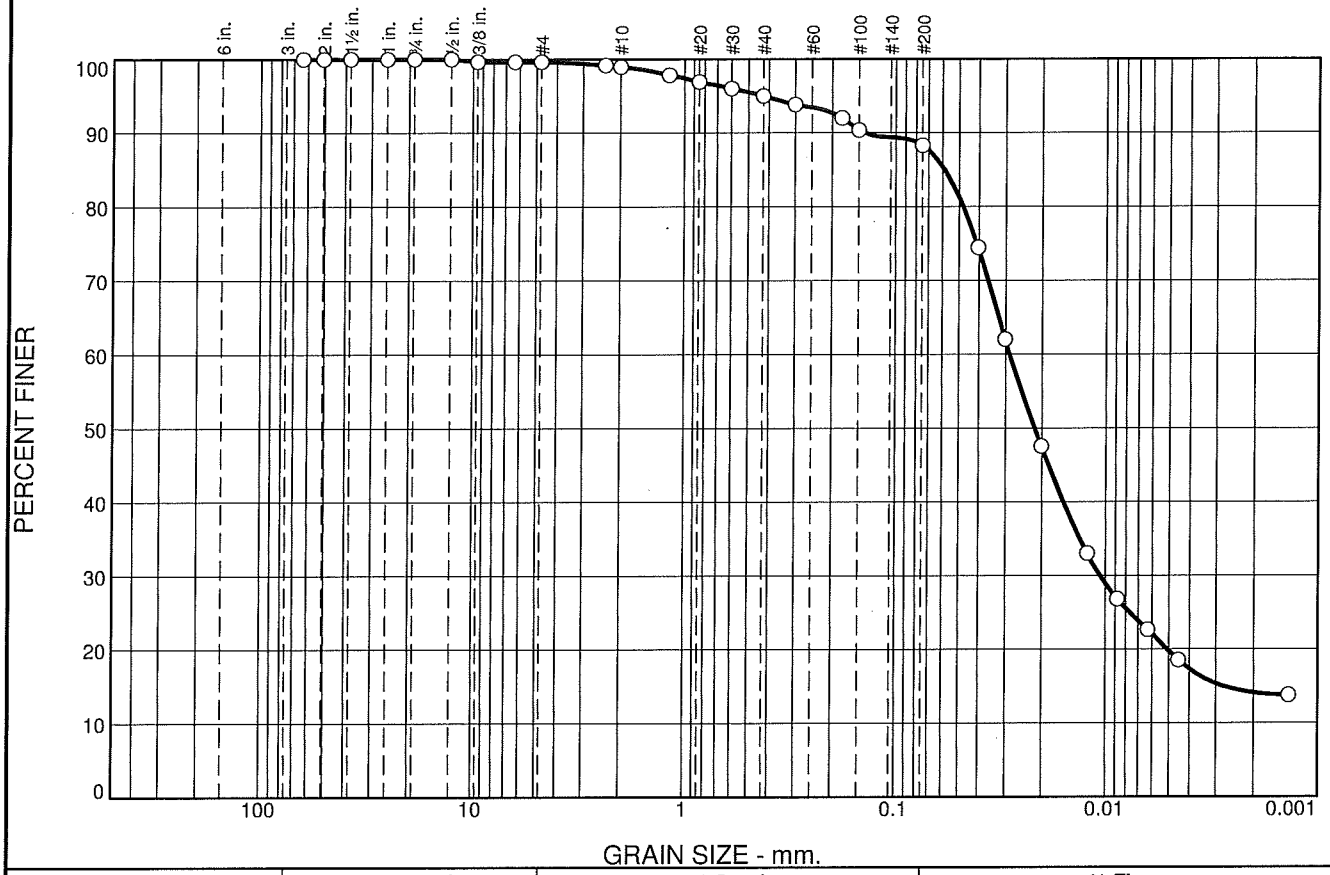
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	0.6	4.0	6.7	68.5	19.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	99.6		
.25	99.6		
#4	99.6		
#8	99.2		
#10	99.0		
#16	97.9		
#20	96.9		
#30	96.0		
#40	95.0		
#50	93.8		
#80	92.0		
#100	90.4		
#200	88.3		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 21 LL= 39 PI= 18

Coefficients

D_{90}= 0.1405 D_{85}= 0.0587 D_{60}= 0.0287
D_{50}= 0.0217 D_{30}= 0.0106 D_{15}= 0.0028
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Source of Sample: Lift 4 **Depth:** 382,250N/2,200,850E
Sample Number: T-27 **Date:** 09-18-14

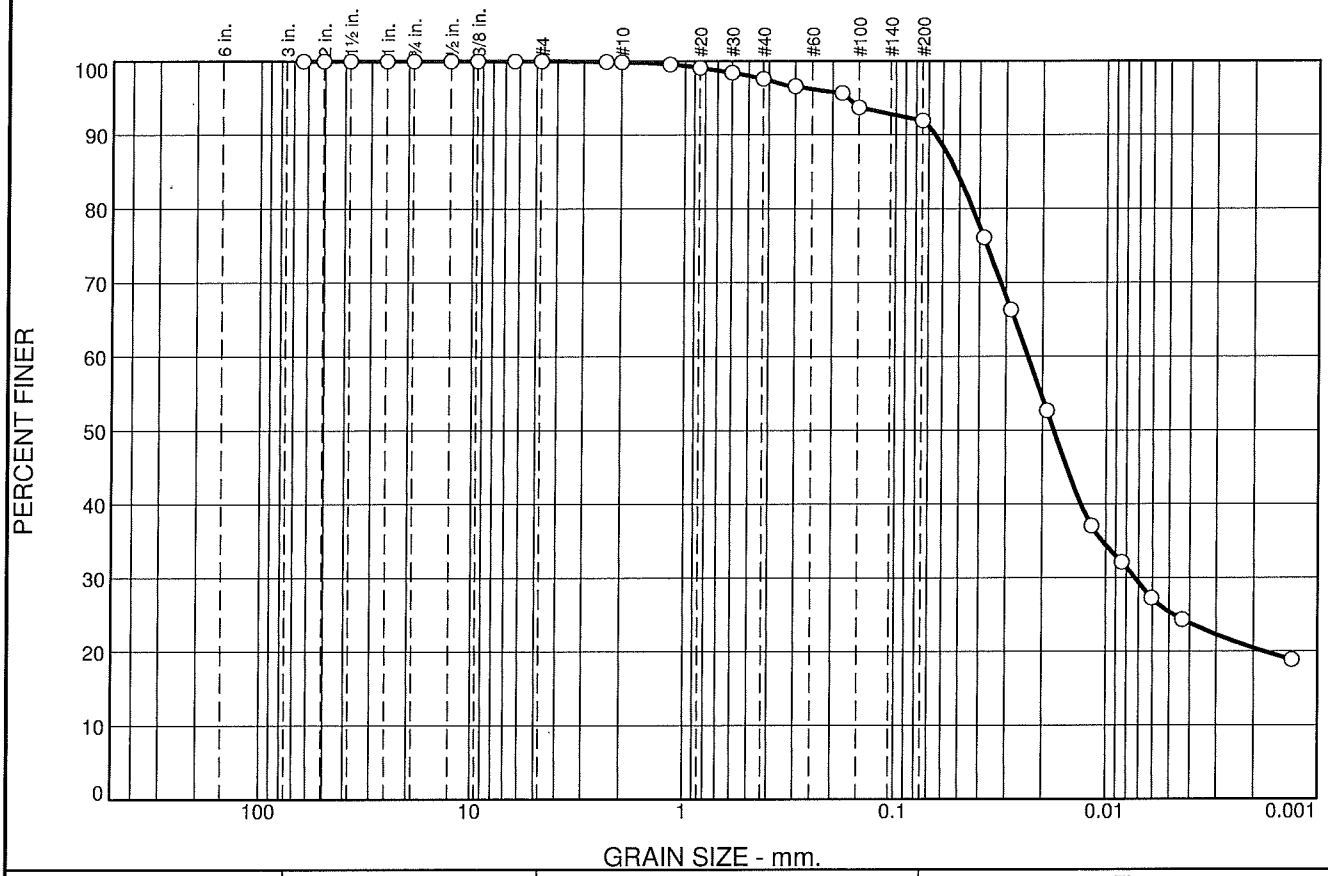
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	2.3	5.7	66.6	25.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	100.0		
#8	99.9		
#10	99.9		
#16	99.6		
#20	99.1		
#30	98.4		
#40	97.6		
#50	96.6		
#80	95.7		
#100	93.7		
#200	91.9		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 40 PI= 21

Coefficients

D_{90}= 0.0650 D_{85}= 0.0517 D_{60}= 0.0235
D_{50}= 0.0177 D_{30}= 0.0073 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(20)

Remarks

Source of Sample: Lift 4 **Depth:** 382,750N/2,200,950E
Sample Number: T-28 **Date:** 09-18-14

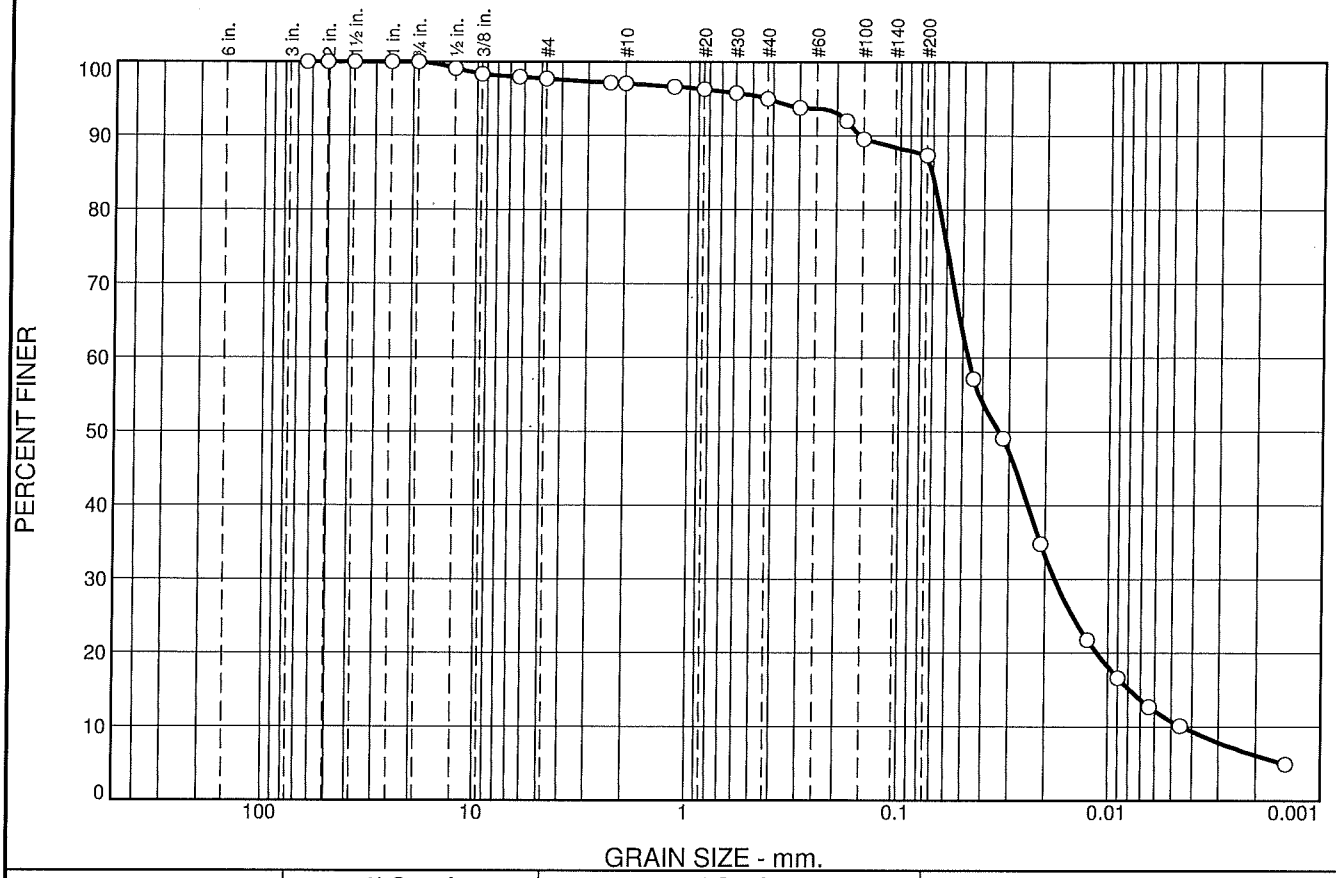
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.3	0.6	2.1	7.6	76.6	10.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	99.1		
.375	98.3		
.25	98.0		
#4	97.7		
#8	97.2		
#10	97.1		
#16	96.6		
#20	96.3		
#30	95.8		
#40	95.0		
#50	93.8		
#80	92.0		
#100	89.5		
#200	87.4		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 20 LL= 36 PI= 16

Coefficients

D_{90}= 0.1568 D_{85}= 0.0710 D_{60}= 0.0472
D_{50}= 0.0334 D_{30}= 0.0180 D_{15}= 0.0079
D_{10}= 0.0044 C_u= 10.62 C_c= 1.55

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Source of Sample: Lift 4 **Depth:** 382,750N/2,201,150E
Sample Number: T-29 **Date:** 09-24-14

