# WOODBURY COUNTY BOARD OF SUPERVISORS AGENDA ITEM(S) REQUEST FORM

Date: <u>3/20/2025</u> Weekl	y Agenda Date: <u>3/25/2025</u>						
ELECTED OFFICIAL / DEPARTMENT HEAD / CITIZEN: Kenny Schmitz							
Dorothy Pecaut Nature Cer	ter - Floor Slabs Stabilization I	Project					
	ACTION REQUIRED:						
Approve Ordinance  Approve Resolution  Approve Motion							
Public Hearing	Other: Informational $\Box$	Attachments					

# EXECUTIVE SUMMARY:

Competitive Vendor Quotes have been taken. Building Services in conjunction with CMBA & Raker Rhodes Eng. seek approval to complete floor slab stabilization (fill voids) on both 1st and 2nd Floors.

# BACKGROUND:

Quotes have been received for the work necessary to perform floor slab stabilization which is necessary to address settlement and provide a non-invasive attempt at solving a complex issue. CMBA Architects, Raker Rhodes Engineering, & Certified Testing believe a best path forward is to stabilize the floor slabs & continue to monitor structural movements before conducting any invasive pier work.

#### FINANCIAL IMPACT:

CIP FY2023: \$111,7700 (Remaining \$82,164) CIP FY2026: \$372,000

IF THERE IS A CONTRACT INVOLVED IN THE AGENDA ITEM, HAS THE CONTRACT BEEN SUBMITTED AT LEAST ONE WEEK PRIOR AND ANSWERED WITH A REVIEW BY THE COUNTY ATTORNEY'S OFFICE?

Yes 🗆 No 🗹

# **RECOMMENDATION:**

Consideration and approval of low quote & a project contingency for progress work or unknown additions to the quoted scope of services to be performed.

# ACTION REQUIRED / PROPOSED MOTION:

Motion to approve Concrete Raising Service Quote Dated 3/19/2025 in the amount of \$48,000.00, General Contractor work \$8,250.00, and project contingency of \$12,000.00 for a Total Amount of \$68,250.00.

# WOODBURY COUNTY BOARD OF SUPERVISORS AGENDA ITEM(S) REQUEST FORM

Date: 10/18/2023 Week	ly Agenda Date: 10/24/2023						
ELECTED OFFICIAL / DEPARTMENT HEAD / CITIZEN: Kenny Schmitz/ Dan Heissel							
	Dorothy Pecaut Nature Center- Building Floor Slab Settlement - 2024 CIP Expense Approval						
ACTION REQUIRED:							
Approve Ordinance	Approve Resolution	Approve Motion					
Public Hearing 🛛	Other: Informational	Attachments 图					

# EXECUTIVE SUMMARY:

Building Services will request funding for 2024 Dorothy Pecaut CIP expenditure approval relating to floor slab settlement & seek feedback on applicable expenses.

# BACKGROUND:

The Conservation Department in 2022 notified Building Services that the Nature Center Building over an extended period of time has continued to experience floor settling & the problem was beginning to effect entry door function, & the issue was to a level that it needed to be addressed. Upon inspection Building Services noted an area on first floor had settled 2.25 Inches in 20 Foot.

# FINANCIAL IMPACT:

2024 Capital Improvement Project 6100-24-Foundation = \$100,000 Total Expenditures to be determined

IF THERE IS A CONTRACT INVOLVED IN THE AGENDA ITEM, HAS THE CONTRACT BEEN SUBMITTED AT LEAST ONE WEEK PRIOR AND ANSWERED WITH A REVIEW BY THE COUNTY ATTORNEY'S OFFICE?

Yes 🗆 No 🖽

**RECOMMENDATION:** 

Approve motions & provide direction on applicable expenditures

#### ACTION REQUIRED / PROPOSED MOTION:

a. Motion to approve 2024 CIP 1600-24-Foundation & expenditures in the amount of \$100,000
 b. Motion to approve additional funds of \$25,000 applicable to Architectural, Engineering, & Geotechnical expenses previously incurred.

# WOODBURY COUNTY BOARD OF SUPERVISORS AGENDA ITEM(S) REQUEST FORM

Date: 10/12/2023 Weekly Agenda Date: 10/17/2023							
ELECTED OFFICIAL / DEPARTMENT HEAD / CITIZEN: Kenny Schmitz							
	Dorothy Pecaut Nature Center- Building Floor Slab Settlement						
ACTION REQUIRED:							
Approve Ordinance	Approve Resolution	Approve Motion					
Public Hearing	Other: Informational 🗹	Attachments 🗹					

# EXECUTIVE SUMMARY:

Building Services will discuss actions taken to determine factors contributing to building settlement, expenditures to date, & expectations moving forward.

#### BACKGROUND:

The Conservation Department in 2022 notified Building Services that the Nature Center Building over an extended period of time has continued to experience floor settling & the problem was beginning to effect entry door function, & the issue was to a level that it needed to be addressed. Upon inspection Building Services noted an area on first floor had settled 2.25 Inches in 20 Foot.

# FINANCIAL IMPACT:

2024 Capital Improvement Project = \$100,000 Architectural, Engineering, & Testing Expensed as of 10/15/2023 = \$9,959.50

IF THERE IS A CONTRACT INVOLVED IN THE AGENDA ITEM, HAS THE CONTRACT BEEN SUBMITTED AT LEAST ONE WEEK PRIOR AND ANSWERED WITH A REVIEW BY THE COUNTY ATTORNEY'S OFFICE?

Yes 🗆 No 🖽

**RECOMMENDATION:** 

Information

ACTION REQUIRED / PROPOSED MOTION:

Information



# WOODBURY COUNTY BUILDING SERVICES DEPARTMENT

# Subject: Dorothy Pecaut Nature Center (2024 CIP #6100-24-Foundation)

# Performance Items & Expenses

# Project Performance Items Completed as of October 15th, 2023:

- 1. Initial Architectural & Engineering Meeting & on-site Reviews
- 2. Architectural & Engineers Review of Original Building (As Built) Plans & Specifictions
- 3. Geotechnical Exploration Phase-1 Floor Slab Survey
- 4. Geotechnical Exploration Phase-2 Floor Slab Soil Borings
- 5. Downspouts Collector Camera Inspections (Architects Action Item #2)

Architectural, Engineering, Geotechnical, & Plumbing Expensed as of 10/15/2023 = \$9,959.50

# Project Next Steps Action Items To Be Completed:

- 1. Architects Action Item #1- Exterior Soil Borings (East Side)
- 2. Architects Action Item #4- Ground Penetrating Radar Exploration
- 3. Architects Action Item #5- Stabilization Materials Investigation
- 4. Architects Action Item #3- Building Settlement Monitors

# Quoted Costs;

Exterior Soil Borings (Action Item #1)- Quoted Waiting Approval- \$2,450 Ground Penetrating Radar (Action Item #4)- Quoted Waiting Approval- \$2,925 Settlement Monitors (Action Item #3)- Initial Installation \$2,800 – Future Inspections \$1,800 Each

