



To: Mayor and City Council
Cc: Gregg Mandsager, City Administrator
Brian Stineman, Public Works Director
From: Kristy Korpi, Solid Waste Manager
Date: Monday, July 17, 2017
Re: Request to approve Annual Services Contract with Barker Lemar Engineering

Introduction: Barker Lemar Engineering Consultants provides environmental services to The City of Muscatine on behalf of the landfill permit holder, Muscatine County Solid Waste Management Agency. This scope of services is to provide engineering services that are required to comply with the conditions outlines in the the permits and Iowa Administrative Code for the landfill, Transfer Station, and the closed C & D landfill.

Annual Services would be provided Fiscal Year 2018 through Fiscal Year 2020 (July 1, 2017- June 30, 2020). The fee for services is \$25,385.00 annually, \$76,155.00 for fiscal years 2018-2020.

Barker Lemar proposes the following services:

1. Semi-Annual Groundwater Sampling
2. Spring Sampling Notification
3. Annual Water Quality Report
4. Annual Statisical Software Licensing Fee
5. Leachate Control System Performance Evaluation Report
6. Landfill Gas Annual Report
7. Annual Financial Assurance Review

Recommendation: Staff recommends approval of the annual services contract with Barker Lemar Engineering to ensure compliance with permits and Iowa Administravtive Code for the landfill, Transfer Station and closed C&D landfill.



June 23, 2017

Ms. Kristy Korpi
Muscatine County Solid Waste Management Agency
1000 South Houser
Muscatine, Iowa 52761

RE: Annual Services – Fiscal Year 2018 through Fiscal Year 2020 (July 1, 2017 through June 30, 2020)
Muscatine County Sanitary Landfill, Muscatine Recycling and Transfer Station,
and Muscatine C&D Landfill
Proposal No. 164458

Dear Kristy:

BARKER LEMAR ENGINEERING CONSULTANTS (BARKER LEMAR) appreciates the opportunity to provide environmental services to the Muscatine County Solid Waste Management Agency (Client). The purpose of this scope of services is to provide the engineering services as described herein that are required to comply with the conditions outlined in the permits and Iowa Administrative Code (IAC) for the Muscatine County Sanitary Landfill, Muscatine Recycling and Transfer Station, and the closed Muscatine construction and demolition (C&D) Landfill.

1.0 PROJECT UNDERSTANDING

The Muscatine County Sanitary Landfill accepted waste after October 1, 2007; therefore, it is governed by the current IAC 567 Chapter 113.

The closed Muscatine C&D Landfill was issued a closure permit on December 29, 1994; it is governed by the closure permit and the 1989 IAC 567 Chapter 103.

The Muscatine Recycling and Transfer Station is governed under IAC 567 Chapter 106.

This scope of services has been prepared based upon current Iowa Department of Natural Resources (DNR) regulations, the pertinent IAC, and site permits and amendments.

2.0 SCOPE OF SERVICES

Based on the above information, BARKER LEMAR proposes the following scope of services for the Muscatine County Sanitary Landfill:

1. Semi-Annual Groundwater Sampling
2. Spring Sampling Notification
3. Annual Water Quality Report
4. Annual Statistical Software Licensing Fee
5. Leachate Control System Performance Evaluation Report
6. Landfill Gas Annual Report
7. Annual Financial Assurance Review



Note: Semi-annual inspections of the Muscatine County Sanitary Landfill will no longer be required after the construction of a leachate storage lagoon. If the construction of the lagoon does not occur during 2017, a change order for necessary inspections will be prepared.

BARKER LEMAR proposes the following scope of services for the Muscatine C&D Landfill:

1. Semi-Annual Groundwater Sampling
2. Annual Water Quality Report
3. Semi-Annual Engineering Inspections

BARKER LEMAR proposes the following scope of services for the Muscatine Recycling and Transfer Station:

1. Annual Transfer Station Inspection

MUSCATINE COUNTY SANITARY LANDFILL

Each task for the Muscatine County Sanitary Landfill is described below.

Task 1 – Groundwater Sampling

As a result of the Muscatine County Sanitary Landfill accepting municipal solid waste after October 1, 2007, the Muscatine County Sanitary Landfill is currently governed by IAC 567 Chapter 113. Based on the revised Hydrologic Monitoring System Plan (HMSP) and site operating permit, Table 1 at the end of this scope was prepared to show the anticipated sampling at the Muscatine County Sanitary Landfill during the semi-annual sampling events.

In the event that the DNR requires additional monitoring, this proposal includes a per well price (see Attachment A, Table A) for sampling services. If sampling in addition to that included in the fee tables is required, the Client will be informed prior to commencing field work.