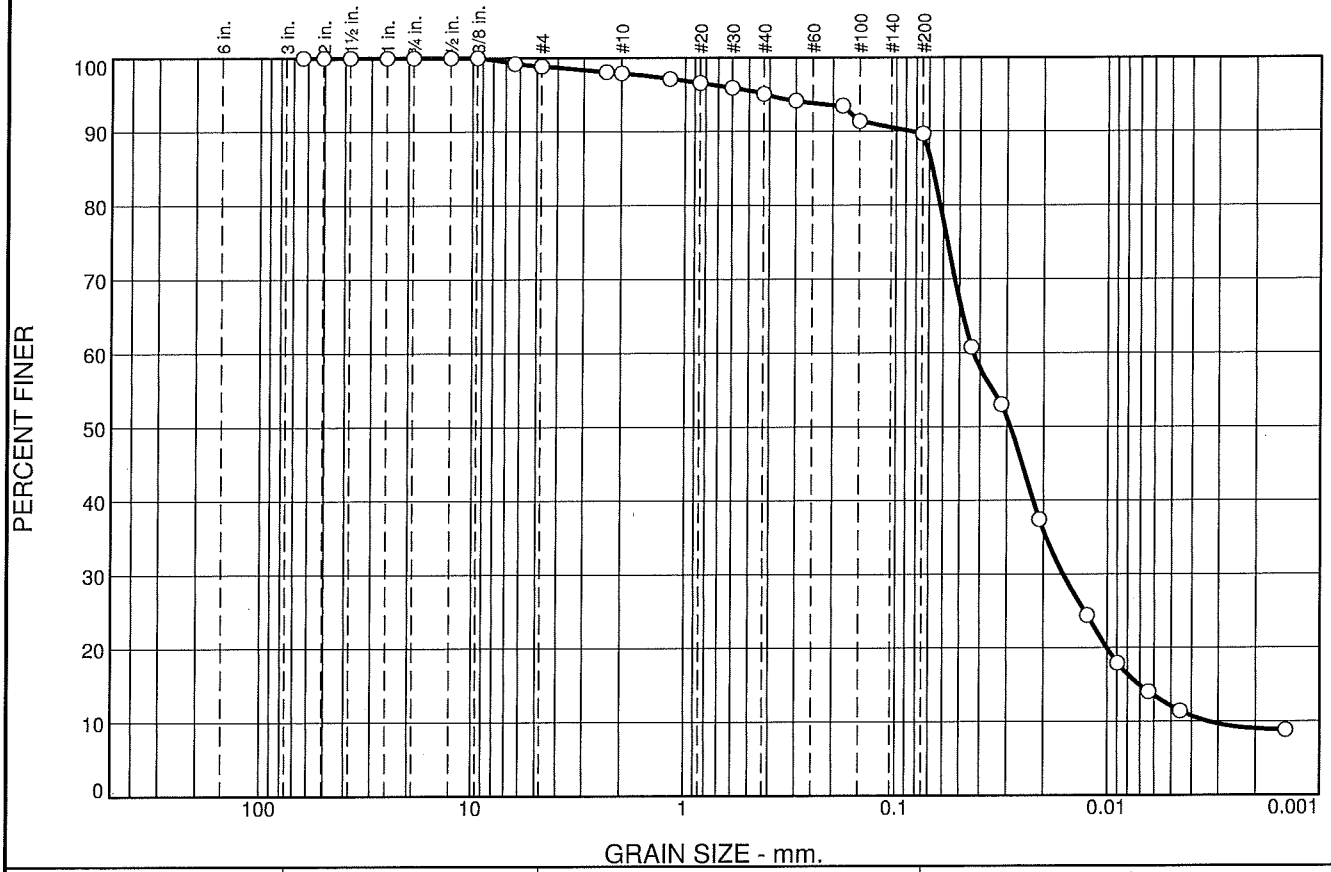
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.1	1.0	2.8	5.4	77.6	12.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.2		
#4	98.9		
#8	98.1		
#10	97.9		
#16	97.1		
#20	96.6		
#30	95.9		
#40	95.1		
#50	94.2		
#80	93.5		
#100	91.4		
#200	89.7		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 20 LL= 37 PI= 17

Coefficients

D_{90}= 0.0851 D_{85}= 0.0675 D_{60}= 0.0430
D_{50}= 0.0288 D_{30}= 0.0162 D_{15}= 0.0071
D_{10}= 0.0033 C_u= 12.87 C_c= 1.82

Classification

USCS= CL AASHTO= A-6(15)

Remarks

Source of Sample: Lift 4 **Depth:** 382,250N/2,201,150E
Sample Number: T-30 **Date:** 09-24-14

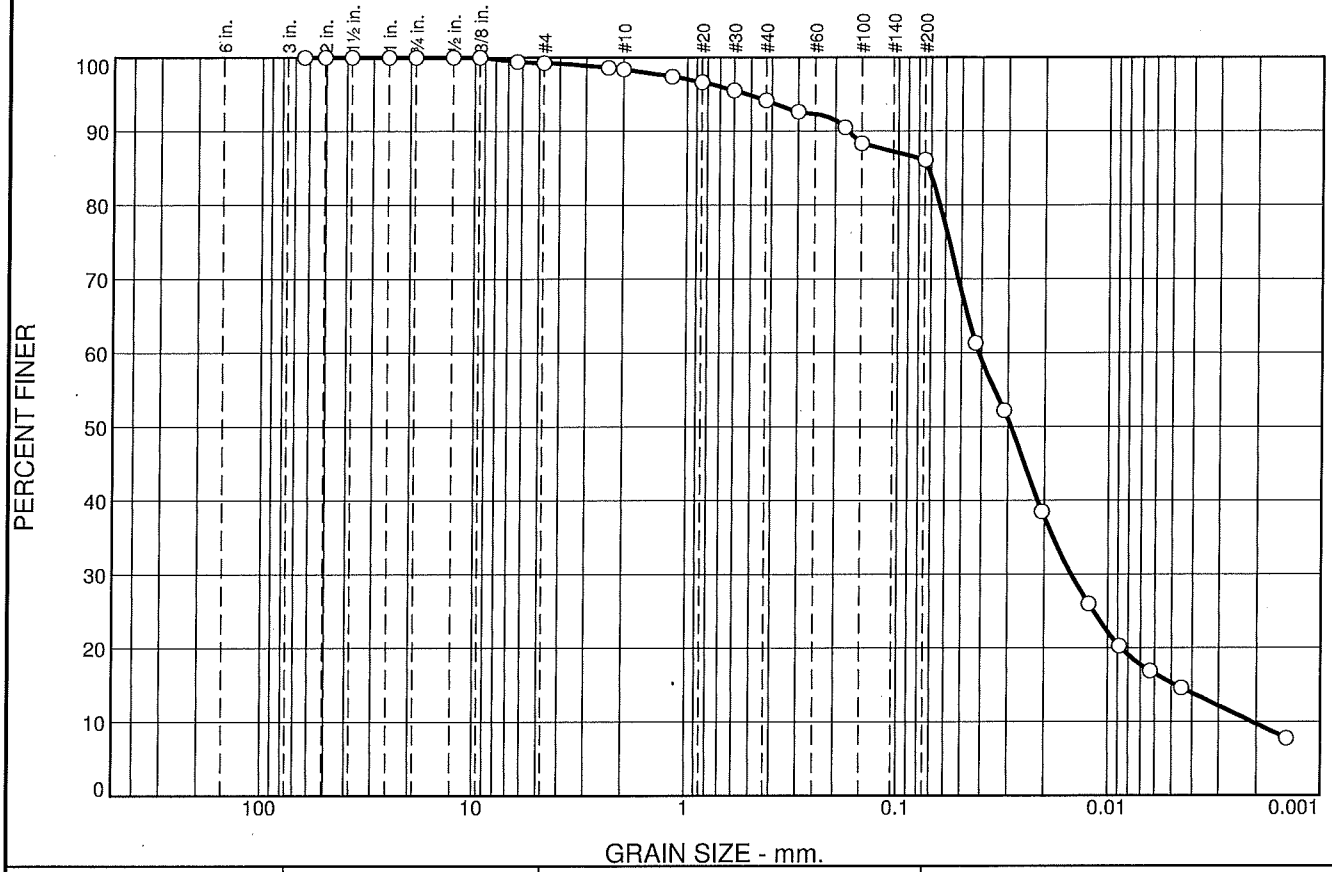
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	0.9	4.2	8.1	70.8	15.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	99.4		
#4	99.3		
#8	98.6		
#10	98.4		
#16	97.4		
#20	96.6		
#30	95.5		
#40	94.2		
#50	92.6		
#80	90.5		
#100	88.4		
#200	86.1		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 18 LL= 37 PI= 19

Coefficients

D_{90}= 0.1726 D_{85}= 0.0722 D_{60}= 0.0413
D_{50}= 0.0290 D_{30}= 0.0149 D_{15}= 0.0048
D_{10}= 0.0021 C_u= 19.67 C_c= 2.56

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Source of Sample: Lift 4 **Depth:** 382,550N/2,201,050E
Sample Number: T-31 **Date:** 09-24-14

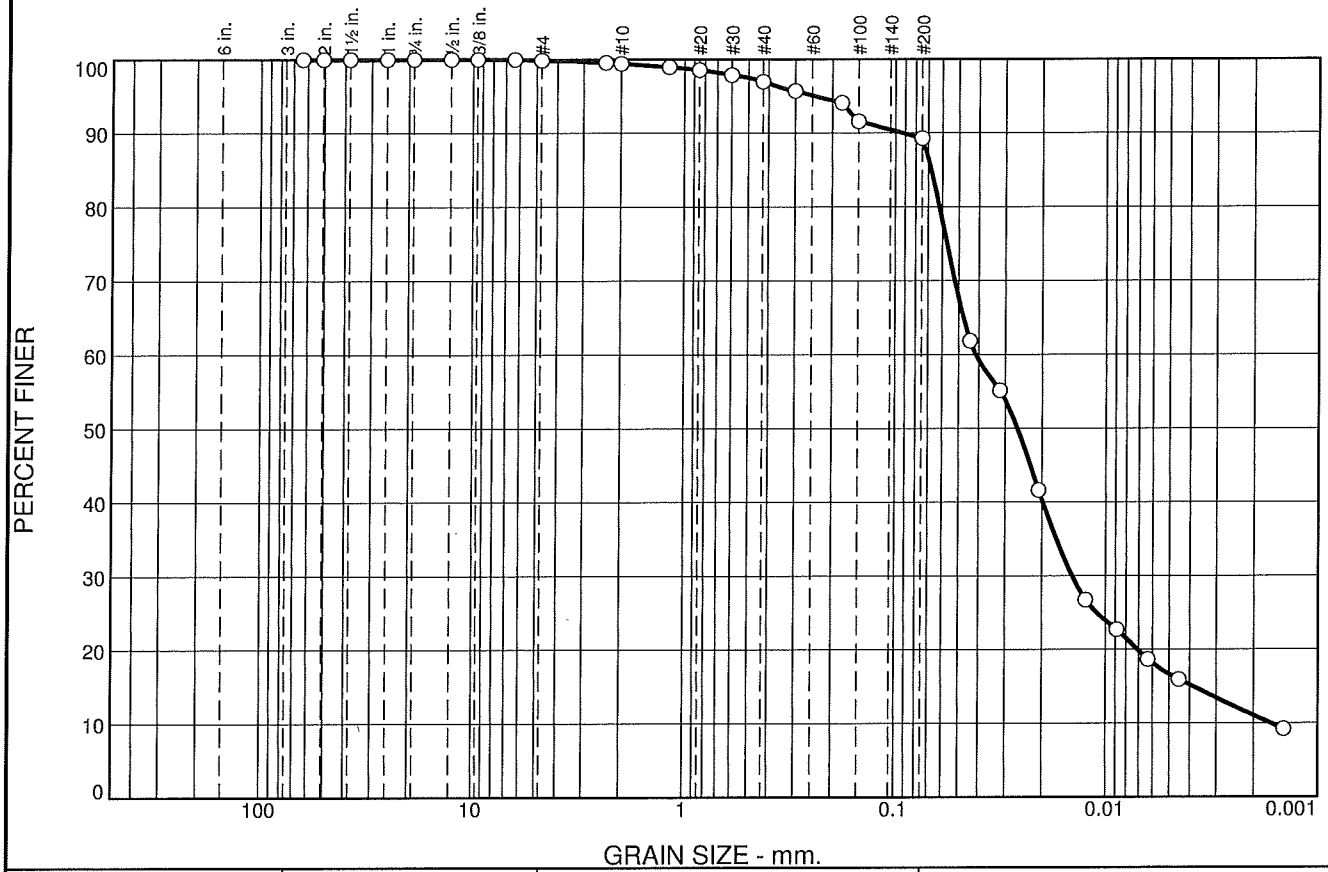
TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.5	2.4	7.7	72.6	16.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5	100.0		
2.0	100.0		
1.5	100.0		
1.0	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
.25	100.0		
#4	99.9		
#8	99.5		
#10	99.4		
#16	99.0		
#20	98.5		
#30	97.9		
#40	97.0		
#50	95.7		
#80	94.1		
#100	91.6		
#200	89.3		

* (no specification provided)

Material Description

Lean clay

Atterberg Limits

PL= 19 LL= 37 PI= 18

Coefficients

D_{90}= 0.0929 D_{85}= 0.0678 D_{60}= 0.0415
D_{50}= 0.0263 D_{30}= 0.0144 D_{15}= 0.0039
D_{10}= 0.0017 C_u= 25.02 C_c= 3.02

Classification

USCS= CL AASHTO= A-6(16)

Remarks

Source of Sample: Lift 4 **Depth:** 382,150N/2,201,050E
Sample Number: T-32 **Date:** 09-24-14

TRC Environmental Corp.

Madison, Wisconsin

Client: Dane County
Project: Dane County Rodefeld

Project No: 220142.0000 **Figure**

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	7
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 1, T-1, 382,600N/2,201,000E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	1.1E-08 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values			
Sample Dia. (in)		2.82	2.84	Permeant:	Water	
Sample Ht. (in)		2.30	2.30	Permeant Specific Gravity:	1.00	
Tare & Wet (g)		872.80	743.40	Sample Specific Gravity:	2.70	Est.
Tare & Dry (g)		774.80	652.10	Confining Pressure (psi):	100.0	
Tare (g)		267.40	253.69	Burette Diameter (in):	0.250	
Sample Wt. (g)		481.40	489.71	Burette Zero (cm):	100.0	
Moisture (%)		19.3	22.9	Maximum Gradient:	16.4	
Wet Density (pcf)		127.7	128.0	Average Gradient:	15.0	
Dry Density (pcf)		107.0	104.2	Max. Effect. Stress (psi):	5.9	
Saturation (%)		90.5	100.0	Min. Effect. Stress (psi):	4.2	
				Ave. Effect. Stress (psi):	4.9	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	8	18	4	50.00		0.0	95	95	56.70		2.55		103.20				
2	2014	8	18	5	52.00	3720	20.0	95	95	56.55	-0.15	2.70	0.15	102.40	0.80	-68.4	5.8E-08	
3	2014	8	18	6	45.00	3180	20.0	95	95	56.80	0.25	2.80	0.10	102.30	0.10	0.0	1.4E-08	
4	2014	8	18	8	1.00	4560	20.0	95	95	56.90	0.10	2.90	0.10	102.20	0.10	0.0	1.0E-08	
5	2014	8	18	9	10.00	4140	20.0	95	95	57.15	0.25	3.05	0.15	102.05	0.15	0.0	1.7E-08	
6	2014	8	18	10	39.00	5340	20.0	95	95	57.40	0.25	3.20	0.15	101.90	0.15	0.0	1.3E-08	
7	2014	8	18	13	40.00	10860	23.0	95	95	58.75	1.35	3.50	0.30	101.60	0.30	0.0	1.2E-08	
8	2014	8	19	5	6.00	55560	20.0	95	95	59.80	1.05	4.80	1.30	100.20	1.40	-3.7	1.1E-08	
9	2014	8	20	8	19.00		0.0	95	95	41.30		3.50		102.45				
10	2014	8	20	9	56.00	5820	22.0	95	95	43.35	2.05	3.70	0.20	101.70	0.75	-57.9	3.6E-08	
11	2014	8	20	11	26.00	5400	22.0	95	95	44.40	1.05	3.85	0.15	101.40	0.30	-33.3	1.8E-08	
12	2014	8	20	14	0.00	9240	21.0	95	95	45.70	1.30	4.10	0.25	101.00	0.40	-23.1	1.6E-08	
13	2014	8	20	18	16.00	15360	21.0	95	95	47.60	1.90	4.50	0.40	100.45	0.55	-15.8	1.4E-08	
14	2014	8	21	5	0.00	38640	21.0	95	95	48.90	1.30	5.45	0.95	99.35	1.10	-7.3	1.2E-08	1
15	2014	8	21	9	3.00	14580	22.0	95	95	51.10	2.20	5.80	0.35	99.05	0.30	7.7	1.0E-08	1
16	2014	8	21	13	48.00	17100	23.0	95	95	52.30	1.20	6.20	0.40	98.60	0.45	-5.9	1.1E-08	1
17	2014	8	21	17	53.00	14700	22.0	95	95	53.30	1.00	6.55	0.35	98.25	0.35	0.0	1.1E-08	1
18	2014	8	22	5	34.00	42060	20.0	95	95	54.70	1.40	7.45	0.90	97.25	1.00	-5.3	1.1E-08	1
19	2014	8	22	9	59.00	15900	22.0	95	95	56.10	1.40	7.80	0.35	97.00	0.25	16.7	9.1E-09	1
20	2014	8	22	17	32.00	27180	22.0	95	95	57.30	1.20	8.50	0.70	96.35	0.65	3.7	1.2E-08	1
21	2014	8	25	4	40.00	212880	21.0	95	95	65.00	7.70	12.45	3.95	92.40	3.95	0.0	9.8E-09	1
22																		
23																		
24																		
25																		
26																		

**A zero in this column starts a series of measurements. (Termination determined by stable Kv and low flow differential.)