Additional Costs (To Be Determined);

Downspout Line & Associated Repair Costs Building/ Slab Stabilization, Building Repairs, Retaining Wall Removal/ Replacement Water Feature Removal/ Replacement Architectural & Engineering Fees



a

CMBA ARCHITECTS 302 Jones Street, Suite 200 Sioux City, IA 51101 (P) 712.274.2933

WOODBURY COUNTY KENNY SCHMITZ 401 8th Street Sioux City, IA 51101 
 Invoice number
 63017

 Date
 09/11/2023

Project 23186 Dorothy Pecaut Nature Center Floor Issues

Professional services for the period: 8/1/23 through 8/31/23

Professional Servi	ces						
					Hours	Rate	Billed Amount
Principal					7.50	225.00	1,687.50
		ж			in	voice total	1,687.50
Aging Summary							
Invoice Number	Invoice Date	Outstanding	Current	Over 30	Over 60	Over 90	Over 120
63017	09/11/2023	1,687.50	1,687.50				
	Total	1,687.50	1,687.50	0.00	0.00	0.00	0.00

6100 - 24 - Foundation



CMBA ARCHITECTS 302 Jones Street, Suite 200 Sioux City, IA 51101 (P)712.274.2933

WOODBURY COUNTY
KENNY SCHMITZ
401 8th Street
Sioux City, IA 51101

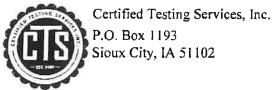
Invoice number 63119 10/06/2023 Date

Project 23186 Dorothy Pecaut Nature Center Floor Issues

Professional services for the period: 9/1/23 through 9/30/23

Professional Servi	ces						
					Hours	Rate	Billed Amount
Principal		- 2			1.10	225.00	247.50
					In	voice total	247.50
Aging Summary	Invoice Date	Outstanding	Current	Over 30	Over 60	Over 90	Over 120
63119	10/06/2023	247.50	247.50				
	Total	247.50	247.50	0.00	0.00	0.00	0.00

6100-24-FoundAtion 10/24/23 post date



Invoice

Invoice #

Date

	<b>WA</b> SIGIX City	V 1A 51102				
	Sioux City	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			6/28/2023	SC46228
Building S Woodbury 401 8th Str					Locat	
Sidur Ony	, 1044 51101				Woodbury Co	
Proj	ect	G7037- I	Dorothy Pecaut Na	ture Center	Building I	
Date		Description		Quantity	Rate	Total
16/28/2023 16/28/2023	Floor Survey and Geotechnical Su	d Analysis. Lump Sum	in i i i i i i i i i i i i i i i i i i		950.00 5,200.00	950.00 5,200.00
	6100-:	29-DPC f	OUNDA	riow		

		nsactions, we unfortunately need to	Subtotal	\$6.150.00
charge a 1.9% surcharge on all invoices paid by Credit or Debit card. We still offer FREE ACH, Direct Debit, Check or cash pay options for your convenience on all invoices.		Sales Tax (0.0%)	\$0.00	
Phone #	Fax #	E-mail	Dalamaa Dua	
712-252-5132	712-252-0110	kmartin@ctsgeo.com	<b>Balance</b> Due	\$6.150.00

# RE BAKER RHODES

# Invoice

#### Bill To

 $\mathbf{r}$ 

Woodbury County Court House Kenny Schmitz, Director of Facilities 620 Douglas St. Sioux City, IA 51101

2

Date	Invoice #
8/31/2023	RR23205-8

		Project	FE	iE:		
		RR23205 Dorthy Peca	RR23205 Dorthy Pecaut Settlement			
Qty	ltem	Description	Rate	Prior Billed	Amount	
12	Review	Site visits as needed to review settleme concerns; review of existing drawings a geotechnical report; provide structural details/recommendations as needed after geotechnical exploration	and new	0	1,500.0	
		C	urrent Invoice	Total	\$1,500.0	
			b Total cludes Outstanding Ba	lances)	\$1,500.00	

PO Box 4547 Sioux City, IA 51104 US 712-274-1738 office@morningsideplumbing.biz



morningside Fidmonig



INVOICE # 15131794 DATE 09/15/2023 DUE DATE 10/06/2023

BILL TO	SHIP TO
Woodbury County	Woodbury County
Conservation-Dorothy Pecaut	Conservation-Dorothy
Nature Center	Pecaut Nature Center
4500 Sioux River Rd	4500 Sioux River Rd
Sioux City, IA 51109	Sioux City, IA 51109

#### PLEASE DETACH TOP PORTION AND RETURN WITH YOUR PAYMENT.

	DESCRIPTION		AMOUNT
CAMERA REG	Sewer Camera- Televised Downspouts Belly in line from 19' to 36.11' Separated pipe 55.09' south of downspout #	3	350.00T
		SUBTOTAL	350.00
		TAX	24.50
		TOTAL	374.50
		BALANCE DUE	\$374.50

Subject: RE: Dorothy Pecaut Meeting Walk-thru

Date: 3/31/2023 2:12 PM

From: "Corey Erickson" < CErickson@rakerrhodes.com>

To: "Kenny Schmitz" <kschmitz@woodburycountyiowa.gov>, "glade.t@cmbaarchitects.com" <glade.t@cmbaarchitects.com>

Kenny,

The following time slots work for me next week:

- Tuesday 4/4 anytime
- Wednesday 4/5 anytime
- Friday 4/7 1-4pm

Thanks,

Corey Erickson, PE RAKER RHODES ENGINEERING c: 712.389.0170 | | www.rakerrhodes.com

From: Kenny Schmitz <kschmitz@woodburycountyiowa.gov>
Sent: Friday, March 31, 2023 1:04 PM
To: glade.t@cmbaarchitects.com; Corey Erickson <CErickson@rakerrhodes.com>
Subject: Dorothy Pecaut Meeting Walk-thru

Terry/ Corey,

Can you both provide me your schedule availabilities for next week or/and the week after for a one-hour meeting at Dorothy Pecaut.

Kenny Schmitz Director | Building Services 401 8<sup>th</sup> Street Sioux City, Iowa 51101 712.279.6539 kschmitz@woodburycountyiowa.gov

Providing Professional Services to Weedbury County since 2015

Subject: Dorothy Pecaut Nature Center Floor

Date:	4/25/2023 2:28 PM
From:	"Terry Glade" <glade.t@cmbaarchitects.com></glade.t@cmbaarchitects.com>
To:	"Matthew Dailey" <mdailey@ctsgeo.com></mdailey@ctsgeo.com>
Cc:	"Corey Erickson (CErickson@rakerrhodes.com)" <cerickson@rakerrhodes.com>, "Kenny Schmitz (kschmitz@woodburycountyiowa.gov)" <kschmitz@woodburycountyiowa.gov>, "Daniel Heissel" <dheissel@woodburyparks.org>, "HOLLY MATHIESEN" <mathiesenholly@yahoo.com></mathiesenholly@yahoo.com></dheissel@woodburyparks.org></kschmitz@woodburycountyiowa.gov></cerickson@rakerrhodes.com>

Matt,

The Nature Center is experiencing some floor settlement issues on their lower level and has for some time. It has recently gotten worse and we were out there last week to review. The consensus was that we need a geotech to review the situation and the drawings to really see what is happening before we create a plan to rectify and stabilize. Do you have any times this week that you could meet out there to look at the situation? Please let us know.