Task 2 – Spring Sampling Notification

The following is a description of the Task 2 services:

- Field sampling forms, laboratory analytical data sheets, and the 1st Semi-Annual Statistical Report will be prepared and retained for submittal in the subsequent Annual Water Quality Report
- The Spring Sampling Notification, which will include a summary of statistical results, will be completed for the landfill;
- The notification will be submitted to the DNR in 2018, 2019, and 2020 within 59 days of receipt of analytical results if a new occurrence of a statistically significant level (SSL) over a groundwater protection standard (GWPS) is measured.

Task 3 – Annual Water Quality Report (AWQR)

The following is a description of the Task 3 services:

- The Annual Water Quality Report will be completed for the landfill;

- The report will include a summary of groundwater monitoring results, groundwater levels, monitoring well depths, analysis of the data collected, statistical analysis, and associated sampling recommendations;
- The AWQR will be prepared under the direction and signed by a qualified groundwater scientist; and
- The report will be submitted to the DNR by January 31 of 2018, 2019, and 2020.

Task 4 – Annual Statistical Software Licensing Fee

BARKER LEMAR staff has obtained a statistical software license to allow use of the software to complete statistics for the site. A renewal license fee is required annually.

Task 5 – Leachate Control System Performance Evaluation Report (LCSPER)

The following is a description of the Task 5 services:

- The leachate control system performance evaluation report will be prepared;
- The report will include a summary of disposal volumes of leachate, laboratory testing, and monthly leachate head levels provided by the Client's staff;
- The LCSPER will be submitted to the DNR by January 31 of 2018, 2019, and 2020 as a supplement to the AWQR.

Task 6 – Landfill Gas Annual Report

The following is a description of the Task 6 services:

- Obtain the quarterly gas monitoring results, actions taken, and results of actions taken from the Client's staff; and
- Prepare and submit the annual report to the DNR by January 31 of 2018, 2019, and 2020 as a supplement to the AWQR.

Task 7 – Annual Financial Assurance Review

The following is a description of the Task 7 services:

- Estimate the amount to be set aside for closure/post closure care for the site to meet the Financial Assurance rules.
- As part of the Financial Assurance requirements for closure and post closure of municipal solid waste landfills, the owner or operator is required to submit to the DNR a detailed written estimate in current dollars and certified by an Iowa-licensed professional engineer. Following the initial detailed written estimate, line items where changes have been made since the previous submittal will be re-evaluated in subsequent years. The Inflation Factor from the US Department of Commerce will be applied to line items where changes have not occurred since the previous submittal.
- The estimates and completed DNR Form 542-8090 Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form will be provided to the Client by March 1 of 2018, 2019, and 2020. It is the Client's responsibility to provide the required documentation to the DNR by April 1 of each year as required by IAC 567-113.14(4).

MUSCATINE C&D LANDFILL

Each task for the Muscatine C&D Landfill is described below.

Task 1 – Groundwater Sampling

Based on the HMSP and site permit and amendments, Table 2 at the end of this scope was prepared to show the anticipated sampling BARKER LEMAR will perform at the Muscatine C&D Landfill during the semi-annual sampling events.

In the event that the DNR requires additional monitoring, this proposal includes a per well price (see Attachment A, Table A) for sampling services. If sampling in addition to that included in the fee tables is required, the Client will be informed prior to commencing field work.

Task 2 – Annual Water Quality Report (AWQR)

The following is a description of the Task 2 services:

- The Annual Water Quality Report will be completed for the landfill;
- The report will include a summary of groundwater monitoring results, groundwater levels, monitoring well depths, analysis of the data collected, statistical analysis, and associated sampling recommendations;
- Any modifications required by the DNR for the groundwater statistical analysis program during the reporting period will be summarized in the AWQR. However, this does not include any additional associated analysis;
- The AWQR will be prepared under the direction of, and signed by, an engineer licensed in the State of Iowa; and
- The report will be submitted to the DNR by November 30 of 2017, 2018, and 2019.

Task 3 – Semi-Annual Landfill Engineering Inspections

The following is a description of the Task 3 services:

- A landfill site inspection will be performed in Fall 2017, Spring and Fall 2018, Spring and Fall 2019, and Spring 2020 at the Muscatine C&D Landfill;
- The inspection will be prepared under the direction of, and signed by, an engineer licensed in the State of Iowa; and
- The Inspection reports will be submitted to the DNR by November 1 and May 1 of each year.



MUSCATINE RECYCLING AND TRANSFER STATION

The task for the Muscatine Recycling and Transfer Station is described below.