*Average Kv for those rows with a 1 in the Ave. column. 1.1E-08 cm/s

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name: Dane County Rodefeld

Project #: 220142.0000

Sample Name: Lift 1, T-3, 382,100N/2,201,100E

Visual Descript: Lean clay

Cell #: 8

USCS Description: Lean clay

USCS Classification: CL

Average Kv = 7.6E-09 cm/s

Sample Type: Undisturbed

	Initial Values	Final Values
Sample Dia. (in)	2.83	2.86
Sample Ht. (in)	3.00	3.00
Tare & Wet (g)	669.40	905.20
Tare & Dry (g)	601.00	786.30
Tare (g)	264.98	255.95
Sample Wt. (g)	637.20	649.25

Permeant:	Water
Permeant Specific Gravity:	1.00
Sample Specific Gravity:	2.70 Est.
Confining Pressure (psi):	100.0
Burette Diameter (in):	0.250
Burette Zero (cm):	100.0

Moisture (%)	20.4	22.4
Wet Density (pcf)	128.6	128.3
Dry Density (pcf)	106.9	104.8
Saturation (%)	95.7	100.0

Maximum Gradient:	12.7
Average Gradient:	12.1
Max. Effect. Stress (psi):	6.0
Min. Effect. Stress (psi):	4.2
Ave. Effect. Stress (psi):	5.0

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	8	18	4	51.00		0.0	95	95	54.60		1.20		104.10				
2	2014	8	18	5	53.00	3720	20.0	95	95	54.60	0.00	1.30	0.10	103.35	0.75	-76.5	6.5E-08	
3	2014	8	18	6	46.00	3180	20.0	95	95	54.80	0.20	1.35	0.05	103.30	0.05	0.0	9.0E-09	
4	2014	8	18	8	2.00	4560	20.0	95	95	55.10	0.30	1.45	0.10	103.15	0.15	-20.0	1.6E-08	
5	2014	8	18	9	11.00	4140	20.0	95	95	55.40	0.30	1.55	0.10	103.05	0.10	0.0	1.4E-08	
6	2014	8	18	10	40.00	5340	20.0	95	95	55.75	0.35	1.65	0.10	102.95	0.10	0.0	1.1E-08	
7	2014	8	18	13	41.00	10860	23.0	95	95	57.15	1.40	1.85	0.20	102.80	0.15	14.3	8.6E-09	
8	2014	8	19	5	7.00	55560	20.0	95	95	58.75	1.60	2.65	0.80	102.05	0.75	3.2	8.1E-09	
9	2014	8	20	8	20.00		0.0	95	95	32.00		2.80		102.75				
10	2014	8	20	9	57.00	5820	22.0	95	95	34.85	2.85	2.85	0.05	102.05	0.70	-86.7	3.6E-08	
11	2014	8	20	11	27.00	5400	22.0	95	95	36.40	1.55	2.90	0.05	101.65	0.40	-77.8	2.3E-08	
12	2014	8	20	14	0.00	9180	21.0	95	95	38.30	1.90	2.95	0.05	101.35	0.30	-71.4	1.1E-08	
13	2014	8	20	18	16.00	15360	21.0	95	95	41.00	2.70	3.15	0.20	100.95	0.40	-33.3	1.1E-08	
14	2014	8	21	5	0.00	38640	21.0	95	95	43.60	2.60	3.65	0.50	100.30	0.65	-13.0	8.7E-09	
15	2014	8	21	9	4.00	14640	22.0	95	95	44.90	1.30	3.85	0.20	100.10	0.20	0.0	7.9E-09	1
16	2014	8	21	13	48.00	17040	23.0	95	95	46.30	1.40	4.10	0.25	99.90	0.20	11.1	7.5E-09	1
17	2014	8	21	17	53.00	14700	22.0	95	95	47.30	1.00	4.30	0.20	99.65	0.25	-11.1	8.9E-09	1
18	2014	8	22	5	35.00	42120	20.0	95	95	49.20	1.90	4.75	0.45	99.15	0.50	-5.3	6.9E-09	1
19	2014	8	22	10	0.00	15900	22.0	95	95	50.80	1.60	5.05	0.30	99.05	0.10	50.0	7.4E-09	1
20	2014	8	22	17	33.00	27180	22.0	95	95	52.25	1.45	5.35	0.30	98.60	0.45	-20.0	8.2E-09	1
21	2014	8	25	4	41.00	212880	21.0	95	95	62.35	10.10	7.70	2.35	96.45	2.15	4.4	6.6E-09	1
22																		
23																		
24																		
25																		
26																		

**A zero in this column starts a series of measurements.

(Termination determined by stable Kv and low flow differential.)

*Average Kv for those rows with a 1 in the Ave. column. 7.6E-09 cm/s

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	9
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 1, T-6, 382,300N/2,201,100E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	2.3E-08 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values			
Sample Dia. (in)		2.83	2.83	Permeant:	Water	
Sample Ht. (in)		3.50	3.50	Permeant Specific Gravity:	1.00	
Tare & Wet (g)		850.40	1000.80	Sample Specific Gravity:	2.70	Est.
Tare & Dry (g)		758.00	865.60	Confining Pressure (psi):	100.0	
Tare (g)		274.48	255.61	Burette Diameter (in):	0.250	
Sample Wt. (g)		733.40	745.19	Burette Zero (cm):	100.0	
Moisture (%)		19.1	22.2	Maximum Gradient:	9.7	
Wet Density (pcf)		126.9	128.9	Average Gradient:	8.8	
Dry Density (pcf)		106.5	105.5	Max. Effect. Stress (psi):	5.9	
Saturation (%)		88.5	100.0	Min. Effect. Stress (psi):	4.1	
				Ave. Effect. Stress (psi):	4.7	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°***	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	8	19	5	5.00		0.0	95	95	39.65		1.90		103.10				
2	2014	8	19	6	22.00	4620	20.0	95	95	39.80	0.15	2.40	0.50	102.05	1.05	-35.5	1.2E-07	
3	2014	8	19	9	47.00	12300	20.0	95	95	41.40	1.60	3.70	1.30	101.10	0.95	15.6	6.4E-08	
4	2014	8	20	8	20.00		0.0	95	95	48.60		2.55		102.20				
5	2014	8	20	9	57.00	5820	22.0	95	95	52.60	4.00	2.25	-0.30	99.40	2.80	-124.0	1.4E-07	
6	2014	8	20	11	27.00	5400	22.0	95	95	54.70	2.10	2.30	0.05	98.05	1.35	-92.9	8.9E-08	
7	2014	8	20	14	1.00	9240	21.0	95	95	56.80	2.10	2.70	0.40	96.40	1.65	-61.0	7.9E-08	
8	2014	8	20	18	17.00	15360	21.0	95	95	59.30	2.50	3.55	0.85	94.70	1.70	-33.3	6.1E-08	
9	2014	8	21	5	1.00	38640	21.0	95	95	61.80	2.50	5.50	1.95	92.10	2.60	-14.3	4.5E-08	
10	2014	8	21	9	4.00	14580	22.0	95	95	63.00	1.20	6.10	0.60	91.45	0.65	-4.0	3.3E-08	1
11	2014	8	21	13	49.00	17100	23.0	95	95	64.40	1.40	6.70	0.60	90.75	0.70	-7.7	2.9E-08	1
12	2014	8	21	17	54.00	14700	22.0	95	95	65.40	1.00	7.15	0.45	90.30	0.45	0.0	2.4E-08	1
13	2014	8	22	5	35.00	42060	20.0	95	95	66.70	1.30	8.25	1.10	89.20	1.10	0.0	2.2E-08	1
14	2014	8	22	10	0.00	15900	22.0	95	95	68.30	1.60	8.70	0.45	88.80	0.40	5.9	2.2E-08	1
15	2014	8	22	17	33.00	27180	22.0	95	95	69.50	1.20	9.25	0.55	88.20	0.60	-4.3	1.8E-08	1
16	2014	8	25	4	41.00	212880	21.0	95	95	77.15	7.65	12.85	3.60	85.25	2.95	9.9	1.4E-08	1
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		
26																		

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column.

2.3E-08 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	11
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 2, T-9, 382,050N/2,200,950E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	4.1E-09 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values	
Sample Dia. (in)		2.85	2.85	Permeant: Water
Sample Ht. (in)		2.97	2.97	Permeant Specific Gravity: 1.00
Tare & Wet (g)		358.72	902.20	Sample Specific Gravity: 2.70 Est.
Tare & Dry (g)		340.99	783.80	Confining Pressure (psi): 100.0
Tare (g)		248.46	266.73	Burette Diameter (in): 0.250
Sample Wt. (g)		626.50	635.47	Burette Zero (cm): 100.0
Moisture (%)		19.2	22.9	Maximum Gradient: 12.8
Wet Density (pcf)		126.1	127.9	Average Gradient: 12.7
Dry Density (pcf)		105.9	104.1	Max. Effect. Stress (psi): 6.0
Saturation (%)		87.5	100.0	Min. Effect. Stress (psi): 4.4
				Ave. Effect. Stress (psi): 5.2

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	8	20	8	21.00		0.0	95	95	38.80		3.10		103.05				
2	2014	8	20	9	58.00	5820	22.0	95	95	39.90	1.10	4.70	1.60	103.75	-0.70	255.6	4.3E-08	
3	2014	8	20	11	28.00	5400	22.0	95	95	40.75	0.85	5.65	0.95	104.05	-0.30	192.3	3.4E-08	
4	2014	8	20	14	2.00	9240	21.0	95	95	41.95	1.20	6.80	1.15	104.30	-0.25	155.6	2.8E-08	
5	2014	8	20	18	18.00	15360	21.0	95	95	43.90	1.95	8.30	1.50	104.20	0.10	87.5	3.0E-08	
6	2014	8	21	5	3.00	38700	21.0	95	95	47.15	3.25	11.05	2.75	103.50	0.70	59.4	2.7E-08	
7	2014	8	21	9	2.00	14340	22.0	95	95	48.30	1.15	11.95	0.90	103.40	0.10	80.0	2.1E-08	
8	2014	8	21	13	50.00	17280	23.0	95	95	49.85	1.55	12.65	0.70	103.15	0.25	47.4	1.6E-08	
9	2014	8	21	17	55.00	14700	22.0	95	95	51.10	1.25	13.15	0.50	102.90	0.25	33.3	1.6E-08	
10	2014	8	22	5	37.00	42120	20.0	95	95	53.30	2.20	14.55	1.40	102.50	0.40	55.6	1.4E-08	
11	2014	8	22	10	1.00	15840	22.0	95	95	54.80	1.50	15.05	0.50	102.30	0.20	42.9	1.4E-08	
12	2014	8	22	17	34.00	27180	22.0	95	95	56.30	1.50	15.60	0.55	102.20	0.10	69.2	7.6E-09	
13	2014	8	25	13	26.00		0.0	95	95	28.45		2.55		100.90				
14	2014	8	25	14	52.00	5160	22.0	95	95	28.60	0.15	2.70	0.15	100.85	0.05	50.0	1.1E-08	
15	2014	8	26	4	35.00	49380	20.0	95	95	29.70	1.10	3.45	0.75	100.60	0.25	50.0	6.0E-09	
16	2014	8	26	7	30.00	10500	20.0	95	95	29.60	-0.10	3.60	0.15	100.50	0.10	20.0	7.1E-09	
17	2014	8	26	15	27.00	28620	21.0	95	95	30.30	0.70	4.00	0.40	100.35	0.15	45.5	5.6E-09	
18	2014	8	26	18	5.00	9480	21.0	95	95	30.70	0.40	4.05	0.05	100.30	0.05	0.0	3.1E-09	1
19	2014	8	27	4	12.00	36420	20.0	95	95	30.80	0.10	4.45	0.40	100.05	0.25	23.1	5.4E-09	1
20	2014	8	27	8	17.00	14700	20.0	95	95	31.20	0.40	4.55	0.10	100.00	0.05	33.3	3.1E-09	1
21	2014	8	27	11	16.00	10740	22.0	95	95	31.80	0.60	4.65	0.10	99.95	0.05	33.3	4.0E-09	1
22	2014	8	27	16	45.00	19740	22.0	95	95	32.20	0.40	4.75	0.10	99.85	0.10	0.0	2.9E-09	1
23	2014	8	27	18	0.00	4500	22.0	95	95	31.30	-0.90	4.80	0.05	99.80	0.05	0.0	6.5E-09	1
24	2014	8	28	4	37.00	38220	20.0	95	95	32.80	1.50	5.05	0.25	99.55	0.25	0.0	4.0E-09	1
25																		
26																		

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column. 4.1E-09 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	5
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 2, T-12, 382,650N/2,200,850E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	1.8E-08 cm/s