Thanks,

TERRY GLADE AIA, LEED AP PRINCIPAL

CMBA ARCHITECTS P 712.274.2933 ext 1106 M 712.898.9459

WWW.CMBAARCHITECTS.COM

The information contained in this communication may be confidential, and is intended only for the use of the recipient(s) named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication, or any of its contents, is strictly prohibited. If you have received this communication in error-please return it to the cender immediately and delete the original message and any copy of it from your computer system. Subject: Dorothy Pecaut Plans

From: "Terry Glade" <glade.t@cmbaarchitects.com>

To: "Matthew Dailey" <mdailey@ctsgeo.com>

Cc: "Corey Erickson (CErickson@rakerrhodes.com)" <cerickson@rakerrhodes.com>, "Kenny Schmitz (kschmitz@woodburycountyiowa.gov)" <kschmitz@iwoodburycountyiowa.gov>

ShareFile Attachments	Expires May 28, 2023		
92057 Nature Center as-builts reduced.pdf	14 2 MB		

**Download Attachments** 

Terry Glade uses ShareFile to share documents securely.

# Matt,

Thanks for sending Robbie to the meeting today. He got a good visual on what we are seeing. Use this link to view the original plans of the building to relate that to what is happening on site. Please provide a proposal to perform the exploration you feel is necessary to take this further. Address the proposal to:

Kenny Schmitz, Director, Building Services Woodbury County 4018<sup>th</sup> St. Sioux City, IA 51101

712/253-3745

kschmitz@woodburycountyiowa.gov

Thanks,

TERRY GLADE AIA, LEED AP PRINCIPAL

CMBA ARCHITECTS P 712.274.2933 ext 1106 M 712.898.9459

WWW.CMBAARCHITECTS.COM

The information contained in this communication may be confidential, and is intended only for the use of the recipient(s) named above. If the reader of this message is not the intended recipient, you are bereby notified that any dissemination, distribution, or copying of this communication, or any of its contents, is strictly prohibited. If you have received this communication in error, please return it to the cender immoduately and delete the original message and any copy of it from your computer system.

Subject: RE: Dorothy Pecaut Nature Center Floor

Date: 5/10/2023 7:04 AM

From: "Kenny Schmitz" <kschmitz@woodburycountyiowa.gov>

To: "Matthew Dailey" <mdailey@ctsgeo.com>

"Terry Glade" <glade.t@cmbaarchitects.com>, "Corey Erickson

Cc: (CErickson@rakerrhodes.com)" <cerickson@rakerrhodes.com>, "Daniel Heissel" <dheissel@woodburyparks.org>, "James Bertsch" <JBertsch@ctsgeo.com>, "Jed McInerney" <JMcInerney@ctsgeo.com>

# Matt,

Attached is the executed copy. Please coordinate with Dan's schedule (possibly Monday) or as soon as possible.

Thanks,

Kenny Schmitz Director | Building Services 401 8<sup>th</sup> Street Sioux City, Iowa 51101 712.279.6539 kschmitz@woodburycountyiowa.gov

Survey Sugara soil bereas to Headland County and 21.15

From: Matthew Dailey <mdailey@ctsgeo.com> Sent: Tuesday, May 9, 2023 5:06 PM To: Kenny Schmitz <kschmitz@woodburycountyiowa.gov> Cc: Terry Glade <glade.t@cmbaarchitects.com>; Corey Erickson (CErickson@rakerrhodes.com) <cerickson@rakerrhodes.com>; Daniel Heissel <dheissel@woodburyparks.org>; James Bertsch <JBertsch@ctsgeo.com>; Jed McInerney <JMcInerney@ctsgeo.com> Subject: RE: Dorothy Pecaut Nature Center Floor

**CAUTION:** This email originated from **OUTSIDE** of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. **If you are asked for your username and password, please call WCICC and DO NOT ENTER any data.** Kenny,

Attached is our proposal for the initial phase of the investigation as to the settlement of the Nature Center Building. Please review the proposal and let us know if there are any questions. Dan indicated that Mondays were best to perform work in that the facility is closed to the public. With that, we could be there as early as Monday to do the floor survey.

Thanks,

Matthew R. Dailey, P.E. Geotechnical Department Manager <u>Certified Testing Services, Inc.</u> <u>PO Box 1193 | 419 W. 6th Street | Sioux City, Iowa 51102</u> Office: (712)252-5132 | Direct: (712)226-1551 | Mobile: (712)203-0053



Certified Testing Services, Inc.

419 W. 6th Street • P.O. Box 1193 • Sioux City, Iowa 51102 • Phone (712) 252-5132

May 9, 2023

Kenny Schmitz Director – Building Services Woodbury County 401 8<sup>th</sup> Street Sioux City, Iowa 51101

> RE: Geotechnical Exploration Services Building Distress Dorothy Pecaut Nature Center Sioux City, Iowa CTS Proposal No. 6398

Dear Mr. Schmitz,

# Introduction

Certified Testing Services, Inc. is pleased to submit this proposal to perform a geotechnical exploration for the above referenced project. This proposal presents our understanding of the furnished project information, scope of work, as well as schedule and fees.

### Project Information

During a meeting at the site on April 28, 2023, Mr. Robert Smutzler of CTS met with Mr. Terry Glade, AIA of CMBA Architects, Mr. Kenny Schmitz of Woodbury County, Mr. Dan Heissel and Mr. Brian Stehr of the Woodbury County Conservation Board, Mr. Corey Erickson of Raker Rhodes, and Ms. Holly Mathiesen of Concrete Raising Service. On May 5, 2023, Mr. Matthew Dailey, P.E., and Mr. Robert Smutzler of CTS met with Mr. Dan Heissel at the site for a follow up visit. In an email on April 28, 2023, Mr. Glade provided a link to the as-built plans for the site. CTS understands that settlement has occurred in the floor slab along the west wall in the lower level of the twostory portion of the building, along the east wall in the main level single-story portion of the building and the retaining walls are leaning away from the slope on the south side of

# Woodbury County May 9, 2023 CTS Proposal Number 6398 Page 2 of 7

the building. It is also understood that there is some cracking of the drywall, doorways in the distressed areas are experiencing movement and a built-in shelf has fallen due to the movement. CTS did not witness cracking of the exterior walls during the exterior inspection of the building. Mr. Heissel indicated that the exterior stoops on the west side of the building have been replaced due to the doors contacting the concrete while opening.