Task 1 – Annual Transfer Station Inspection

BARKER LEMAR staff will perform the following subtasks:

- An annual inspection will be performed at the transfer station during Fall of 2017, 2018, and 2019;
- The inspection will be performed under the direction of, and signed by, an engineer licensed in the State of Iowa; and
- The inspection reports will be submitted to the DNR by November 1 of 2017, 2018, and 2019.

3.0 LIMITATIONS

The above scope of services is based on review of the site permits and associated documents.

Services not set forth in the scope of services are excluded from the scope of BARKER LEMAR'S services and BARKER LEMAR assumes no responsibility to perform such services and no liability associated with the non-performance of such services.

4.0 SCHEDULE

This scope of services will be completed July 1, 2017 through June 30, 2020 in accordance with the timeframes set forth in the site permits and Iowa Administrative Code.

5.0 COMPENSATION

The compensation for the proposed scope of services may be found in Tables 3, 4, and 5 (attached) and are valid for 60 days following the date of this proposal. Although the fees are shown by task, the compensation for individual tasks are not independent of each other and elimination of any task or part of a task shall justify a review and potential adjustment of the compensation for this proposal. Our invoices will be submitted monthly and will reflect the percentage complete of each task as of the date of the invoice. Payment terms are to be followed as stated in the attached Terms and Conditions. Should conditions be encountered that require significant changes or an increase in the scope of work, we will contact you and proceed further only with your authorization, followed by a signed change order.

6.0 HEALTH AND SAFETY

This proposal assumes that Level D safety precautions are adequate. Level D safety attire generally consists of a normal work uniform including safety shoes, hard-hat where required, and appropriate eye protection. The costs will be adjusted accordingly if site-specific conditions require more stringent health and safety procedures.

7.0 CONDITIONS

Items to be provided by the Client include the right-of-entry to conduct inspections and sampling operations. The Client is responsible for making BARKER LEMAR aware of any restrictions or special requirements regarding the site and its required activities prior to the commencement of the fieldwork. We have enclosed our Terms and Conditions that should be considered part of this proposal.

CONFIRMATION OF NOTICE TO PROCEED

Proposal No. 164458

The above proposal and attached Terms and Conditions are understood and accepted.

BARKER LEMAR ENGINEERING CONSULTANTS (BARKER LEMAR) agrees to perform and complete the following Services for the Client at its facilities located in Muscatine County, Iowa.

The Scope of Services is described as groundwater sampling, inspections, and reporting associated as noted in Section 2.0 Scope of Services; and provide other technical and/or administrative services as needed and outlined in this proposal (see Scope of Services section for greater detail).

BARKER LEMAR agrees to perform the above scope of services for a total compensation estimated to be: \$76,155, as shown in Tables 3, 4, and 5. Client will be invoiced only for the services provided at the rates indicated. The compensation for the proposed scope of services is valid for 60 days following the date of this proposal.

If this proposal meets with your approval, sign and return a copy via email or fax to 515.256.0572.

If you have questions regarding any of the information above, please contact one of the authorized signers below at 515.256.8814, or 800.707.4248.

FOR BARKER LEMAR ENGINEERING CONSULTANTS

CITY OF MUSCATINE



Nathan Ohrt

Senior Groundwater Specialist

Date: June 23, 2017



Name (print): Diana Braderson

Signed:

Date: July 20, 2017



Timothy C. Buelow, P.E.

Principal Engineer

Date: June 23, 2017

Copies: Addressee
File

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TABLE 1
MUSCATINE COUNTY SANITARY LANDFILL
ANTICIPATED SAMPLING SCHEDULE
PROPOSAL NO. 164458