		Initial Values	Final Values			
Sample Type:	Undisturbed					
Sample Dia. (in)		2.85	2.87	Permeant:	Water	
Sample Ht. (in)		2.71	2.73	Permeant Specific Gravity:	1.00	
Tare & Wet (g)		1055.10	860.00	Sample Specific Gravity:	2.71	Est.
Tare & Dry (g)		937.20	755.70	Confining Pressure (psi):	100.0	
Tare (g)		261.28	253.77	Burette Diameter (in):	0.250	
Sample Wt. (g)		592.60	606.23	Burette Zero (cm):	100.0	
Moisture (%)		17.4	20.8	Maximum Gradient:	11.0	
Wet Density (pcf)		130.6	130.8	Average Gradient:	9.4	
Dry Density (pcf)		111.2	108.3	Max. Effect. Stress (psi):	5.9	
Saturation (%)		90.5	100.0	Min. Effect. Stress (psi):	4.5	
				Ave. Effect. Stress (psi):	5.0	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	8	20	8	22.00		0.0	95	95	40.90		3.15		102.25				
2	2014	8	20	9	58.00	5760	22.0	95	95	40.90	0.00	6.05	2.90	103.35	-1.10	222.2	8.0E-08	
3	2014	8	20	11	28.00	5400	22.0	95	95	40.60	-0.30	7.15	1.10	103.40	-0.05	109.5	5.0E-08	
4	2014	8	20	14	3.00	9300	21.0	95	95	41.60	1.00	8.45	1.30	103.15	0.25	67.7	4.5E-08	
5	2014	8	20	18	19.00	15360	21.0	95	95	42.95	1.35	10.25	1.80	102.35	0.80	38.5	4.7E-08	
6	2014	8	21	5	3.00	38640	21.0	95	95	44.10	1.15	14.40	4.15	100.20	2.15	31.7	4.7E-08	
7	2014	8	21	9	5.00	14520	22.0	95	95	44.00	-0.10	16.10	1.70	99.15	1.05	23.6	5.6E-08	
8	2014	8	21	13	51.00	17160	23.0	95	95	46.40	2.40	17.05	0.95	98.15	1.00	-2.6	3.4E-08	
9	2014	8	21	17	55.00	14640	22.0	95	95	47.45	1.05	17.75	0.70	97.40	0.75	-3.4	3.1E-08	
10	2014	8	22	5	38.00	42180	20.0	95	95	48.20	0.75	20.05	2.30	96.20	1.20	31.4	2.8E-08	
11	2014	8	22	10	1.00	15780	22.0	95	95	49.65	1.45	20.65	0.60	95.60	0.60	0.0	2.5E-08	1
12	2014	8	22	17	35.00	27240	22.0	95	95	50.90	1.25	21.55	0.90	94.75	0.85	2.9	2.2E-08	1
13	2014	8	25	4	45.00	213000	21.0	95	95	58.10	7.20	27.20	5.65	89.90	4.85	7.6	1.9E-08	1
14	2014	8	25	13	27.00	31320	21.0	95	95	58.60	0.50	27.75	0.55	89.25	0.65	-8.3	1.6E-08	1
15	2014	8	25	14	53.00		0.0	95	95	58.90		27.80		89.05				
16	2014	8	26	4	36.00	49380	20.0	95	95	59.20	0.30	28.85	1.05	88.35	0.70	20.0	1.5E-08	1
17	2014	8	26	7	31.00	10500	20.0	95	95	58.90	-0.30	29.10	0.25	88.20	0.15	25.0	1.7E-08	1
18	2014	8	26	15	28.00	28620	21.0	95	95	59.80	0.90	29.50	0.40	87.60	0.60	-20.0	1.5E-08	1
19	2014	8	26	18	5.00	9420	21.0	95	95	60.00	0.20	29.65	0.15	87.45	0.15	0.0	1.4E-08	1
20	2014	8	27	4	12.00	36420	20.0	95	95	59.70	-0.30	30.35	0.70	86.95	0.50	16.7	1.5E-08	1
21																		
22																		
23																		
24																		
25																		
26																		

**A zero in this column starts a series of measurements.

(Termination determined by stable Kv and low flow differential.)

*Average Kv for those rows with a 1 in the Ave. column. 1.8E-08 cm/s

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JNH

Project Name:	Dane County Rodefeld	Cell #:	9
Project #:	220142.0000	USCS Description:	Lean Clay
Sample Name:	Lift 2, T-15, 382,150N/2,201,150E	USCS Classification:	Lean Clay
Visual Descript:	VISUAL ONLY	Average Kv =	1.9E-09 cm/s

		Initial Values	Final Values			
Sample Type:	Undisturbed					
Sample Dia. (in)		2.87	2.88	Permeant:	Water	
Sample Ht. (in)		3.07	3.03	Permeant Specific Gravity:	1.00	
Tare & Wet (g)		866.60	920.30	Sample Specific Gravity:	2.68	Est.
Tare & Dry (g)		761.80	801.40	Confining Pressure (psi):	100.0	
Tare (g)		248.13	254.61	Burette Diameter (in):	0.250	
Sample Wt. (g)		662.30	665.69	Burette Zero (cm):	100.0	
Moisture (%)		20.4	21.7	Maximum Gradient:	56.7	
Wet Density (pcf)		127.0	128.5	Average Gradient:	56.1	
Dry Density (pcf)		105.5	105.5	Max. Effect. Stress (psi):	10.7	
Saturation (%)		93.8	100.0	Min. Effect. Stress (psi):	4.3	
				Ave. Effect. Stress (psi):	6.6	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	8	29	14	29.00		0.0	95	95	39.35		2.95		102.10				
2	2014	8	29	15	1.00	1920	22.0	95	95	39.85	0.50	3.20	0.25	101.60	0.50	-33.3	1.1E-07	
3	2014	9	2	5	47.00	312360	19.0	95	95	50.75	10.90	7.20	4.00	102.75	-1.15	180.7	2.8E-09	
4	2014	9	2	7	6.00		0.0	95	95	50.90		7.25		102.80				
5	2014	9	2	7	9.00		0.0	95	90	51.40		7.30		102.35				
6	2014	9	2	9	19.00	7800	20.0	95	90	52.60	1.20	7.35	0.05	101.50	0.85	-88.9	7.5E-09	
7	2014	9	2	10	58.00	5940	21.0	95	90	51.10	-1.50	7.40	0.05	101.30	0.20	-60.0	2.7E-09	
8	2014	9	2	13	48.00	10200	22.0	95	90	54.10	3.00	7.45	0.05	101.05	0.25	-66.7	1.8E-09	
9	2014	9	3	5	26.00	56280	20.0	95	90	54.30	0.20	8.15	0.70	99.75	1.30	-30.0	2.3E-09	
10	2014	9	3	12	37.00	25860	24.0	95	90	56.25	1.95	8.65	0.50	99.35	0.40	11.1	2.1E-09	
11	2014	9	3	13	0.00	1380	24.0	95	90	56.20	-0.05	8.70	0.05	99.30	0.05	0.0	4.3E-09	
12	2014	9	3	13	15.00		0.0	95	90	56.20		8.70		99.30				
13	2014	9	3	15	40.00	8700	23.0	95	90	56.70	0.50	8.90	0.20	99.30	0.00	100.0	1.4E-09	
14	2014	9	4	5	37.00	50220	20.0	95	90	56.75	0.05	9.55	0.65	98.20	1.10	-25.7	2.3E-09	
15	2014	9	4	10	54.00	19020	20.5	95	90	57.55	0.80	10.00	0.45	98.00	0.20	38.5	2.3E-09	
16	2014	9	4	12	51.00	7020	22.0	95	90	58.20	0.65	10.10	0.10	97.90	0.10	0.0	1.8E-09	
17	2014	9	4	14	3.00	4320	23.0	95	90	58.55	0.35	10.20	0.10	97.95	-0.05	300.0	7.1E-10	
18	2014	9	4	17	10.00	11220	23.0	95	90	59.20	0.65	10.40	0.20	97.70	0.25	-11.1	2.5E-09	
19	2014	9	5	8	25.00	54900	21.5	95	90	60.15	0.95	11.15	0.75	96.80	0.90	-9.1	1.9E-09	
20	2014	9	5	13	35.00	18600	21.0	95	90	60.25	0.10	11.45	0.30	96.45	0.35	-7.7	2.3E-09	
21	2014	9	5	17	14.00	13140	21.0	95	90	60.00	-0.25	11.65	0.20	96.25	0.20	0.0	2.0E-09	1
22	2014	9	8	5	54.00	218400	20.5	95	90	62.60	2.60	14.90	3.25	93.10	3.15	1.6	2.0E-09	1
23	2014	9	8	10	8.00	15240	22.0	95	90	62.20	-0.40	15.20	0.30	92.90	0.20	20.0	2.1E-09	1
24	2014	9	8	15	43.00	20100	22.0	95	90	62.70	0.50	15.50	0.30	92.60	0.30	0.0	1.9E-09	1
25	2014	9	8	17	25.00	6120	22.0	95	90	62.65	-0.05	15.55	0.05	92.50	0.10	-33.3	1.6E-09	1
26	2014	9	9	7	55.00	52200	20.5	95	90	62.65	0.00	16.30	0.75	91.75	0.75	0.0	1.9E-09	1

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column.

1.9E-09 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JNH

QA: JNH

Project Name:	Dane County Rodefeld	Cell #:	8
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 3, T-18, 382,500N / 2,201,200E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	8.3E-09 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values		
Sample Dia. (in)		2.85	2.85	Permeant:	Water
Sample Ht. (in)		2.83	2.84	Permeant Specific Gravity:	1.00
Tare & Wet (g)		604.70	875.40	Sample Specific Gravity:	2.72 Est.
Tare & Dry (g)		551.30	761.90	Confining Pressure (psi):	100.0
Tare (g)		266.29	264.48	Burette Diameter (in):	0.250
Sample Wt. (g)		600.50	610.92	Burette Zero (cm):	100.0
Moisture (%)		18.7	22.8	Maximum Gradient:	11.4
Wet Density (pcf)		126.7	128.5	Average Gradient:	11.1
Dry Density (pcf)		106.7	104.6	Max. Effect. Stress (psi):	5.9
Saturation (%)		86.6	100.0	Min. Effect. Stress (psi):	4.5
				Ave. Effect. Stress (psi):	5.1

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	4	9	52.00		0.0	95	95	39.40		2.50		99.80				
2	2014	9	4	10	51.00	3540	20.5	95	95	39.40	0.00	2.90	0.40	99.10	0.70	-27.3	8.9E-08	
3	2014	9	4	11	50.00	3540	21.0	95	95	39.75	0.35	3.10	0.20	98.80	0.30	-20.0	4.0E-08	
4	2014	9	4	12	54.00	3840	22.0	95	95	40.15	0.40	3.40	0.30	98.65	0.15	33.3	3.2E-08	
5	2014	9	4	14	2.00	4080	23.0	95	95	40.50	0.35	3.60	0.20	98.50	0.15	14.3	2.3E-08	
6	2014	9	4	15	50.00	6480	22.5	95	95	40.80	0.30	3.95	0.35	98.20	0.30	7.7	2.8E-08	
7	2014	9	4	17	9.00	4740	23.0	95	95	41.10	0.30	4.15	0.20	98.00	0.20	0.0	2.3E-08	
8	2014	9	5	8	26.00	55020	21.5	95	95	42.35	1.25	5.85	1.70	96.30	1.70	0.0	1.8E-08	
9	2014	9	5	9	24.00	3480	21.0	95	95	42.40	0.05	5.95	0.10	96.20	0.10	0.0	1.7E-08	
10	2014	9	5	10	26.00	3720	22.0	95	95	42.60	0.20	6.05	0.10	96.15	0.05	33.3	1.2E-08	
11	2014	9	5	11	23.00	3420	22.0	95	95	42.50	-0.10	6.10	0.05	96.05	0.10	-33.3	1.3E-08	
12	2014	9	5	13	33.00	7800	21.0	95	95	42.40	-0.10	6.30	0.20	95.90	0.15	14.3	1.4E-08	
13	2014	9	5	17	13.00	13200	21.0	95	95	42.30	-0.10	6.55	0.25	95.65	0.25	0.0	1.1E-08	
14	2014	9	8	5	53.00	218400	20.5	95	95	44.50	2.20	10.10	3.55	92.70	2.95	9.2	9.6E-09	
15	2014	9	8	7	49.00	6960	20.5	95	95	44.75	0.25	10.15	0.05	92.65	0.05	0.0	4.8E-09	
16	2014	9	8	13	3.00	18840	22.0	95	95	45.35	0.60	10.40	0.25	92.40	0.25	0.0	8.5E-09	1
17	2014	9	8	17	24.00	15660	22.0	95	95	45.50	0.15	10.60	0.20	92.20	0.20	0.0	8.3E-09	1
18	2014	9	9	7	54.00	52200	20.5	95	95	45.60	0.10	11.25	0.65	91.55	0.65	0.0	8.5E-09	1
19	2014	9	9	11	54.00	14400	22.0	95	95	46.55	0.95	11.45	0.20	91.40	0.15	14.3	8.0E-09	1
20	2014	9	9	18	36.00	24120	22.0	95	95	47.35	0.80	11.75	0.30	91.10	0.30	0.0	8.3E-09	1
21	2014	9	10	6	35.00	43140	20.0	95	95	47.90	0.55	12.30	0.55	90.65	0.45	10.0	8.2E-09	1
22																		
23																		
24																		
25																		
26																		

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column.