# Scope of Work

Based on the information provided by during the site meetings and past experience, CTS proposes to perform the work in two phases. The first phase will consist of performing a floor survey of the floor slabs in the distressed areas in the upper and lower portions of the building. The second phase would be to perform soil borings in the floor slab and potentially exterior borings in and around the distressed areas based on the results of the floor slab survey. At the completion of the fieldwork, the pavement will be patched and samples collected in the field will be transported to the laboratory and tested to determine select engineering properties that will be used in our analysis. The results of the fieldwork, laboratory testing, project information and other information will be evaluated by a professional engineer familiar with the soil conditions in the project area and presented in a report.

Items that will be addressed in the first phase report include our understanding of the project information, the results of the floor survey with recommendations for further investigation, and groundwater information.

# Cost

Based on the scope of work discussed above, CTS proposes to perform the work for the first phase for a lump sum amount of \$950.00, which includes two hard copies and an electronic copy of the report. The scope of work and cost for the second phase will be provided based on our analysis of the results of the floor survey. It is further proposed Woodbury County May 9, 2023 CTS Proposal Number 6398 Page 3 of 7

to perform the work in accordance with the attached CTS "General Conditions" which are incorporated into this proposal.

# Schedule and Authorization

Based on our present schedule, we can commence the first phase of the fieldwork within five to seven working days of receiving the signed copy of the proposal if weather and site conditions allow. CTS's written report for the first phase would be completed within seven working days of completion of the fieldwork.

CTS will proceed with the fieldwork for the first phase based on the receipt of a signed copy of this proposal. To speed up the process a copy of the signature page may be faxed to (712) 252-0110 or emailed to <u>mdailey@ctsgeo.com</u> and would serve as written authorization. Please complete as many items as possible on the attached project data sheet and return with the signature page.

CTS appreciates the opportunity to submit this proposal and looks forward to working with you on this project. If you should have any questions or need additional information, feel free to contact our office.

Sincerely,

CERTIFIED TESTING SERVICES, INC.

Janues Batel MD

James A. Bertsch, P.E. Senior Geotechnical Engineer

ZIL

Matthew R. Dailey, P.E. Geotechnical Department Manager

JAB/MRD/md

Woodbury County May 9, 2023 CTS Proposal Number 6398 Page 4 of 7

Attachments: Schedule of Services and Fees Project Data Sheet General Conditions

cc: CMBA Architects Woodbury County Conservation Board

AGREED TO THIS 10th DAY OF May , 20 23	
SIGNATURE: Kenny Achimit	
PRINTED NAMES Ke Wary Schmitz	
TITLE:Building Services Director	
FIRM: Woodbury County Iowa	

Woodbury County May 9, 2023 CTS Proposal Number 6398 Page 5 of 7

# SCHEDULE OF SERVICES AND FEES

# <u>Report</u>

Staff Engineer	Hour	130.00
Senior Engineer	Hour	160.00

# CERTIFIED TESTING SERVICES, INC PROJECT DATA SHEET SUBSURFACE EXPLORATION

1.	Project Name:	
2.	Project Location:	
3.	Your Job Number	Purchase Order No.:
4.	Project Manager:	Telephone No.:
5.	Distribution of Reports:	
	Copies To:	Copies To:
	Attn:	Attn: Email:
	$\square$ Request for Distribution of Hard Copies an	d Electronic Copies

□ Request for Distribution of Electronic Copies Only

6. Invoicing Address:

Attn:	
Email:	

This document is a fillable form

#### SECTION 1: Scope of Work

CTS shall perform the services defined in the contract and shall invoice the client for those services at the fee schedule rates. Any cost estimates stated in this contract shall not be considered as a firm figure unless otherwise specifically stated in this contract. If intespected site conditions are discovered, the scope of work may change, even as the work is in progress. CTS will provide these additional services at the contract fee schedule rate.

Rates for work beyond the scope of this contract and not covered by the contract fee schedule can be provided. CTS can perform additional work with verbal authorization, and will provide written confirmation of fees, if requested. All costs mentred because of delays in authorizant the additional work will be billed to the client.

Fee schedules are valid for one year following the date of the contract unless otherwise noted

#### SECTION 2: Access to Sites

Unless otherwise agreed, the client will furnish CTS with right-of-access to the site in order to conduct the planned exploration.

While CTS will take all reasonable precautions to minimize any damage to the property, it is understood by the client that in the normal course of work some damage may occur, the restaration of which is not part of this agreement.

# SECTION 3: Soil Boring Locations

The client will furnish CTS with a diagram indicating the location of the site. Test boring locations may also be indicated on the diagram. CTS reserves the right to deviate a reasonable distance from the boring locations specified inless this right is specifically revoked by the client in writing at the time the location diagram is supplied. CTS reserves the right to terminate this contract if conditions preventing drilling at the specified locations are encountered which were not made known to CTS prior to the date of this contract.

The accuracy and proximity of provided survey control will affect the accuracy of in situ test focation and evaluation determinations. Unless atherwise noted, the accuracy of test locations and elevations will be commensurate only with pacing and approximate meas-arements or estimates.

#### **SECTION 4: Utilities**

In the performance of its work, CTS will take all reasonable precautions to avoid damage or injury to subterranean structures or utilities

The client agrees to hold CTS harmless and indemnify CTS for any claims, payments or other fiability, including costs and attorney fees incurred by CTS for any damages to subterranean structures which are not called to CTS's attention and correctly shown on plans familyhed to CTS.

#### SECTION 5: Samples

CTS will retain all soil and rock samples for 30 days after submission of the report. Further storage or transfer of samples can be made at owner expense upon written request.

# SECTION 6: Unanticipated Hazardous Materials

It shall be the duty of the owner or his representative to advise CTS of any known or suspected hazardous substances which are or may be related to the services provided, such hazardous substances including but not limited to products, materials, hy-products, wastes or samples of the foregoing which CTS may be provided or obtain performing its services or which hazardous substances exist or may exist on or near any premises upon which work is to be performed by CTS's employees, agents or subcontractors.

If during the course of providing services CTS observes or suspects the existence of inanticipated hazardous materials, CTS may at its option terminate further work on the project and neitify client of the condition. Services will be resumed only after a renegotiation of scope of services and fees. In the event that such renepotiation cannot occur to the satisfaction of CTS.

#### SECTION 7: Reports and Invoices

CTS will furnish three (3) copies of the report to the chent. Additional copies will be furnished at the rate specified in the fee schedule.

CTS will submit invoices to the eltent monthly and a final bill upon completion of services Payment is due upon presentation of invoice and is past due thirty (30) days from the invoice date. Chent agrees to pay a finance charge of one and one-half percent  $(1^{-1}z^{0}a)$  per month, but not exceeding a maximum rate allowed by law, on past due accounts

# SECTION 8: Ownership of Documents

All reports, boning logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by CTS as instruments of service, shall remain the property of CTS, unless there are other contractual agreements.