Monitoring Point	Monitoring Program	1 st Semi-Annual	2 nd Semi-Annual
MW-18	Background	Appendix I, TSS	Appendix I, TSS
MW-19	Background	Appendix I, TSS	Appendix I, TSS
MW-29	Background	Appendix I, TSS	Appendix I, TSS
MW-2	Assessment	Appendix I, TSS, Bis[2-ethylhexyl] phthalate, Dimethoate	Appendix I, TSS, Bis[2-ethylhexyl] phthalate, Dimethoate
MW-4	Pre-Corrective Action	Appendix I, TSS, Bis[2-ethylhexyl] phthalate	Appendix I, TSS, Bis[2-ethylhexyl] phthalate
MW-9	Assessment	Appendix I, TSS, Bis[2-ethylhexyl] phthalate, Cyanide	Appendix I, TSS, Bis[2-ethylhexyl] phthalate, Cyanide
MW-10A	Assessment	Appendix I, TSS	Appendix I, TSS
MW-11	Pre-Corrective Action	Appendix I, TSS	Appendix I, TSS
MW-12R	Pre-Corrective Action	Appendix I, TSS, Dimethoate, Disulfoton	Appendix I, TSS, Dimethoate, Disulfoton
MW-13	Pre-Corrective Action	Appendix I, TSS	Appendix I, TSS
MW-20	Assessment	Appendix I, TSS	Appendix I, TSS
MW-21	Assessment	Appendix I, TSS	Appendix I, TSS
MW-22	Assessment	Appendix I, TSS	Appendix I, TSS
MW-23	Pre-Corrective Action	Appendix I, TSS	Appendix I, TSS
MW-24	Assessment	Appendix I, TSS	Appendix I, TSS
MW-25	Assessment	Appendix I, TSS	Appendix I, TSS
MW-26	Assessment	Appendix I, TSS, Bis[2-ethylhexyl] phthalate	Appendix I, TSS, Bis[2-ethylhexyl] phthalate
MW-38	Pre-Corrective Action	Appendix I+, TSS, Aldrin, Endosulfan I	Appendix I+, TSS, Aldrin, Endosulfan I
MW-39	Pre-Corrective Action	Appendix I+, TSS, Endosulfan I	Appendix I+, TSS, Endosulfan I
MW-30	Bracketing	Vinyl Chloride, TSS	Vinyl Chloride, TSS
MW-31	Bracketing	Benzene, TSS	Benzene, TSS
MW-32	Bracketing	Benzene, TSS	Benzene, TSS
MW-33	Bracketing	Cobalt, TSS, Vinyl Chloride	Cobalt, TSS, Vinyl Chloride
MW-34	Bracketing	Cobalt, TSS, Vinyl Chloride	Cobalt, TSS, Vinyl Chloride

Monitoring Point	Monitoring Program	1 st Semi-Annual	2 nd Semi-Annual
MW-35	Bracketing	Vinyl Chloride, TSS	Vinyl Chloride, TSS
MW-36	Bracketing	Arsenic, Cobalt, TSS	Arsenic, Cobalt, TSS
MW-37	Bracketing	Benzene, TSS	Benzene, TSS
MW-40	Bracketing	Cobalt, TSS	Cobalt, TSS
MW-41	Bracketing	Cobalt, TSS	Cobalt, TSS
MW-42	Bracketing	Cobalt, TSS	Cobalt, TSS
MW-43	Bracketing	Cobalt, TSS, Vinyl Chloride	Cobalt, TSS, Vinyl Chloride
MW-44	Bracketing	Cobalt, TSS	Cobalt, TSS
MW-45	Bracketing	Cobalt, TSS	Cobalt, TSS
MW-46	Bracketing	Arsenic, Cobalt, TSS	Arsenic, Cobalt, TSS

TSS: Total Suspended Solids.

Appendix I + indicates Appendix I parameters and any detected Appendix II parameters not in Appendix I.

**TABLE 2
MUSCATINE C&D LANDFILL
ANTICIPATED SAMPLING SCHEDULE
PROPOSAL NO. 164458**

Monitoring Point	Location	1st Semi-Annual	2nd Semi-Annual
MW-6	Upgradient	IAC 567-103.2(4) "e"	IAC 567-103.2(4) "e" and "f"
MW-2	Downgradient	IAC 567-103.2(4) "e"	IAC 567-103.2(4) "e" and "f"
MW-3	Downgradient	IAC 567-103.2(4) "e"	IAC 567-103.2(4) "e" and "f"
MW-4	Downgradient	IAC 567-103.2(4) "e"	IAC 567-103.2(4) "e" and "f"
MW-7	Downgradient	IAC 567-103.2(4) "e"	IAC 567-103.2(4) "e" and "f"
MW-1	Not Applicable	Water Level	Water Level
MW-5	Not Applicable	Water Level	Water Level
PZ-8	Not Applicable	Water Level	Water Level

**TABLE 3
ANNUAL SERVICES ACTIVITIES
PROPOSAL NO. 164458**

Fiscal Year 2018 Activities (July 1, 2017 – June 30, 2018)

Activity	July to September	October to December	January to March	April to June	Total
Muscatine County Sanitary Landfill					
Groundwater Sampling*	\$4,780		\$4,780		\$9,560
Spring Sampling Notification				\$2,500	\$2,500
AWQR		\$5,000			\$5,000
Statistical Software Licensing Renewal Fee		\$225			\$225
LCSPER		\$1,000			\$1,000
Landfill Gas Annual Report		\$400			\$400
Annual Financial Assurance Review			\$1,500		\$1,500
Muscatine C&D Landfill					
Groundwater Sampling*	\$700		\$700		\$1,400
AWQR		\$1,500			\$1,500
Semi-Annual Engineering Inspection	\$900		\$900		\$1,800
Muscatine Recycling and Transfer Station					
Annual Transfer Station Inspection	\$500				\$500
Annual Compliance Total	\$6,880	\$8,125	\$7,880	\$2,500	\$25,385

*Client pays analytical fees direct.