8.3E-09 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JNH

QA: JNH

Project Name:	Dane County Rodefeld	Cell #:	7
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 3, T-21, 382,500N/2,201,000E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	5.8E-09 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values		
Sample Dia. (in)		2.86	2.87	Permeant:	Water
Sample Ht. (in)		3.04	3.05	Permeant Specific Gravity:	1.00
Tare & Wet (g)		533.60	935.90	Sample Specific Gravity:	2.70 Est.
Tare & Dry (g)		488.40	817.80	Confining Pressure (psi):	100.0
Tare (g)		265.60	261.30	Burette Diameter (in):	0.250
Sample Wt. (g)		669.50	674.60	Burette Zero (cm):	100.0
Moisture (%)		20.3	21.2		
Wet Density (pcf)		130.6	129.8		
Dry Density (pcf)		108.6	107.1	Max. Effect. Stress (psi):	8.6
Saturation (%)		99.3	100.0	Min. Effect. Stress (psi):	4.5
				Ave. Effect. Stress (psi):	5.2

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	4	9	45.00		0.0	95	95	26.40		3.45		99.50				
2	2014	9	4	10	47.00	3720	20.5	95	95	26.35	-0.05	3.50	0.05	98.90	0.60	-84.6	5.4E-08	
3	2014	9	4	11	48.00	3660	21.0	95	95	26.80	0.45	3.75	0.25	98.75	0.15	25.0	3.3E-08	
4	2014	9	4	12	53.00	3900	22.0	95	95	27.20	0.40	4.05	0.30	98.60	0.15	33.3	3.4E-08	
5	2014	9	4	14	0.00	4020	23.0	95	95	27.85	0.65	4.25	0.20	98.50	0.10	33.3	2.2E-08	
6	2014	9	4	15	48.00	6480	22.5	95	95	28.20	0.35	4.55	0.30	98.25	0.25	9.1	2.5E-08	
7	2014	9	4	17	7.00	4740	23.0	95	95	28.70	0.50	4.75	0.20	98.05	0.20	0.0	2.5E-08	
8	2014	9	4	17	55.00	2880	23.0	95	95	29.40	0.70	5.00	0.25	98.85	-0.80	-190.9	-5.6E-08	
9	2014	9	5	8	27.00	52320	21.5	95	95	31.30	1.90	6.40	1.40	96.70	2.15	-21.1	2.1E-08	
10	2014	9	5	9	25.00	3480	21.0	95	95	31.40	0.10	6.50	0.10	96.60	0.10	0.0	1.8E-08	
11	2014	9	5	10	27.00	3720	22.0	95	95	31.75	0.35	6.60	0.10	96.60	0.00	100.0	8.3E-09	
12	2014	9	5	11	22.00	3300	22.0	95	95	31.70	-0.05	6.65	0.05	96.50	0.10	-33.3	1.4E-08	
13	2014	9	5	12	31.00	4140	21.0	95	95	31.70	0.00	6.70	0.05	96.40	0.10	-33.3	1.2E-08	
14	2014	9	5	14	40.00	7740	21.0	95	95	31.90	0.20	6.85	0.15	96.30	0.10	20.0	1.0E-08	
15	2014	9	5	17	11.00	9060	21.0	95	95	31.95	0.05	7.05	0.20	96.15	0.15	14.3	1.2E-08	
16	2014	9	8	5	52.00	218460	20.5	95	95	40.30	8.35	10.35	3.30	93.85	2.30	17.9	8.7E-09	
17	2014	9	8	7	47.00	6900	20.5	95	95	40.70	0.40	10.45	0.10	93.75	0.10	0.0	1.0E-08	
18	2014	9	8	13	2.00	18900	22.0	95	95	42.00	1.30	10.65	0.20	93.65	0.10	33.3	5.3E-09	
19	2014	9	8	17	23.00	15660	22.0	95	95	42.55	0.55	10.80	0.15	93.50	0.15	0.0	6.5E-09	
20	2014	9	9	7	53.00	52200	22.0	95	95	43.60	1.05	11.40	0.60	92.95	0.55	4.3	7.5E-09	
21	2014	9	9	11	53.00	14400	22.0	95	95	44.80	1.20	11.65	0.25	92.90	0.05	66.7	7.2E-09	
22	2014	9	9	18	35.00	24120	22.0	95	95	46.00	1.20	11.80	0.15	92.75	0.15	0.0	4.3E-09	
23	2014	9	10	6	32.00	43020	20.0	95	95	46.90	0.90	12.35	0.55	92.30	0.45	10.0	8.5E-09	
24	2014	9	10	12	14.00	20520	23.0	95	95	48.75	1.85	12.65	0.30	92.15	0.15	33.3	7.5E-09	
25	2014	9	10	14	0.00		0.0	95	92	49.40		12.60		91.90				
26	2014	9	10	15	15.00	4500	22.0	95	92	49.55	0.15	12.70	0.10	91.60	0.30	-50.0	8.6E-09	

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column.

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JNH

QA: JNH

Project Name:	Dane County Rodefeld	Cell #:	10
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 3, T-22, 382,700N / 2,200,900E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	3.0E-09 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values		
Sample Dia. (in)		2.86	2.86	Permeant:	Water
Sample Ht. (in)		3.00	3.00	Permeant Specific Gravity:	1.00
Tare & Wet (g)		647.00	919.20	Sample Specific Gravity:	2.70 Est.
Tare & Dry (g)		525.69	797.80	Confining Pressure (psi):	100.0
Tare (g)		0.00	272.11	Burette Diameter (in):	0.250
Sample Wt. (g)		647.00	647.09	Burette Zero (cm):	100.0
Moisture (%)		23.1	23.1		
Wet Density (pcf)		127.4	127.7		
Dry Density (pcf)		103.5	103.8	Max. Effect. Stress (psi):	10.8
Saturation (%)		99.2	100.0	Min. Effect. Stress (psi):	4.2
				Ave. Effect. Stress (psi):	5.0

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	4	10	0.00		0.0	95	95	40.00		2.50		100.45				
2	2014	9	4	10	53.00	3180	20.0	95	95	41.20	1.20	2.85	0.35	98.70	1.75	-66.7	2.0E-07	
3	2014	9	4	11	53.00	3600	21.0	95	95	42.50	1.30	3.15	0.30	97.80	0.90	-50.0	1.0E-07	
4	2014	9	4	12	52.00	3540	22.0	95	95	43.70	1.20	3.45	0.30	97.05	0.75	-42.9	8.8E-08	
5	2014	9	4	14	5.00	4380	23.0	95	95	45.05	1.35	3.60	0.15	96.30	0.75	-66.7	6.0E-08	
6	2014	9	4	15	52.00	6420	22.5	95	95	46.45	1.40	3.90	0.30	95.45	0.85	-47.8	5.4E-08	
7	2014	9	4	17	11.00	4740	23.0	95	95	47.65	1.20	4.05	0.15	94.90	0.55	-57.1	4.4E-08	
8	2014	9	5	8	24.00	54780	21.5	95	95	52.50	4.85	6.45	2.40	92.25	2.65	-5.0	3.0E-08	
9	2014	9	5	9	22.00	3480	21.0	95	95	52.65	0.15	6.60	0.15	92.15	0.10	20.0	2.4E-08	
10	2014	9	5	10	24.00	3720	22.0	95	95	52.90	0.25	6.70	0.10	92.05	0.10	0.0	1.7E-08	
11	2014	9	5	11	26.00	3720	22.0	95	95	52.95	0.05	6.70	0.00	91.95	0.10	-100.0	8.8E-09	
12	2014	9	5	12	37.00	4260	21.0	95	95	53.05	0.10	6.90	0.20	91.80	0.15	14.3	2.7E-08	
13	2014	9	5	13	36.00	3540	21.0	95	95	53.30	0.25	7.00	0.10	91.75	0.05	33.3	1.4E-08	
14	2014	9	5	14	36.00	3600	21.0	95	95	53.35	0.05	7.10	0.10	91.70	0.05	33.3	1.4E-08	
15	2014	9	5	15	34.00	3480	21.0	95	95	53.40	0.05	7.20	0.10	91.65	0.05	33.3	1.5E-08	
16	2014	9	5	17	15.00	6060	21.0	95	95	53.50	0.10	7.35	0.15	91.50	0.15	0.0	1.7E-08	
17	2014	9	8	5	55.00	218400	20.5	95	95	59.90	6.40	10.25	2.90	89.50	2.00	18.4	8.0E-09	
18	2014	9	8	7	52.00	7020	20.5	95	95	60.20	0.30	10.30	0.05	89.45	0.05	0.0	5.2E-09	
19	2014	9	8	10	10.00	8280	22.0	95	95	60.95	0.75	10.30	0.00	89.35	0.10	-100.0	4.2E-09	
20	2014	9	9	7	56.00	78360	20.5	95	95	63.70	2.75	10.70	0.40	88.90	0.45	-5.9	4.0E-09	
21	2014	9	9	18	38.00	38520	22.0	95	95	64.90	1.20	10.75	0.05	88.50	0.40	-77.8	4.2E-09	
22	2014	9	10	6	37.00	43140	20.0	95	95	65.35	0.45	11.20	0.45	88.55	-0.05	125.0	3.5E-09	
23	2014	9	10	12	14.00		0.0	95	90	28.40		11.25		88.10				
24	2014	9	10	13	53.00	5940	22.5	95	90	29.20	0.80	11.35	0.10	87.40	0.70	-75.0	8.7E-09	
25	2014	9	10	15	17.00	5040	22.0	95	90	29.50	0.30	11.45	0.10	87.10	0.30	-50.0	5.2E-09	
26	2014	9	10	18	8.00	10260	21.0	95	90	29.50	0.00	11.55	0.10	86.70	0.40	-60.0	3.2E-09	

**A zero in this column starts a series of measurements.

(Termination determined by stable Kv and low flow differential.)

*Average Kv for those rows with a 1 in the Ave. column.

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JNH

QA: JNH

Project Name:	Dane County Rodefeld	Cell #:	11
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 3, T-23, 382,600N / 2,201,100E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	3.6E-09 cm/s

Sample Type: Undisturbed	Initial Values	Final Values			
Sample Dia. (in)	2.87	2.85	Permeant:	Water	
Sample Ht. (in)	3.32	3.31	Permeant Specific Gravity:	1.00	
Tare & Wet (g)	705.40	964.80	Sample Specific Gravity:	2.70	Est.
Tare & Dry (g)	564.77	827.40	Confining Pressure (psi):	100.0	
Tare (g)	0.00	262.63	Burette Diameter (in):	0.250	
Sample Wt. (g)	705.40	702.17	Burette Zero (cm):	100.0	
Moisture (%)	24.9	24.3	Maximum Gradient:	52.5	
Wet Density (pcf)	125.1	126.4	Average Gradient:	52.1	
Dry Density (pcf)	100.2	101.7	Max. Effect. Stress (psi):	10.6	
Saturation (%)	98.6	100.0	Min. Effect. Stress (psi):	4.1	
			Ave. Effect. Stress (psi):	6.2	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	5	8	23.00		0.0	95	95	45.90		5.80		101.45				
2	2014	9	5	9	21.00		0.0	95	95	46.10		2.90		102.30				
3	2014	9	5	10	22.00		0.0	95	95	46.55		2.95		102.45				
4	2014	9	5	11	27.00	3900	22.0	95	95	46.75	0.20	3.00	0.05	102.40	0.05	0.0	7.9E-09	
5	2014	9	5	12	39.00		0.0	95	95	47.05		3.00		102.40				
6	2014	9	5	13	38.00		0.0	95	95	47.40		3.05		102.45				
7	2014	9	5	14	35.00		0.0	95	95	47.50		3.05		103.75				
8	2014	9	5	15	35.00	3600	21.0	95	95	47.75	0.25	3.05	0.00	103.70	0.05	-100.0	4.3E-09	
9	2014	9	5	17	16.00	6060	21.0	95	95	48.05	0.30	3.10	0.05	103.70	0.00	100.0	2.6E-09	
10	2014	9	8	5	56.00	218400	20.5	95	95	56.75	8.70	4.70	1.60	102.60	1.10	18.5	4.0E-09	
11	2014	9	8	7	53.00	7020	20.5	95	95	57.00	0.25	4.75	0.05	102.60	0.00	100.0	2.3E-09	
12	2014	9	8	7	59.00		0.0	95	90	57.25		4.70		102.35				
13	2014	9	8	9	0.00	3660	21.0	95	90	57.90	0.65	4.80	0.10	101.80	0.55	-69.2	1.2E-08	
14	2014	9	8	10	11.00	4260	22.0	95	90	58.75	0.85	4.85	0.05	101.40	0.40	-77.8	7.2E-09	
15	2014	9	8	11	7.00	3360	21.0	95	90	58.95	0.20	4.85	0.00	101.20	0.20	-100.0	4.2E-09	
16	2014	9	8	13	7.00	7200	22.0	95	90	59.90	0.95	4.90	0.05	100.70	0.50	-81.8	5.2E-09	
17	2014	9	8	17	28.00	15660	22.0	95	90	61.10	1.20	5.05	0.15	99.85	0.85	-70.0	4.4E-09	
18	2014	9	9	7	57.00	52140	20.5	95	90	63.35	2.25	6.00	0.95	97.75	2.10	-37.7	4.2E-09	
19	2014	9	9	11	59.00	14520	22.0	95	90	64.60	1.25	6.30	0.30	97.30	0.45	-20.0	3.6E-09	
20	2014	9	9	18	39.00	24000	22.0	95	90	66.98	2.38	6.85	0.55	96.50	0.80	-18.5	3.9E-09	
21	2014	9	10	6	39.00	43200	20.0	95	90	67.10	0.12	7.85	1.00	95.25	1.25	-11.1	3.8E-09	1
22	2014	9	10	12	15.00	20160	22.0	95	90	68.85	1.75	8.35	0.50	94.70	0.55	-4.8	3.7E-09	1
23	2014	9	10	15	18.00	10980	22.0	95	90	69.00	0.15	8.60	0.25	94.45	0.25	0.0	3.2E-09	1
24	2014	9	11	3	46.00	44880	20.0	95	90	69.10	0.10	9.65	1.05	93.25	1.20	-6.7	3.7E-09	1
25	2014	9	11	7	5.00	11940	21.0	95	90	69.40	0.30	9.90	0.25	92.90	0.35	-16.7	3.6E-09	1
26	2014	9	11	10	23.00	11880	20.0	95	90	69.50	0.10	10.15	0.25	92.60	0.30	-9.1	3.4E-09	1