#### SECTION 9: Confidentiality

CTS shall hold confidential all businesses or technical information obtained from the client or tos arithmess or generated in the performance of services under this agreement and identified in writing by the client as "confidential" CTS shall not disclose such information without the client's consent except to the extent required for 1) Performance of services under this agreement, 2) Compliance with professional standards of conduct for preservation of public sofety, health, and welfare; 3) Compliance with any court order or other governmental directive and/or 4) Protection of CTS against claures or habilities arising from performance or services under this agreement. CTS obligations hereinder shall not apply to information in the public domain or lawfittly acquired on a non-confidential basis from others.

#### SECTION 10: Standard of Care

Services performed by CTS under this Agreement will be conducted in the manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty, express or implied, is made or intended by the proposal for consulting services or by furnishing oral or written reports of the findings made.

The chent recognizes that the sub-urface conditions may vary from those encountered at the location where borings, surveys or explorations are made by CTS and that the data, interpretations and recommendations of CTS are based solely upon the data available to CTS CTS will be responsible for those data, interpretations, and recommendations, but shall not be responsible for the interpretation by others of the information developed.

#### SECTION 11: Subpoenas

The client is responsible, after notification. For payment of time charges and expenses resulting from our required response to subpoenas issued by any party in computerion with our work. Charges are based on fee schedules in effect at the time the subpoena is served.

#### SECTION 12: Limitation of Liability

The client agrees to limit CTS's hability to the owner and all construction contractors and subcontractors on the project arising from CTS's professional acts, errors, or ounsstons, such that the total aggregate liability of CTS to all those named shall not exceed \$50,000 or CTS's total fee for the services rendered on this project, whichever is more. The owner further agrees to require of the contractor and his subcontractors an identical limitation of CTS's liability for damages suffered by the contractor or subcontractor ansaing from CTS's professional acts, errors, or omissions. Neither the contractor nor any of his subcontractors assumes any liability for damages to others which may arise on account of CTS's professional acts, errors or omissions.

# SECTION 13: Insurance and Indemnity

CTS represents that it and its staff are protected by worker's compensation insurance and that CTS has such coverage under public liability and property damage insurance policies which CTS deems to be adequate. It is the policy of CTS to require certificates of insurance from all consultants or subcontractors employed by CTS. Certificates for all such policies of insurance will be provided to client upon request in writing. Within the limits and conditions of such insurance, CTS agrees to indemnify and save client hamless from an against any loss, damage, injury or liability arising from any negligent acts of CTS or its employees. CTS shall not be responsible for any loss, damage or liability beyond the amounts, limits and conditions of such insurance. CTS shall not be responsible for any loss, damage or liability arising from any acts by a client, its agents, staff or other consultants employed by offers.

CTS's compensation hereunder is not commensurate with the potential risk of injury or loss that may be caused by exposures to pollution, hazardous waste or toxic or other dangerous substances or conditions. Accordingly, except as expressly provided in this contract, the chemt waves any claim against CTS and agrees to indemnify and size CTS, its agents, and its employees harmless from any claim, liability or defense cost for injury or loss sustained by any party from such exposures allegedly arising out of or related to CTS's performance of services hereunder.

#### SECTION 14: Termination

This Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, CTS shall be paid for services performed to the termination notice date plus reasonable termination expenses. Expenses or termination or suspension shall include all direct costs of CTS required to complete analysis and records necessary to complete its files and may also include a report on the services performed to the date of notice of termination or suspension.

#### SECTION 15: Precedence

These Standards. Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice to proceed, or like document regarding CTS's services.



#### Geotechnical Engineering & Construction Testing

SIOUX CITY, IA = 712-252-5132 STORM LAKE, IA = 712-213-8378 Subject: RE: RE: Dorothy Pecaut Nature Center Floor

Date: 5/24/2023 5:04 PM

From: "Matthew Dailey" <mdailey@ctsgeo.com>

To: "Kenny Schmitz" <kschmitz@woodburycountyiowa.gov>

Cc: "Daniel Heissel" <dheissel@woodburyparks.org>

# Kenny,

I have completed the analysis of the floor survey conducted last week and determined what areas have experienced the most differential movement, which most are where I expected but one was not expected (in Dan's office). There is up to 3.4" of differential movement in the upper classroom/storage level and up to 2.6" of differential movement in the lower office portion. We would propose 3 hand auger borings in the upper level and 3 hand auger borings in the lower level to depths ranging from 15 feet to 20 feet. The cost to perform the hand augers and provide the report that provides our evaluation on the cause and potential remediation methods would be \$4,525.00. I will work up a formal proposal. I would like to either set up a Teams meeting or have a site meeting with the group to discuss my findings and my proposed field investigation. Let me know what works for each of you. I would bring whomever else in on the meeting that should be included, such as Terry, Corey and whomever else you feel should be involved.

Thanks,

Matthew R. Dailey, P.E. Geotechnical Department Manager <u>Certified Testing Services, Inc.</u> <u>PO Box 1193 | 419 W. 6th Street | Sioux City, Iowa 51102</u> Office: (712)252-5132 | Direct: (712)226-1551 | Mobile: (712)203-0053



From: Kenny Schmitz <kschmitz@woodburycountyiowa.gov> Sent: Tuesday, May 23, 2023 8:53 AM To: Matthew Dailey <mdailey@ctsgeo.com> Cc: Daniel Heissel <dheissel@woodburyparks.org> Subject: RE: RE: Dorothy Pecaut Nature Center Floor

Hi Matt,

It sounds as though the floor survey/ floor slabs field work is complete so we now need to do the second phase (floor borings) I assume. Have you determined a cost for those yet?

Thanks'

Subject: RE: Dorothy Pecaut Nature Center Floor

Date: 5/31/2023 5:12 PM

From: "Matthew Dailey" <mdailey@ctsgeo.com>

To: "Kenny Schmitz" <kschmitz@woodburycountyiowa.gov>

# Kenny,

The cost to add one additional boring in the mechanical room area would bring the total to \$5,200.

Thanks,

Matthew R. Dailey, P.E.