**TABLE 4
ANNUAL SERVICES ACTIVITIES
PROPOSAL NO. 164458**

Fiscal Year 2019 Activities (July 1, 2018 – June 30, 2019)

Activity	July to September	October to December	January to March	April to June	Total
Muscatine County Sanitary Landfill					
Groundwater Sampling*	\$4,780		\$4,780		\$9,560
Spring Sampling Notification				\$2,500	\$2,500
AWQR		\$5,000			\$5,000
Statistical Software Licensing Renewal Fee		\$225			\$225
LCSPER		\$1,000			\$1,000
Landfill Gas Annual Report		\$400			\$400
Annual Financial Assurance Review			\$1,500		\$1,500
Muscatine C&D Landfill					
Groundwater Sampling*	\$700		\$700		\$1,400
AWQR		\$1,500			\$1,500
Semi-Annual Engineering Inspection	\$900		\$900		\$1,800
Muscatine Recycling and Transfer Station					
Annual Transfer Station Inspection	\$500				\$500
Annual Compliance Total	\$6,880	\$8,125	\$7,880	\$2,500	\$25,385

*Client pays analytical fees direct.

**TABLE 5
ANNUAL SERVICES ACTIVITIES
PROPOSAL NO. 164458**

Fiscal Year 2020 Activities (July 1, 2019 – June 30, 2020)

Activity	July to September	October to December	January to March	April to June	Total
Muscatine County Sanitary Landfill					
Groundwater Sampling*	\$4,780		\$4,780		\$9,560
Spring Sampling Notification				\$2,500	\$2,500
AWQR		\$5,000			\$5,000
Statistical Software Licensing Renewal Fee		\$225			\$225
LCSPER		\$1,000			\$1,000
Landfill Gas Annual Report		\$400			\$400
Annual Financial Assurance Review			\$1,500		\$1,500
Muscatine C&D Landfill					
Groundwater Sampling*	\$700		\$700		\$1,400
AWQR		\$1,500			\$1,500
Semi-Annual Engineering Inspection	\$900		\$900		\$1,800
Muscatine Recycling and Transfer Station					
Annual Transfer Station Inspection	\$500				\$500
Annual Compliance Total	\$6,880	\$8,125	\$7,880	\$2,500	\$25,385

*Client pays analytical fees direct.

ATTACHMENT A

GROUNDWATER MONITORING FEE SCHEDULE

**Table A
Fiscal Year 2018 Groundwater Monitoring Fee Schedule**

Item	Unit	Price
Field services administration	Per mob	\$ 240.00
Mobilization	Round trip	\$ 605.00
Daily Per Diem	Each	\$ 25.00
Overnight Perdiem	Each	\$ 125.00
Sample collection	Per point	\$ 100.00
Sample collection with non-dedicated submersible pump (Add'l)	Per point	\$ 50.00
Sample collection (duplicate)	Per point	\$ 16.25
Dissolved Oxygen/ORP	Per measurement	\$ 15.00
Water level measurements	Per well	\$ 25.00
Leachate level measurements	Per point	\$ 25.00
Methane monitoring	Per point	\$ 15.00
Dedicated Submersible Pump (Up to 50')	Each	\$ 200.00
Dedicated Submersible Pump (Up to 90')	Each	\$ 325.00
Dedicated Submersible Pump (Up to 100')	Each	\$ 510.00
Dedicated Submersible Pump (Up to 130')	Each	\$ 570.00
Submersible Pump Well Tubing	Per foot	\$ 0.30
Peristaltic Pump Well Tubing	Per foot	\$ 0.25
Wellhead Assembly	Each	\$ 50.00
Disposable bailer	Each	\$ 10.00
Disposable filter	Each	\$ 15.00
Packing ice	Per point	\$ 1.00
Well Identification Tags	Per point	\$ 15.00
Peristaltic Pump and Sample Collection Controls & Appurtenances	Per day	\$ 50.00
Water level indicator	Per day	\$ 30.00
Leachate level indicator	Per day	\$ 30.00
pH/temperature/conductivity meter	Per day	\$ 30.00
Methane meter	Per day	\$ 30.00
All terrain vehicle	Per day	\$ 30.00
Well padlock	Each	\$ 28.75