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column. 3.6E-09 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	9
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 4, T-27, 382,250N/2,200,850E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	2.4E-09 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values			
Sample Dia. (in)		2.87	2.87	Permeant:	Water	
Sample Ht. (in)		2.99	2.99	Permeant Specific Gravity:	1.00	
Tare & Wet (g)		423.51	934.10	Sample Specific Gravity:	2.70	Est.
Tare & Dry (g)		396.11	822.00	Confining Pressure (psi):	100.0	
Tare (g)		256.30	268.95	Burette Diameter (in):	0.250	
Sample Wt. (g)		663.10	665.15	Burette Zero (cm):	100.0	
Moisture (%)		19.6	20.3	Maximum Gradient:	38.9	
Wet Density (pcf)		130.6	131.0	Average Gradient:	38.7	
Dry Density (pcf)		109.2	108.9	Max. Effect. Stress (psi):	9.0	
Saturation (%)		97.5	100.0	Min. Effect. Stress (psi):	4.6	
				Ave. Effect. Stress (psi):	6.7	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	11	3	57.00		0.0	95	95	28.55		3.20		100.70				
2	2014	9	11	4	57.00	3600	21.0	95	95	28.60	0.05	3.30	0.10	100.20	0.50	-66.7	4.8E-08	
3	2014	9	11	10	23.00	19560	20.5	95	95	28.20	-0.40	3.60	0.30	100.05	0.15	33.3	6.9E-09	
4	2014	9	11	12	35.00		0.0	95	95	28.30		3.70		100.05				
5	2014	9	11	12	41.00		0.0	95	92	28.60		3.70		99.90				
6	2014	9	11	14	59.00	8280	21.0	95	92	29.05	0.45	3.80	0.10	99.40	0.50	-66.7	6.6E-09	
7	2014	9	11	19	13.00	15240	21.5	95	92	29.90	0.85	4.05	0.25	99.00	0.40	-23.1	3.9E-09	
8	2014	9	12	8	5.00	46320	20.0	95	92	29.90	0.00	4.75	0.70	98.10	0.90	-12.5	3.3E-09	
9	2014	9	12	13	18.00	18780	20.0	95	92	29.90	0.00	5.05	0.30	97.85	0.25	9.1	2.8E-09	
10	2014	9	12	16	59.00	13260	20.5	95	92	30.25	0.35	5.25	0.20	97.70	0.15	14.3	2.5E-09	
11	2014	9	15	9	8.00	230940	20.5	95	92	30.80	0.55	8.15	2.90	95.10	2.60	5.5	2.3E-09	
12	2014	9	15	10	13.00		0.0	95	92	32.65		8.25		95.05				
13	2014	9	15	11	15.00	3720	22.0	95	92	32.90	0.25	8.40	0.15	95.00	0.05	50.0	5.0E-09	
14	2014	9	15	13	52.00	9420	23.5	95	92	33.20	0.30	8.50	0.10	94.85	0.15	-20.0	2.4E-09	
15	2014	9	15	15	1.00	4140	23.0	95	92	33.20	0.00	8.55	0.05	94.80	0.05	0.0	2.2E-09	
16	2014	9	16	5	58.00	53820	23.0	95	92	33.60	0.40	9.20	0.65	94.10	0.70	-3.7	2.3E-09	
17	2014	9	16	8	2.00	7440	23.0	95	92	33.40	-0.20	9.30	0.10	94.00	0.10	0.0	2.4E-09	
18	2014	9	16	10	0.00	7080	23.0	95	92	33.60	0.20	9.40	0.10	93.90	0.10	0.0	2.6E-09	
19	2014	9	16	12	10.00	7800	23.5	95	92	33.65	0.05	9.55	0.15	93.85	0.05	50.0	2.3E-09	
20	2014	9	16	14	47.00	9420	23.5	95	92	33.70	0.05	9.65	0.10	93.75	0.10	0.0	1.9E-09	1
21	2014	9	16	16	52.00	7500	25.0	95	92	34.45	0.75	9.80	0.15	93.65	0.10	20.0	2.9E-09	1
22	2014	9	16	20	5.00	11580	25.0	95	92	34.50	0.05	10.00	0.20	93.50	0.15	14.3	2.6E-09	1
23	2014	9	17	6	14.00	36540	22.0	95	92	34.10	-0.40	10.35	0.35	93.00	0.50	-17.6	2.2E-09	1
24	2014	9	17	8	1.00	6420	22.5	95	92	34.20	0.10	10.45	0.10	92.90	0.10	0.0	2.9E-09	1
25	2014	9	17	10	34.00	9180	22.0	95	92	34.40	0.20	10.55	0.10	92.80	0.10	0.0	2.0E-09	1
26																		

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column.

2.4E-09 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	8
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 4, T-28, 382,750N/2,200,950E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	3.3E-09 cm/s

	Initial Values	Final Values			
Sample Type:	Undisturbed				
Sample Dia. (in)	2.86	2.86	Permeant:	Water	
Sample Ht. (in)	2.81	2.80	Permeant Specific Gravity:	1.00	
Tare & Wet (g)	380.65	865.70	Sample Specific Gravity:	2.68	Est.
Tare & Dry (g)	359.27	750.80	Confining Pressure (psi):	100.0	
Tare (g)	258.91	269.58	Burette Diameter (in):	0.250	
Sample Wt. (g)	594.69	596.12	Burette Zero (cm):	100.0	
Moisture (%)	21.3	23.9	Maximum Gradient:	59.9	
Wet Density (pcf)	125.5	126.3	Average Gradient:	59.7	
Dry Density (pcf)	103.5	101.9	Max. Effect. Stress (psi):	10.8	
Saturation (%)	92.8	100.0	Min. Effect. Stress (psi):	4.2	
			Ave. Effect. Stress (psi):	6.8	

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	11	4	5.00		0.0	95	95	32.20		2.10		100.50				
2	2014	9	11	7	0.00	10500	21.0	95	95	33.75	1.55	2.35	0.25	99.50	1.00	-60.0	3.2E-08	
3	2014	9	11	12	34.00	20040	20.0	95	95	35.95	2.20	2.70	0.35	99.30	0.20	27.3	7.7E-09	
4	2014	9	11	19	12.00	23880	21.5	95	95	38.65	2.70	3.10	0.40	99.15	0.15	45.5	6.3E-09	
5	2014	9	12	8	9.00	46620	20.0	95	95	40.95	2.30	3.70	0.60	98.70	0.45	14.3	6.4E-09	
6	2014	9	12	13	17.00	18480	20.0	95	95	41.70	0.75	3.95	0.25	98.55	0.15	25.0	6.2E-09	
7	2014	9	12	16	58.00	13260	20.5	95	95	42.70	1.00	4.10	0.15	98.50	0.05	50.0	4.3E-09	
8	2014	9	12	17	5.00		0.0	95	90	43.05		4.10		98.20				
9	2014	9	12	17	55.00	3000	20.5	95	90	43.90	0.85	4.15	0.05	97.75	0.45	-80.0	1.0E-08	
10	2014	9	15	9	8.00	227580	20.5	95	90	61.65	17.75	10.25	6.10	90.85	6.90	-6.2	3.5E-09	
11	2014	9	15	10	12.00		0.0	95	90	64.80		10.25		90.75				
12	2014	9	15	11	14.00	3720	22.0	95	90	65.45	0.65	10.40	0.15	90.70	0.05	50.0	3.2E-09	
13	2014	9	15	13	52.00	9480	23.5	95	90	66.30	0.85	10.60	0.20	90.30	0.40	-33.3	3.7E-09	
14	2014	9	15	15	0.00	4080	23.0	95	90	66.40	0.10	10.70	0.10	90.20	0.10	0.0	2.9E-09	
15	2014	9	16	5	58.00	53880	23.0	95	90	68.25	1.85	12.20	1.50	88.60	1.60	-3.2	3.4E-09	
16	2014	9	16	8	1.00	7380	23.0	95	90	68.20	-0.05	12.35	0.15	88.35	0.25	-25.0	3.2E-09	
17	2014	9	16	10	0.00	7140	23.0	95	90	68.50	0.30	12.65	0.30	88.20	0.15	33.3	3.7E-09	
18	2014	9	16	12	8.00	7680	23.5	95	90	68.75	0.25	12.85	0.20	88.10	0.10	33.3	2.3E-09	
19	2014	9	16	14	46.00	9480	23.5	95	90	68.80	0.05	13.05	0.20	87.75	0.35	-27.3	3.4E-09	
20	2014	9	16	16	49.00	7380	24.5	95	90	69.75	0.95	13.30	0.25	87.65	0.10	42.9	2.8E-09	
21	2014	9	16	20	3.00	11640	25.0	95	90	70.00	0.25	13.65	0.35	87.30	0.35	0.0	3.4E-09	1
22	2014	9	17	6	13.00	36600	22.0	95	90	69.85	-0.15	14.60	0.95	86.20	1.10	-7.3	3.4E-09	1
23	2014	9	17	8	0.00	6420	22.5	95	90	70.20	0.35	14.75	0.15	86.05	0.15	0.0	2.9E-09	1
24	2014	9	17	10	32.00	9120	22.0	95	90	70.50	0.30	15.05	0.30	85.85	0.20	20.0	3.4E-09	1
25																		
26																		

**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column. 3.3E-09 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

TRC Environmental Corporation

Falling Head, Rising Tailwater Permeability Test (ASTM D5084, Method C)

QC: JPH

QA: JPH

Project Name:	Dane County Rodefeld	Cell #:	9
Project #:	220142.0000	USCS Description:	Lean clay
Sample Name:	Lift 4, T-30, 382,250N/2,201,150E	USCS Classification:	CL
Visual Descript:	Lean clay	Average Kv =	1.6E-08 cm/s

Sample Type:	Undisturbed	Initial Values	Final Values		
Sample Dia. (in)		2.86	2.86	Permeant:	Water
Sample Ht. (in)		3.26	3.26	Permeant Specific Gravity:	1.00
Tare & Wet (g)		690.60	956.60	Sample Specific Gravity:	2.69 Est.
Tare & Dry (g)		555.31	821.60	Confining Pressure (psi):	100.0
Tare (g)		0.00	266.29	Burette Diameter (in):	0.250
Sample Wt. (g)		690.60	690.31	Burette Zero (cm):	100.0
Moisture (%)		24.4	24.3	Maximum Gradient:	10.9
Wet Density (pcf)		126.1	126.2	Average Gradient:	10.7
Dry Density (pcf)		101.4	101.5	Max. Effect. Stress (psi):	5.9
Saturation (%)		99.8	100.0	Min. Effect. Stress (psi):	4.2
				Ave. Effect. Stress (psi):	4.9

	Date			Time		Run	Temp	Pressure (psi)		Cham	Cham.	Bot	Bot.	Top	Top	Flow	Kv ***	Ave.*
	Yr.	Mo.	Day	Hr.	Min.	Time (s)	C°**	Bot	Top	(cm)	Dif.(cm)	(cm)	Dif.(cm)	(cm)	Dif.(cm)	Dif.(%)	cm/s	0,1
1	2014	9	19	9	27.00		0.0	95	95	36.75		3.35		103.20				
2	2014	9	19	9	58.00		0.0	95	95	38.10		3.50		102.60				
3	2014	9	19	11	29.00	5460	23.0	95	95	41.20	3.10	3.60	0.10	102.55	0.05	33.3	8.2E-09	
4	2014	9	19	12	33.00	3840	23.0	95	95	42.40	1.20	3.70	0.10	102.50	0.05	33.3	1.2E-08	
5	2014	9	19	13	23.00	3000	23.0	95	95	43.10	0.70	3.75	0.05	102.45	0.05	0.0	1.0E-08	
6	2014	9	19	14	55.00	5520	23.0	95	95	44.30	1.20	3.85	0.10	102.35	0.10	0.0	1.1E-08	
7	2014	9	22	6	11.00	227760	22.0	95	95	55.30	11.00	5.70	1.85	101.50	0.85	37.0	3.7E-09	
8	2014	9	22	8	12.00	7260	22.0	95	95	55.45	0.15	5.75	0.05	100.95	0.55	-83.3	2.6E-08	
9	2014	9	22	10	27.00	8100	22.5	95	95	55.60	0.15	5.80	0.05	100.90	0.05	0.0	3.9E-09	
10	2014	9	22	12	10.00	6180	22.0	95	95	55.50	-0.10	5.85	0.05	100.85	0.05	0.0	5.1E-09	
11	2014	9	22	12	12.00		0.0	95	95	55.80		5.85		100.60				
12	2014	9	22	14	48.00	9360	22.0	95	95	57.15	1.35	5.90	0.05	99.70	0.90	-89.5	3.3E-08	
13	2014	9	23	6	6.00	55080	22.0	95	95	59.40	2.25	6.85	0.95	97.65	2.05	-36.7	1.8E-08	
14	2014	9	23	7	18.00	4320	24.0	95	95	59.80	0.40	7.00	0.15	97.50	0.15	0.0	2.2E-08	
15	2014	9	23	10	23.00	11100	21.5	95	95	59.40	-0.40	7.15	0.15	97.25	0.25	-25.0	1.2E-08	
16	2014	9	23	13	7.00	9840	22.0	95	95	59.75	0.35	7.40	0.25	97.00	0.25	0.0	1.7E-08	1
17	2014	9	23	17	11.00	14640	23.0	95	95	60.35	0.60	7.70	0.30	96.60	0.40	-14.3	1.6E-08	1
18	2014	9	23	19	27.00	8160	23.5	95	95	60.70	0.35	7.90	0.20	96.40	0.20	0.0	1.6E-08	1
19	2014	9	24	5	49.00	37320	23.0	95	95	61.30	0.60	8.70	0.80	95.35	1.05	-13.5	1.7E-08	1
20																		
21																		
22																		
23																		
24																		
25																		
26																		

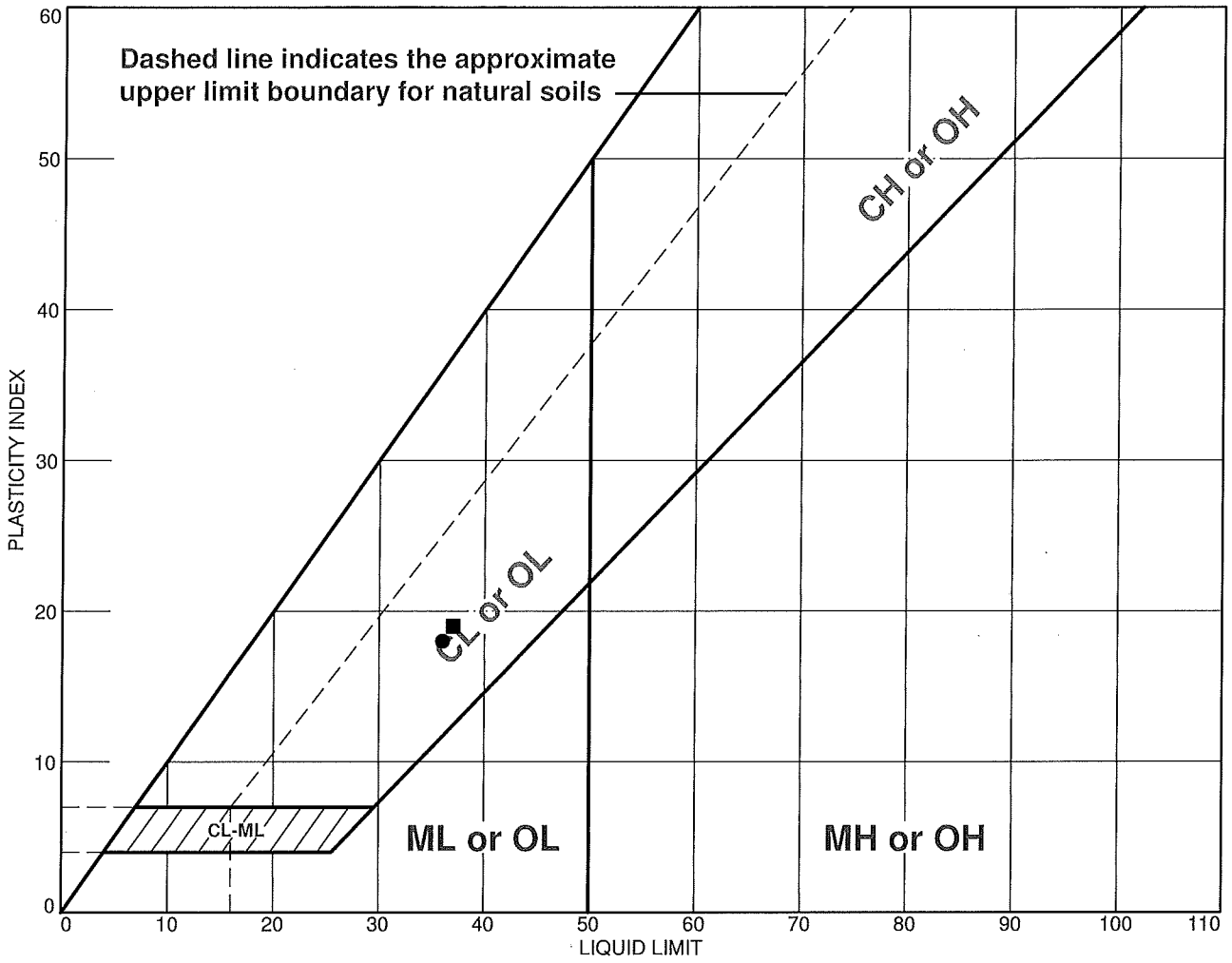
**A zero in this column starts a series of measurements.