Geotechnical Department Manager <u>Certified Testing Services, Inc.</u> <u>PO Box 1193 | 419 W. 6th Street | Sioux City, Iowa 51102</u> Office: (712)252-5132 | Direct: (712)226-1551 | Mobile: (712)203-0053



From: Kenny Schmitz <kschmitz@woodburycountyiowa.gov>
Sent: Tuesday, May 30, 2023 10:32 AM
To: Matthew Dailey <mdailey@ctsgeo.com>; Corey Erickson <CErickson@rakerrhodes.com>; Daniel Heissel
<dheissel@woodburyparks.org>; Terry Glade <glade.t@cmbaarchitects.com>; Brian Stehr
<bstehr@woodburyparks.org>
Subject: RE: Dorothy Pecaut Nature Center Floor

Matt please send our teams meeting invitation for 4:00 pm tomorrow. Thanks

Kenny Schmitz Director | Building Services 401 8<sup>th</sup> Street Sioux City, Iowa 51101 712.279,6539 kschmitz@woodburycountyiowa.gov

Burnding Aufessmont Services to Headling County since 20 75

From: Matthew Dailey <<u>mdailey@ctsgeo.com</u>> Sent: Tuesday, May 30, 2023 9:15 AM To: Kenny Schmitz <<u>kschmitz@woodburycountyiowa.gov</u>>; Corey Erickson <<u>CErickson@rakerrhodes.com</u>>; Daniel Heissel <<u>dheissel@woodburyparks.org</u>>; Terry Glade <<u>glade.t@cmbaarchitects.com</u>> Subject: RE: Dorothy Pecaut Nature Center Floor

Subject:	RE: Dorothy Pecaut Nature Center Floor
Date:	5/31/2023 5:11 PM
From:	"Matthew Dailey" <mdailey@ctsgeo.com></mdailey@ctsgeo.com>
To:	"Kenny Schmitz" <kschmitz@woodburycountyiowa.gov>, "Corey Erickson" <cerickson@rakerrhodes.com>, "Daniel Heissel" <dheissel@woodburyparks.org>, "Terry Glade" <glade.t@cmbaarchitects.com>, "Brian Stehr" <bstehr@woodburyparks.org></bstehr@woodburyparks.org></glade.t@cmbaarchitects.com></dheissel@woodburyparks.org></cerickson@rakerrhodes.com></kschmitz@woodburycountyiowa.gov>
Cc:	"Robert Smutzler" <rsmutzler@ctsgeo.com>, "Jed McInerney" <jmcinerney@ctsgeo.com>, "James Bertsch" <jbertsch@ctsgeo.com></jbertsch@ctsgeo.com></jmcinerney@ctsgeo.com></rsmutzler@ctsgeo.com>

All,

Attached is the floor survey results that were discussed in the Teams meeting. I will get out there tomorrow or Friday to get shots on that lower level mechanical room and will add those to the drawing. The pushpins should pop up photos that I took at the various locations of the issues that I witnessed.

Thanks,

# Matthew R. Dailey, P.E.

Geotechnical Department Manager <u>Certified Testing Services, Inc.</u> <u>PO Box 1193 | 419 W. 6th Street | Sioux City, Iowa 51102</u> Office: (712)252-5132 | Direct: (712)226-1551 | Mobile: (712)203-0053

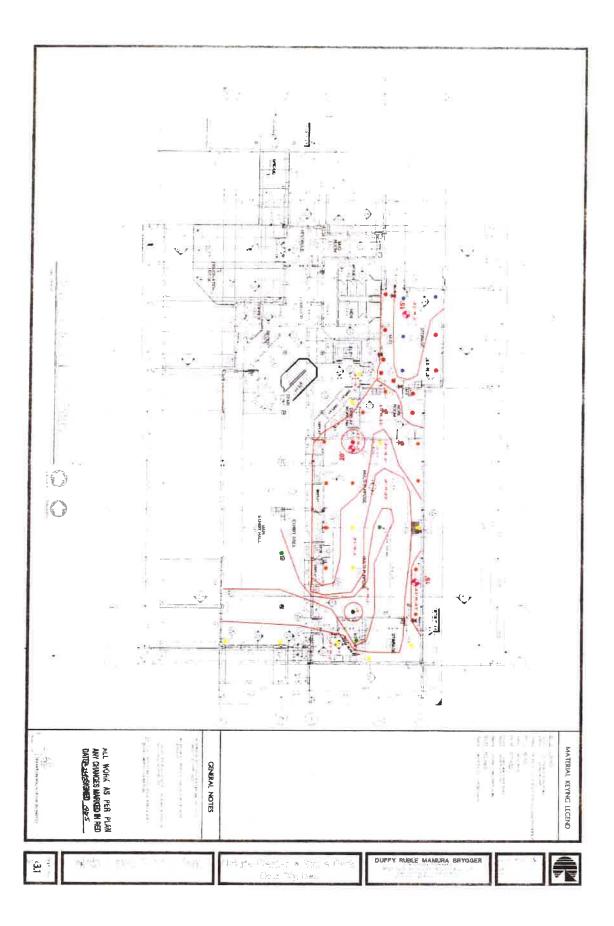


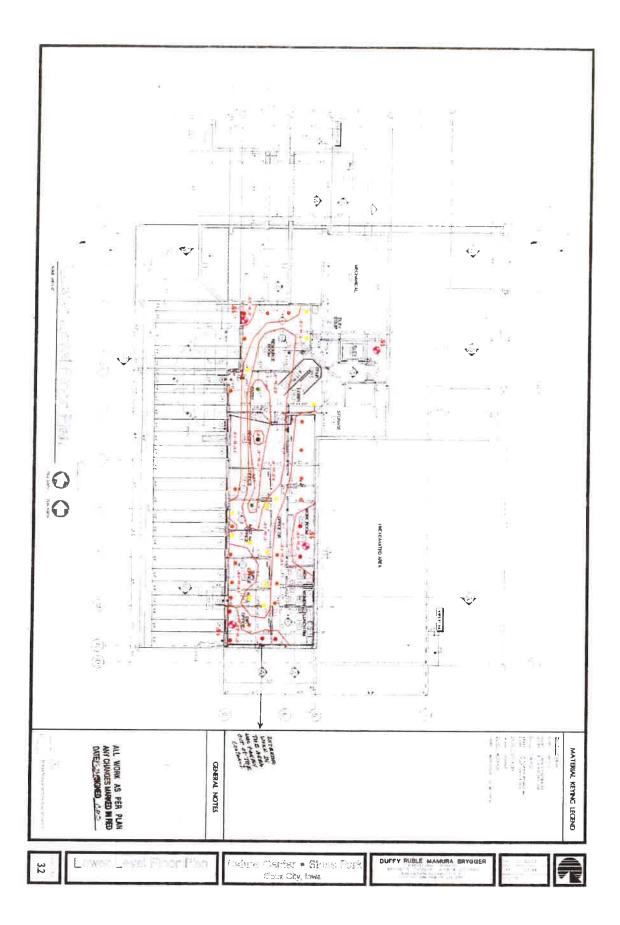
From: Kenny Schmitz <kschmitz@woodburycountyiowa.gov>
Sent: Tuesday, May 30, 2023 10:32 AM
To: Matthew Dailey <mdailey@ctsgeo.com>; Corey Erickson <CErickson@rakerrhodes.com>; Daniel Heissel
<dheissel@woodburyparks.org>; Terry Glade <glade.t@cmbaarchitects.com>; Brian Stehr
<bstehr@woodburyparks.org>
Subject: RE: Dorothy Pecaut Nature Center Floor

Matt please send our teams meeting invitation for 4:00 pm tomorrow. Thanks

Kenny Schmitz Director | Building Services 401 8<sup>th</sup> Street Sioux City, Iowa 51101 712.279.6539 kschmitz@woodburycountyiowa.gov

Inviding Sugarsonal Lynnes to Medlary County since 21 5





# **Kenny Schmitz**

From:	Matthew Dailey <mdailey@ctsgeo.com></mdailey@ctsgeo.com>
Sent:	Wednesday, June 21, 2023 10:10 AM
To:	Kenny Schmitz; Terry Glade
Cc:	Corey Erickson (CErickson@rakerrhodes.com); Brian Stehr; Daniel Heissel
Subject:	RE: Dorothy Pecaut Plans
Attachments:	B5.3gp; 92057 Nature Center as-builts (Floor Survey Results).pdf

CAUTION: This email originated from OUTSIDE of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. If you are asked for your username and password, please call WCICC and DO NOT ENTER any data.