TERMS AND CONDITIONS

PAYMENT TERMS

Payment is due upon receipt of our invoice. If payment is not received within 30 days from the invoice date, Client agrees to pay a finance charge on the principal amount of the past due account of 1 1/2% per month. If 1 1/2% per month exceeds the maximum allowed by law; the charge shall automatically be reduced to the maximum legally allowable. In the event the Client requests termination of the services prior to completion, a termination charge in an amount not to exceed 30% of all charges incurred through the date services are stopped plus any shutdown costs may, at the discretion of Barker, Lemar & Associates, Inc., be made. If during the execution of the services, Barker, Lemar & Associates, Inc., is required to stop operations as a result of changes in the scope of services such as requested by the Client or requirements of third parties, additional charges will be applicable. Client is responsible for all cost of the collection of unpaid accounts, including reasonable attorney fees.

INSURANCE

Barker, Lemar & Associates, Inc. maintains Workers' Compensation and Employers Liability Insurance in conformance with applicable state law. In addition, we maintain Commercial General Liability Insurance with combined Single Bodily Injury and property damage limits of \$1,000,000 and Automobile Liability Insurance with combined Single Bodily Injury and property damage limits of \$1,000,000. A certificate of insurance can be supplied evidencing such coverage, which contains a clause providing that 10 days written notice be given prior to cancellation. Cost of the above coverage is included in our quoted fees. If additional coverage or increased limits of liability are required, Barker, Lemar & Associates, Inc. will endeavor to obtain the requested insurance and charge separately for costs associated with additional coverage or increased limits.

LIMITATION OF LIABILITY

In recognition of the relative risks and benefits of the Project to both the Client and Barker, Lemar & Associates, Inc., the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of Barker, Lemar & Associates, Inc. and Barker, Lemar & Associates, Inc.'s officers, directors, partners, employees, shareholders, owners and sub consultants for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorney's fees and costs and expert-witness fees and costs, so that the total aggregate liability of Barker, Lemar & Associates, Inc. and Barker, Lemar & Associates, Inc.'s officers, directors, partners, employees, shareholders, owners and sub consultants shall not exceed the applicable insurance coverage available at the time of settlement or judgment. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

Client agrees that Barker, Lemar & Associates, Inc.'s liability for any damage on account of any error, omission, or other professional negligence by Barker, Lemar & Associates, Inc. will be limited to a sum not to exceed \$50,000 or the amount presently due Barker, Lemar & Associates, Inc. for services rendered hereunder, whichever is greater.

Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the Client nor Barker, Lemar & Associates, Inc., their respective officers, directors, partners, employees, contractor or sub consultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. The mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the Client and Barker, Lemar & Associates, Inc. shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and sub contracts with others involved in this project. Barker, Lemar & Associates, Inc. is not liable for consequential damages.

Barker, Lemar & Associates, Inc. shall not be responsible for any acts or omissions of the Contractor, any sub contractor, any entity performing any portions of the Work or any agents or employees of any of them. Barker, Lemar & Associates, Inc. does not guarantee the performance of the Contractor and shall not be responsible for the Contractor's failure to perform its Work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.

POLLUTION CLAIMS

Client hereby understands and agrees that Barker, Lemar & Associates, Inc. has not created nor contributed to the creation or existence of any or all types of hazardous or toxic wastes, materials, chemical compounds, or substances, or any other type of environmental hazard or pollution, whether latent or patent, at Client's premises, or in connection with or related to this project with respect to which Barker, Lemar & Associates, Inc. has been retained to provide professional engineering services. Barker, Lemar & Associates, Inc.'s total liability to Client resulting from any release or threatened release of any hazardous waste, substance, pollutant or contaminant, whether or not directly or indirectly generated by Barker, Lemar & Associates, Inc.'s performance of the work hereunder (including any injury to persons or property or death resulting therefrom), shall not exceed the amount due Barker, Lemar and Associates, Inc. for services rendered hereunder. This limitation applies to all liabilities, including indemnification liabilities, whether based on contract, tort (including negligence), and strict liability or otherwise. This limitation of liability does not in any way limit or affect Client's obligations to indemnify and hold Barker, Lemar & Associates, Inc., its owners, officers, directors, and employees harmless. This limitation of liability shall not apply to the extent it is held that the loss or damage arose from Barker, Lemar & Associates, Inc.'s gross negligence or intentional misconduct. In addition, Client agrees to limit Barker, Lemar & Associates, Inc.'s liability to the same extent that Client's liability is limited pursuant to its contract with its client (if one exists).