*Average Kv for those rows with a 1 in the Ave. column. 1.6E-08 cm/s

(Termination determined by stable Kv and low flow differential.)

***Kv adjusted for temperature.

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	36	18	18	98.1	92.4	CL
■	Lean clay	37	18	19	98.9	92.1	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 1 **Depth:** 382,600N/2,201,000E **Sample No.:** T-1

■ **Source:** Lift 1 **Depth:** 382,100N/2,201,100E **Sample No.:** T-3

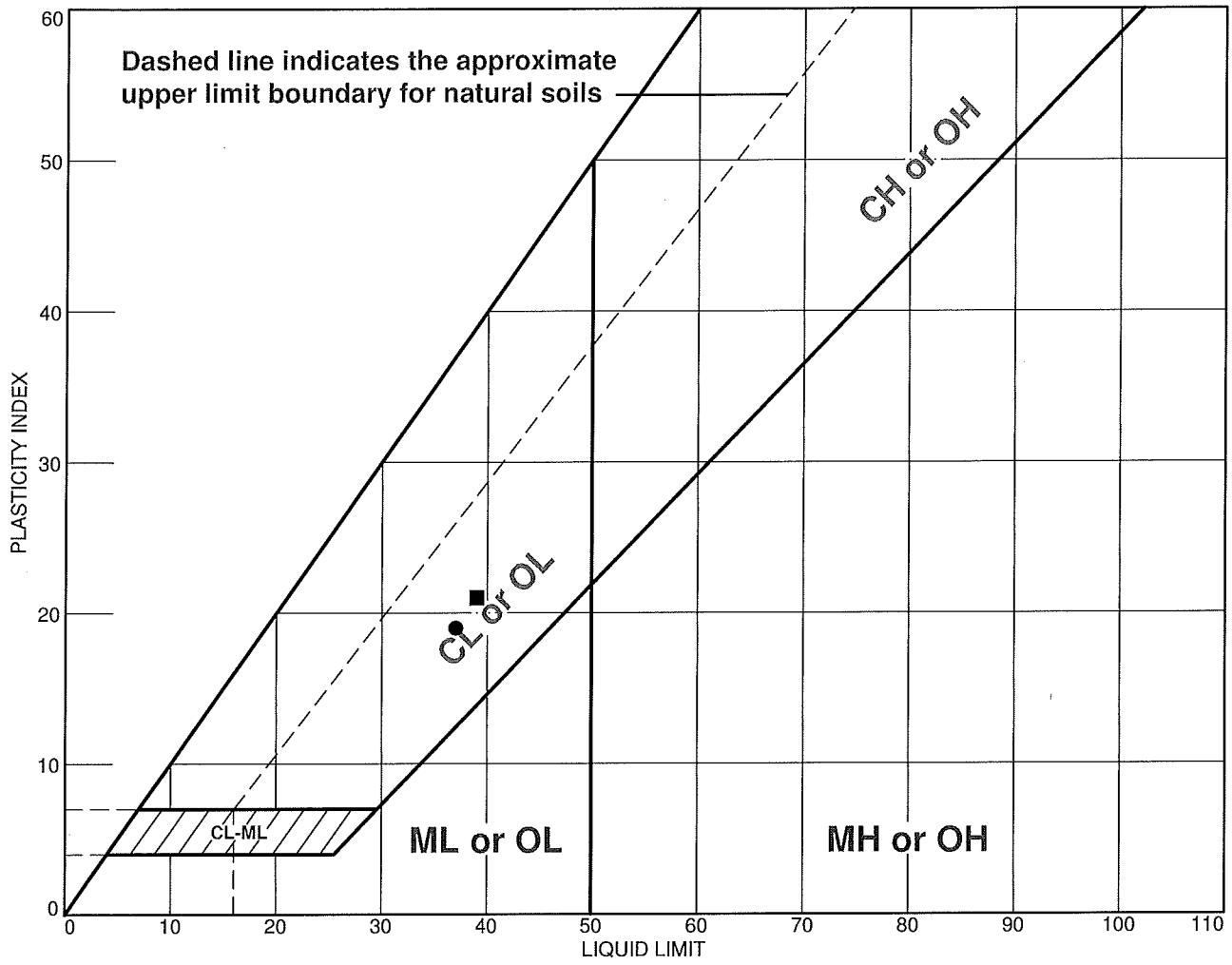
Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	37	18	19	97.0	90.8	CL
■	Lean clay	39	18	21	96.1	88.3	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 1 **Depth:** 382,500N/2,200,900E **Sample No.:** T-2

■ **Source:** Lift 1 **Depth:** 382,000N/2,200,900E **Sample No.:** T-4

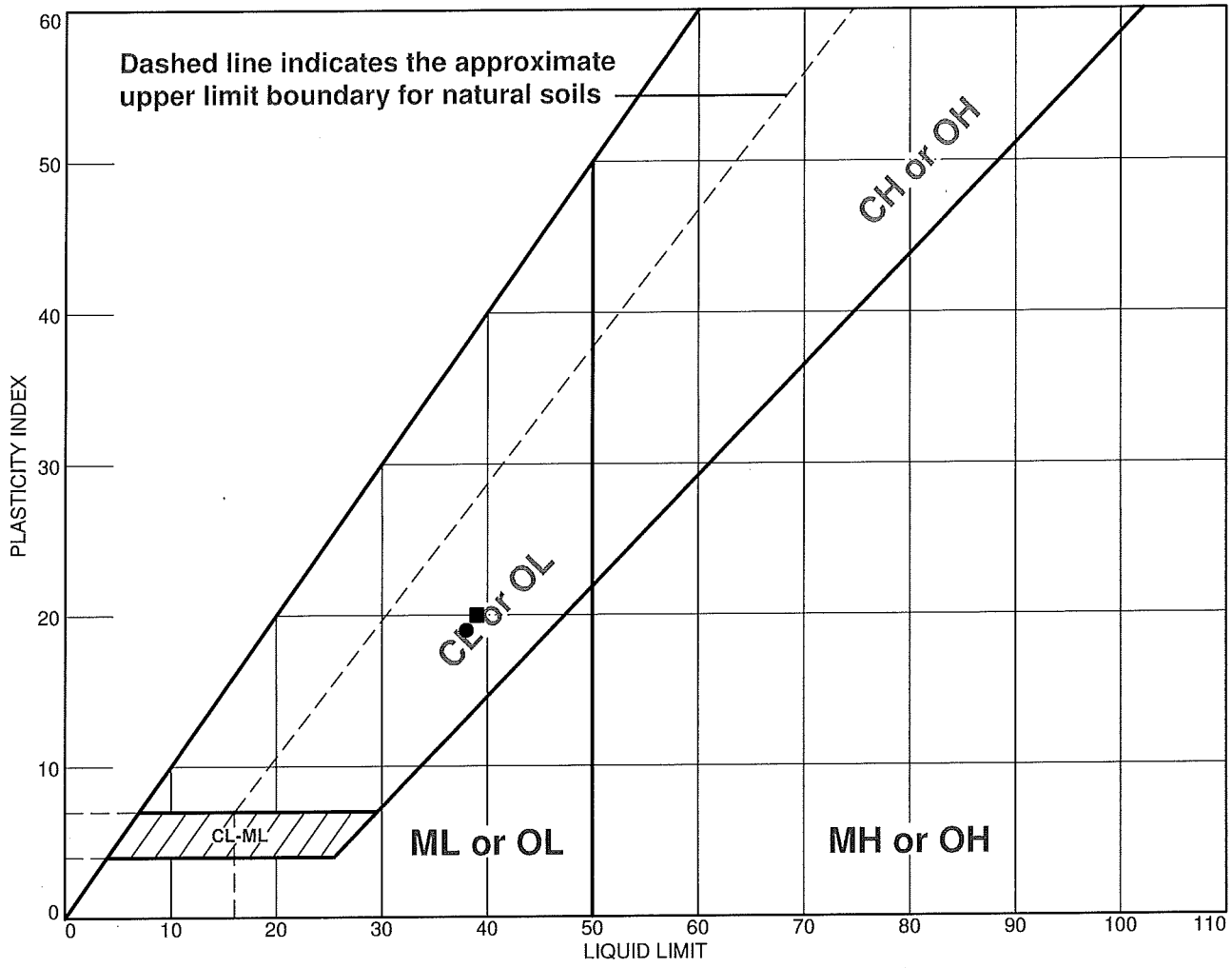
Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	38	19	19	96.9	89.0	CL
■	Lean clay	39	19	20	98.9	94.3	CL
▲	Lean clay	39	19	20	96.6	87.8	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 1 **Depth:** 382,700N/2,201,100E **Sample No.:** T-5

■ **Source:** Lift 1 **Depth:** 382,800N/2,201,200E **Sample No.:** T-7

▲ **Source:** Lift 1 **Depth:** 382,400N/2,201,200E **Sample No.:** T-8

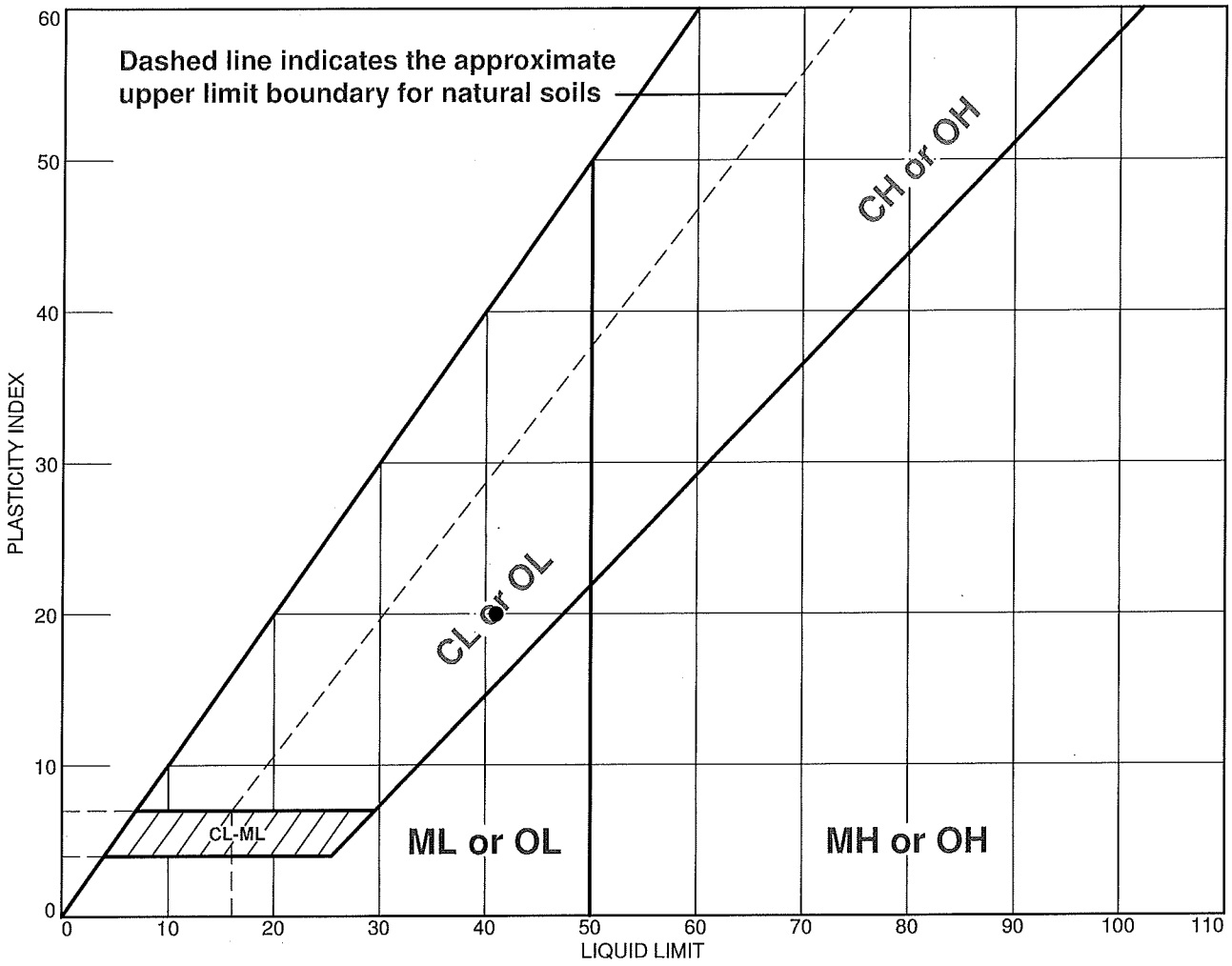
Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	41	21	20	97.2	90.5	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 1 **Depth:** 382,300N/2,201,100E **Sample No.:** T-6