Just to keep everyone in the loop, our crew is finishing up the last boring today. We did encounter voids below the floor slabs on the north side of the upstairs multipurpose room (B6) and just today in the upstairs storage room (B5). The voids were approximately 4 inches directly below the slab. Videos are attached of the voids. We did not encounter any other voids.

B5: Attached to this email

B6: https://ctsgeo-my.sharepoint.com/:v:/p/mdailey/EcaCzXI\_GrIAvsKWtOTTeAQBziGsCXaNh\_F8XHrEEEZXGA?e=VcrOeA

Thanks,

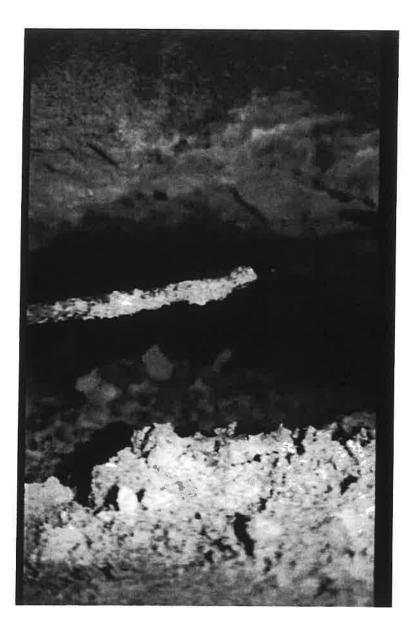
Matthew R. Dailey, P.E. Geotechnical Department Manager Certified Testing Services, Inc. PO Box 1193 | 419 W. 6th Street | Sioux City, Iowa 51102 Office: (712)252-5132 | Direct: (712)226-1551 | Mobile: (712)203-0053

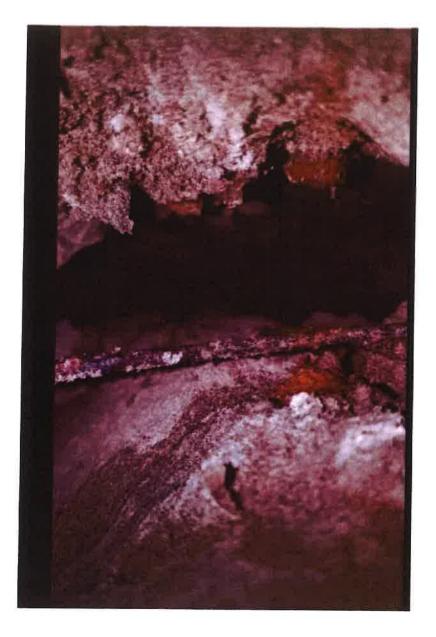


From: Matthew Dailey <mdailey@ctsgeo.com>
Sent: Tuesday, June 20, 2023 7:56 PM
To: Kenny Schmitz <kschmitz@woodburycountyiowa.gov>; Terry Glade <glade.t@cmbaarchitects.com>
Cc: Corey Erickson (CErickson@rakerrhodes.com) <cerickson@rakerrhodes.com>; Brian Stehr
<bstehr@woodburyparks.org>; Daniel Heissel <dheissel@woodburyparks.org>
Subject: Re: Dorothy Pecaut Plans

Kenny, Just an update that we have one boring remaining in the upper level utility room tomorrow. We are running lab testing and I plan to have more information available in the next 2-3 days.

Sent from my Verizon, Samsung Galaxy smartphone Get <u>Outlook for Android</u>









# **Certified Testing Services, Inc.**

# **GEOTECHNICAL ENGINEERING REPORT**

Building Distress Dorothy Pecaut Nature Center Woodbury County, Iowa

> **Prepared For:** Woodbury County

CTS Project No. G7037

Geotechnical Engineering • Construction Materials Testing www.certifiedtestingservices.com

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa. MATTHEW R. DAILEY 19700 Signature: Matur - 1 6-28-2023 Name: Matthew R. Dailey, P.E. ZGI (date) ĩ m License Number: 19700 My license renewal date is December 31, 2023. Pages or sheets covered by this seal: This bound report contains 23 pages, including this page. CTS File Number G7037



**Certified Testing Services, Inc.** 

419 W. 6th Street • P.O. Box 1193 • Sioux City, Iowa 51102 • Phone (712) 252-5132

June 28, 2023

Kenny Schmitz Building Services Director Woodbury County 401 8<sup>th</sup> Street Sioux City, Iowa 51101

> Re: Geotechnical Engineering Report Building Distress Dorothy Pecaut Nature Center Woodbury County, Iowa CTS Job No. G7037

Dear Mr. Schmitz:

Certified Testing Services, Inc. is pleased to transmit our Geotechnical Engineering Report for the referenced project. This report includes the results of field and laboratory testing, opinions concerning the project, and recommendations for remediation of the building distress.

We appreciate the opportunity to perform this Geotechnical Study. If you have any questions pertaining to this report or if we may be of further service, please contact our office.

Respectfully submitted, CERTIFIED TESTING SERVICES, INC.

Somes Batel "D

James A. Bertsch, P.E. IA 12121 Senior Geotechnical Engineer

Matthew R. Dailey, P.E. IA 19700 Geotechnical Department Manager

JAB/MRD/jb

# **GEOTECHNICAL ENGINEERING REPORT**

# BUILDING DISTRESS DOROTHY PECAUT NATURE CENTER WOODBURY COUNTY, IOWA

**CTS PROJECT NO. G7037** 

**PREPARED FOR** 

KENNY SCHMITZ BUILDING SERVICES DIRECTOR WOODBURY COUNTY 401 8<sup>TH</sup> STREET SIOUX CITY, IOWA 51101

JUNE 28, 2023

# TABLE OF CONTENTS

	Page No.
PROJECT INFORMATION	1
Project Authorization Project Description Purpose and Scope of Services	] 
SITE AND SUBSURFACE CONDITIONS	2
Site Location and Description Subsurface Conditions Water Level Measurements	2
EVALUATION AND RECOMMENDATIONS	3
Geotechnical Discussion and Recommendations	3
REPORT LIMITATIONS	4
Appendix	
Floor Survey Plans	

Boring Logs Soil Classification Chart and General Notes

#### PROJECT INFORMATION

#### **Project Authorization**

Certified Testing Services, Inc. has completed a subsurface exploration for the above referenced project. Mr. Kenny Schmitz, Building Services Director for Woodbury County, authorized our work by signing our proposal on May 10, 2023. This work was performed in general accordance with CTS Proposal Number 6398 dated May 9, 2023.