DOCUMENTS

Barker, Lemar & Associates, Inc.'s liability to Owner for any computer programs, software products, or related data furnished hereunder is limited solely to the correction of residual errors, minor maintenance, or update(s) as agreed. Barker, Lemar & Associates, Inc. makes no warranties of any kind, including any implied warranty of merchantability or of fitness for any particular purpose, or against infringement, with respect to computer programs, software products, related data, technical information, or technical assistance provided by Barker, Lemar & Associates, Inc. under this Agreement. In no event shall Barker, Lemar & Associates, Inc., its officers, agents, or employees be liable under or in connection with this Agreement under any theory of tort, contract, strict liability, negligence, or other legal or equitable theory for incidental or consequential damages relating to any computer programs, software products, or related data furnished hereunder.

STANDARD OF CARE

In providing services under this Agreement, Barker, Lemar & Associates, Inc. shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same or similar locality. Barker, Lemar & Associates, Inc. makes no warranty, express or implied, as to its professional services rendered under this Agreement.

RIGHT-OF-ENTRY

Unless otherwise agreed, Client will furnish right-of-entry on the property for Barker, Lemar & Associates Inc. to make the planned borings, surveys, tests, and/or explorations. Barker, Lemar & Associates Inc. will take reasonable precautions to limit damage to the property caused by our operations, but we have not included in our fee the cost of restoration of damage that may result. If Client desires Barker, Lemar & Associates Inc. to restore the property to its former condition, we will accomplish this, to the extent reasonably possible, and add the cost to the proposed fee.

SITE VISITS

Barker, Lemar & Associates, Inc. shall visit the site at intervals appropriate to the stage of construction, or as otherwise agreed to in writing by the Client and Barker, Lemar & Associates, Inc., in order to observe the progress and quality of the Work completed by the Contractor. Such visits and observation are not intended to be an exhaustive check or a detailed inspection of Barker, Lemar & Associates, Inc.'s work but rather are to allow the Consultant to become generally familiar with the Work in progress and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. Based on this general observation, Barker, Lemar & Associates, Inc. shall keep the Client informed about the progress of the Work and shall advise the Client about observed deficiencies in the Work.

If the Client desires more extensive project observation or full-time project representation, the Client shall request that such services be provided by Barker, Lemar & Associates, Inc. as Additional Services in accordance with the terms of this Agreement.

Barker, Lemar & Associates, Inc. shall not supervise, direct or have control over the Contractor's work nor have any responsibility for the construction means, methods, techniques, sequences or procedures selected neither by the Contractor nor for the Contractor's safety precautions or programs in connection with the Work. These rights and responsibilities are solely those of the Contractor in accordance with the Contract Documents.

SAMPLING OR TESTING OF LOCATION

The fees do not include costs associated with surveying of the site or the accurate horizontal and vertical locations of tests, unless otherwise specifically agreed to by the parties. Field test or boring locations described in Barker, Lemar & Associates, Inc.'s report contemplated by these Terms and Conditions or shown on sketches are based on specific information furnished by others or estimates made in the field by our technicians. Such dimensions, depths, or elevations should be considered as approximations unless otherwise stated in the reports contemplated by these Terms and Conditions.

The Client shall furnish, at the Client's expense, all information, requirements, reports, data, surveys and instructions required by this Agreement. Barker, Lemar & Associates, Inc. may use such information, requirements, reports, data, surveys and instructions in performing its services and is entitled to rely upon the accuracy and completeness thereof. Barker, Lemar & Associates, Inc. shall not be held responsible for any errors or omissions that may arise as a result of erroneous or incomplete information provided by the Client and/or the Client's consultants and contractors.

SAMPLE DISPOSAL AGREEMENT

Unless otherwise requested, test specimens or samples will be disposed of immediately upon completion of tests unless otherwise regulatory required. Upon written request, Barker, Lemar & Associates, Inc. will retain test specimens or drilling samples for mutually acceptable storage charge and period of time.

DAMAGE TO EXISTING MAN-MADE OBJECTS

It shall be the responsibility of the Client or his duly authorized representative to disclose the presence and accurate location of all hidden or obscure man-made objects and underground utilities relative to field tests or boring locations. Barker, Lemar & Associates, Inc.'s field personnel are trained to recognize clearly identifiable stakes or markings in the field and without special written instruction to initiate field testing drilling and/or sampling within a reasonable distance of each designated location. If Barker, Lemar & Associates, Inc. is cautioned, advised, or given data in writing that reveal the presence or potential presence of underground or over ground obstructions, such as utilities, Barker, Lemar & Associates, Inc. will give special instructions to its field personnel. As evidenced by Client's acceptance of this proposal, Client agrees to indemnify and save harmless from all claims, suits, losses, personal injuries, death, and property liability resulting from unusual subsurface conditions or damages to subsurface structures, including utility lines, owned by Client or third parties, occurring in the performance of the proposed services, whose presence and, exact locations were not revealed to Barker, Lemar, & Associates, Inc. in writing, and to reimburse Barker, Lemar & Associates, Inc. for expenses in connection with any such claims or suits, including reasonable attorney fees.