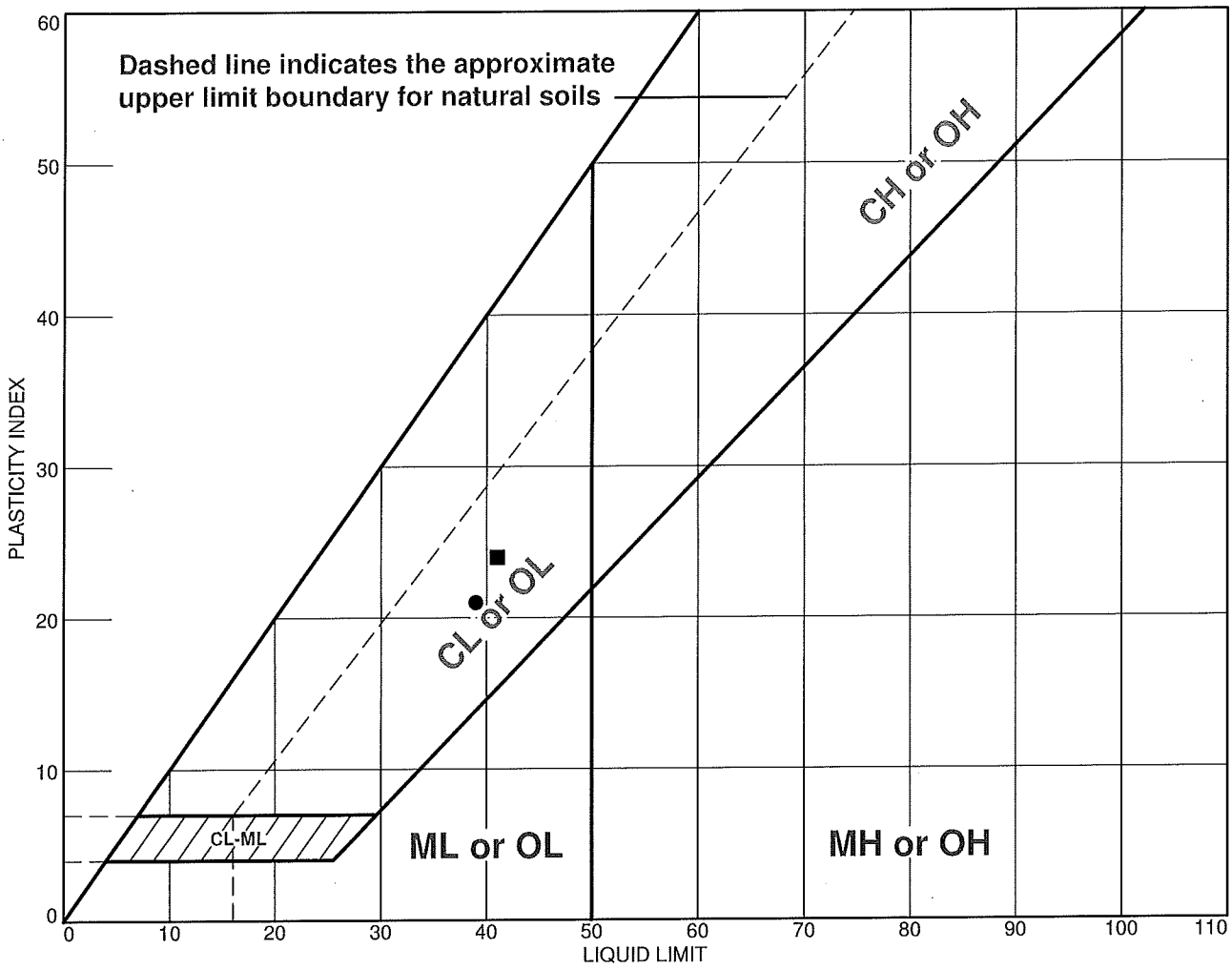
Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	39	18	21	97.1	89.6	CL
■	Lean clay	41	17	24	95.9	90.2	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source of Sample:** Lift 2 **Sample Number:** T-9

■ **Source of Sample:** Lift 2 **Sample Number:** T-12

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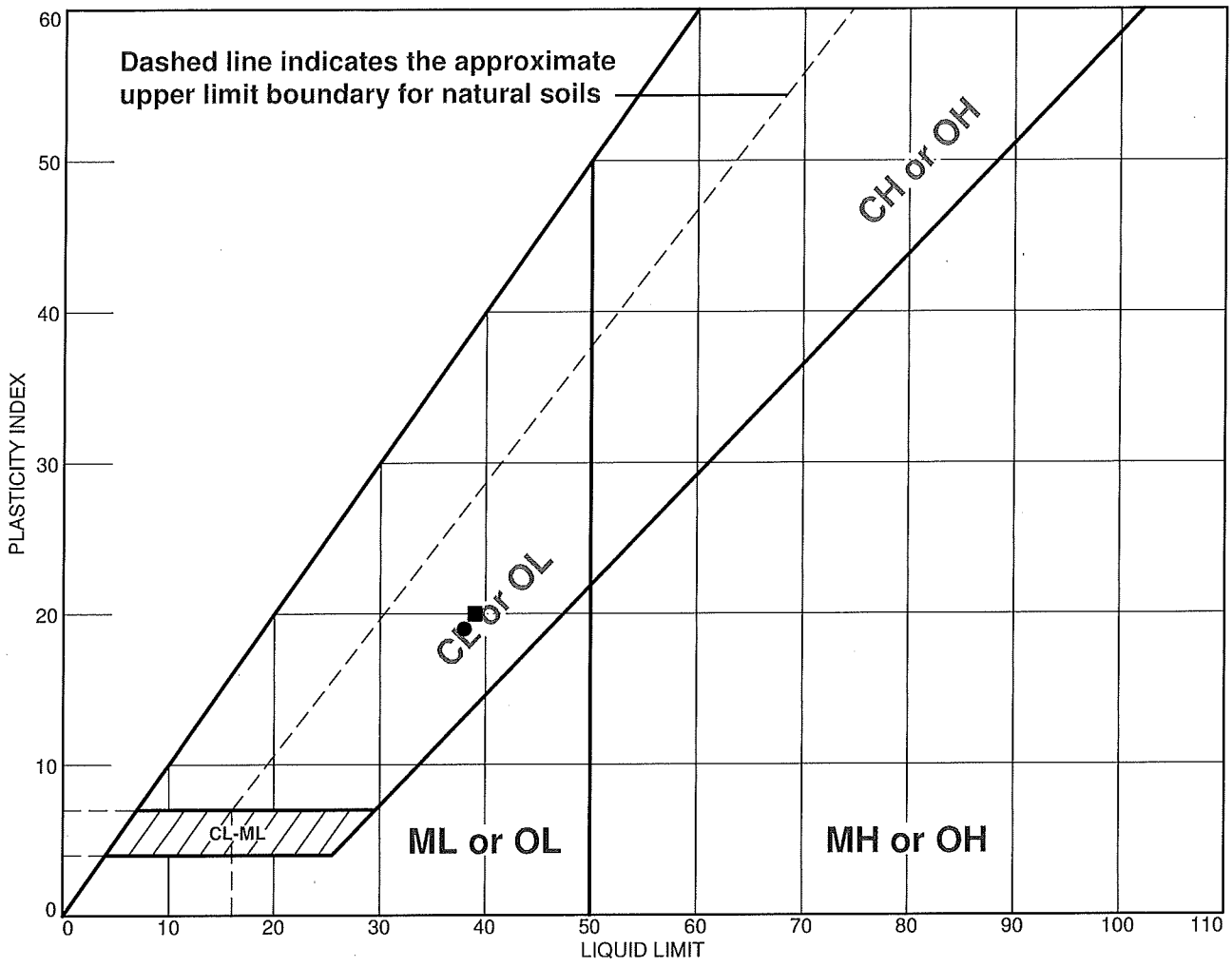
Remarks:

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	38	19	19	96.1	90.8	CL
■	Lean clay	39	19	20	97.0	89.0	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 2 **Depth:** 382,250N/2,200,850E **Sample No.:** T-10

■ **Source:** Lift 2 **Depth:** 382,450N/2,200,950E **Sample No.:** T-11

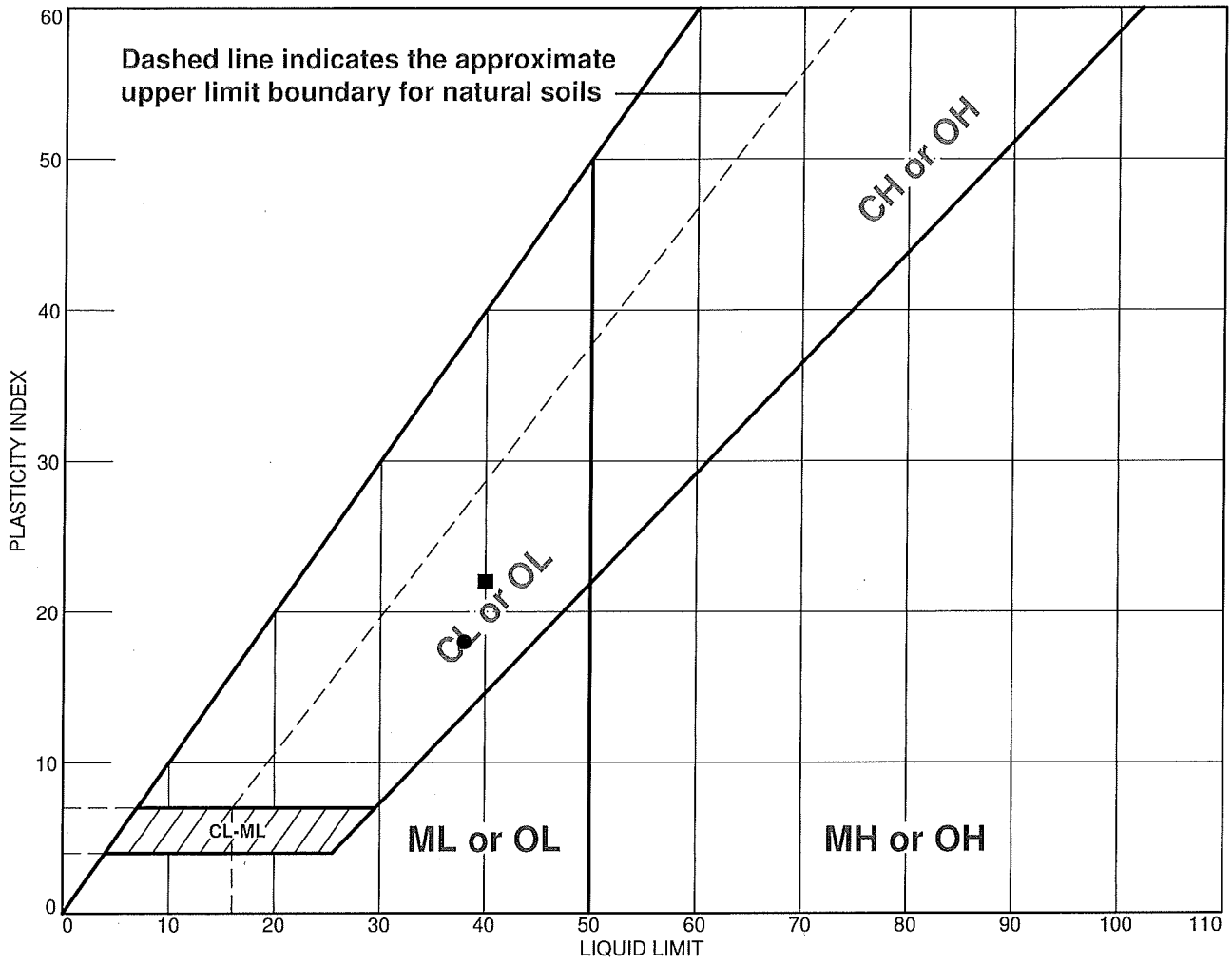
Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	38	20	18	94.9	87.6	CL
■	Lean clay	40	18	22	97.7	90.7	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 2 **Depth:** 382,650N/2,201,050E **Sample No.:** T-13

■ **Source:** Lift 2 **Depth:** 382,250N/2,201,050E **Sample No.:** T-14

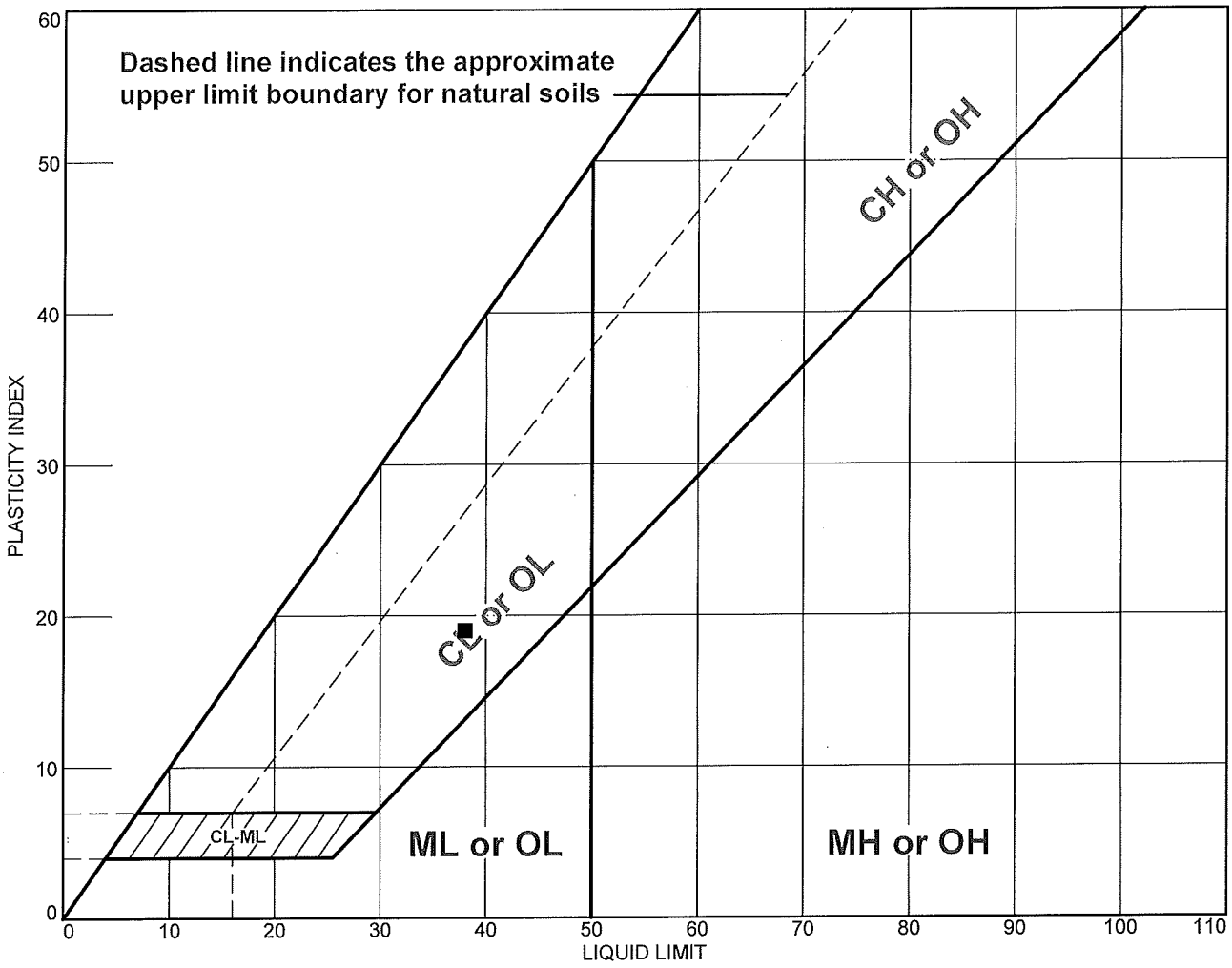
Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean clay	38	19	19	98.0	90.4	CL
■	Lean clay	38	19	19	97.6	89.6	CL

Project No. 220142.0000 **Client:** Dane County

Project: Dane County Rodefeld

● **Source:** Lift 2 **Depth:** 382,150N/2,201,150E **Sample No.:** T-15

■ **Source:** Lift 2 **Depth:** 382,750N/2,201,150E **Sample No.:** T-16

Remarks:

TRC Environmental Corp.

Madison, Wisconsin

Figure