DISPOSAL

Barker, Lemar & Associates, Inc. is not, and has no authority to act as, a handler, generator, operator, treated, storer, transporter or disposer of hazardous waste, substances, pollutants or contaminants found or identified at the site. Barker, Lemar & Associates, Inc. shall have no responsibility for the transportation, storage, treatment or disposition of contaminated or potentially contaminated waste materials of any kind, which are directly or indirectly generated from Barker, Lemar & Associates, Inc.'s performance of the work in accordance with these Terms and Conditions. Client shall be responsible for the disposal of any such waste materials.

SAFETY

Should Barker, Lemar & Associates, Inc. provide periodic observations or monitoring services at the job site during construction, Client agrees that in accordance with generally-accepted construction practices, the contractor will be solely and completely responsible for working conditions on the job site, including safety of all persons and property during the performance of the work and compliance with OSHA regulations, and that these requirements will apply continuously and not be limited to normal working hours. Any monitoring of the contractor's procedures conducted by Barker, Lemar & Associates, Inc. is not intended to include review of the adequacy of the contractor's safety measures in, on, adjacent to, or near the construction site.

CONSTRUCTION COST OPINIONS

Opinions of probable cost for the facilities considered and designed under this Agreement are prepared by Barker, Lemar & Associates, Inc. through exercise of its experience and judgment in applying presently available cost data, but it is recognized that Barker, Lemar & Associates, Inc. has no control over costs of labor and materials, or over the construction contractor's methods of determining prices, or over competitive bidding procedures, market conditions, and unknown field conditions so that Barker, Lemar & Associates, Inc. cannot and does not guarantee that proposals, bids, or the project construction costs will not vary from Barker, Lemar & Associates, Inc.'s opinion of probable construction costs.

OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, drawings, specifications, reports, boring logs, field notes, laboratory test data, calculations, and estimates, prepared by Barker, Lemar & Associates, Inc., are instruments of service pursuant to these Terms and Conditions and shall be the sole property of Barker, Lemar & Associates, Inc. Client agrees that all documents of any nature furnished to Client or Client's agents or designees, if not paid for, will be returned to Barker, Lemar & Associates Inc. upon demand and will not be used by Client for any purpose whatsoever. Client further agrees that under no circumstances shall any documents produced by Barker, Lemar & Associates Inc., pursuant to these Terms and Conditions, be used at any location or for any project not expressly provided for in these Terms and Conditions without the written permission of Barker, Lemar & Associates, Inc. At the request and expense of Client, Barker, Lemar & Associates, Inc. will provide Client with copies of documents created in the performance of the work for a period not exceeding five years following submission of the report contemplated by these Terms and Conditions.

SUCCESSORS AND ASSIGNS

All of the terms, conditions, and provisions hereof shall inure to the benefit of and are binding upon the parties hereto and their respective successors and assigns, provided, however, that no assignment of this Agreement shall be made without written consent of the parties of this Agreement.

SEVERABILITY

If any provision of this Agreement is declared invalid, illegal, or incapable of being enforced by any court of competent jurisdiction, all of the remaining provisions of this Agreement shall nevertheless continue in full force and effect, and no provision shall be deemed dependent upon any other provision unless so expressed herein.

WAIVER

Barker, Lemar & Associates, Inc.'s waiver of any term, condition, or breach of any term, condition, covenant, shall not constitute a waiver of any other term, condition, or covenant, or the breach thereof.

GOVERNING LAW

These Terms and Conditions shall be governed in all respects by the laws of the State of Iowa. Any litigation to be filed by either party to the contract shall be filed in Polk County, Iowa District Court or Federal Court for the Southern District of Iowa.

ENTIRE AGREEMENT

This Agreement, and its attachments, contains the entire understanding between Owner and Barker, Lemar & Associates, Inc. relating to professional engineering services. Any prior or contemporaneous agreements, promises, negotiations, or representations not expressly set forth herein are of no effect. Subsequent modifications or amendments to this Agreement shall be in writing and signed by the parties to this Agreement.