#### **Project Description**

Mr. Robert Smutzler of CTS met with Mr. Terry Glade, AIA of CMBA Architects, Mr. Kenny Schmitz of Woodbury County, Mr. Dan Heissel and Mr. Brian Stehr of the Woodbury County Conservation Board, Mr. Corey Erickson of Raker Rhodes, and Ms. Holly Mathiesen of Concrete Raising Service at the site on April 28, 2023. Mr. Matthew Dailey, P.E., and Mr. Robert Smutzler of CTS met with Mr. Dan Heissel at the site on May 5, 2023, for a follow up visit. Mr. Glade provided a link to the as-built plans for the site in an email on April 28, 2023. CTS understands that settlement has occurred in the floor slab along the west wall in the lower level of the two-story portion of the building, along the east wall in the main level single-story portion of the building and the retaining walls are leaning away from the slope on the south side of the building. It is also understood that there is some cracking of the drywall, doorways in the distressed areas are experiencing movement, and a built-in shelf has fallen due to the movement. CTS did not observe cracking of the exterior walls during the exterior inspection of the building. Mr. Heissel indicated that the exterior stoops on the west side of the building have been replaced due to the doors contacting the concrete while opening.

The geotechnical recommendations presented in this report are based on the available project information and the subsurface materials described in this report. If the noted information is incorrect, please inform CTS in writing so that we may amend the recommendations presented in this report if appropriate. CTS will not be responsible for the implementation of its recommendations when it is not notified of changes in the project.

#### **Purpose and Scope of Services**

The purpose of this work was to determine the cause of the movement and present possible recommendations for remedial action. Our scope work consisted of performing a floor survey of the distressed areas and performing seven hand auger soil test borings to depths ranging from 15 feet to 20 feet below the existing surface in the upper and lower levels. The scope of work was modified due to auger refusal being encountered at Boring Locations B6 and B7 at depths ranging from 12.7 feet and 8.5 feet, respectively. The scope of work also included select laboratory testing, and preparation of this geotechnical report. This report briefly outlines the testing procedures, presents available project information, describes the site and subsurface conditions, presents floor surveys, provides an opinion on the cause of the distress, and presents groundwater information. The scope of services did not include an environmental assessment of the site.

#### SITE AND SUBSURFACE CONDITIONS

### Site Location and Description

The site is the existing Dorothy Pecaut Nature Center building in Woodbury County, Iowa. At the time of drilling, the surface of the boring locations consisted of floor slabs that varied in thickness from 4 inches and 5 inches.

#### **Subsurface** Conditions

After the floor slab survey was completed, CTS explored the site subsurface conditions with seven soil test borings sampled to depths ranging from 8.5 feet to 15 feet below the existing ground surface. The boring locations and depth were chosen by CTS after discussions with Mr. Schmitz. CTS personnel located the borings using a measuring wheel and measuring from known reference points. The locations of the borings are indicated on the "Floor Survey Plans" included in the Appendix.

The borings were advanced utilizing hand auger drilling methods after the floor slabs were cored. Soil samples were routinely obtained during the drilling process. Select soil samples were later tested in the laboratory to determine materials properties for our evaluation. Soil sampling and the laboratory testing were accomplished generally in accordance with ASTM procedures. The boring locations were patched with concrete after completing our work.

The subsurface conditions generally consisted of poorly graded sand fill, lean clay with sand fill, and lean clay weathered shale. It should be noted that 4-inch to 5-inch voids were encountered below the floor slab in Borings B5 and B6. The materials encountered in the borings are described in more detail in the following table:

Material	Moisture Content (%)	Dry Density (PCF)	Saturation (%)	Hand Penetrometer (TSF)	Cone Penetrometer Test (BP 1¼")
Poorly Graded Sand Fill	19	107	92	-	4
Lean Clay with Sand Fill	14-25	93-112	55-99	0.5-4.5	4-25
Lean Clay Weathered Shale	16-31	91-103	55-99	1.75-4.5	6-25

The boring logs included in the Appendix should be reviewed for specific information at individual boring locations. The boring logs include soil/rock descriptions, stratifications, penetration resistances, and locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected at locations other than the locations drilled. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. Water level information obtained during field operations is also shown on the boring logs. Samples that were not altered by laboratory testing will be retained for 30 days from the date of this report and then will be discarded.

### Water Level Measurements

Free water was not encountered in the borings at the time of drilling. It should also be noted that with the relatively impervious material encountered in the borings that a long monitoring time would be required to determine the static water level, which was beyond our scope of work. The water level measurements presented in this report are the levels that were measured at the time of our field activities and should be expected to fluctuate with climatic conditions.

### EVALUATIONS AND RECOMMENDATIONS

### **Geotechnical Discussion and Recommendations**

Based on the floor slab survey information, it is our opinion that the exterior building walls and the interior basement walls have undergone between 1-inch and 2 inches of settlement. It is CTS's opinion that the movement is being caused by poorly compacted fill material and possibly the consolidation of the weather shale. The existing fill material has moisture contents that range from 14 percent to 25 percent, dry densities that varied from 93 PCF to 112 PCF, and cone penetrometer test results that varied from 4 blows per 1<sup>3</sup>/<sub>4</sub> inches to 25 blows per 1<sup>3</sup>/<sub>4</sub> inches, which indicate that the fill material was not placed in a consistent manner and consolidation is occurring in the fill material. It is our further opinion that the weathered shale is contributing to the movement in that the weathered shale is highly susceptible to deterioration due to increases in moisture content. The weathered shale has moisture contents that range from 16 percent to 31 percent, which would indicate that the shale in the area of Borings B1, B2, and B4 have undergone large increases in moisture content versus the weathered shale in Borings B3 and B5.

It should also be noted that the voids encountered below the floor slabs in Borings B5 and B6 are due to the fill consolidating under the floor slab where the floor slab is supported on the foundation walls. It is CTS's opinion that additional voids will be encountered under the floor slabs next to the foundation walls where the floor slabs are supported on the foundation walls. According to the original drawings that were provided, the only area where the floor slabs are not supported on the foundations is along the east wall where there are frost depth foundations.

It is CTS's recommendation that the floor slabs not be pressure grouted to level the floors in that most of the floor slabs are supported on the foundations and raising the floor slabs could cause additional damage to existing walls. CTS would recommend that the voids be filled with grout or foam so that additional cracking of the floor slabs do not occur near the foundation walls. CTS also recommends that settlement points be established to determine if settlement continues to occur. The settlement points should be setup by a surveyor and a benchmark be established outside of the influence of the building area. The surveyor should monitor the settlement points every three months for not less than a year. If additional settlement is observed in the walls, the walls would need to be supported on helical piles.

### **REPORT LIMITATIONS**

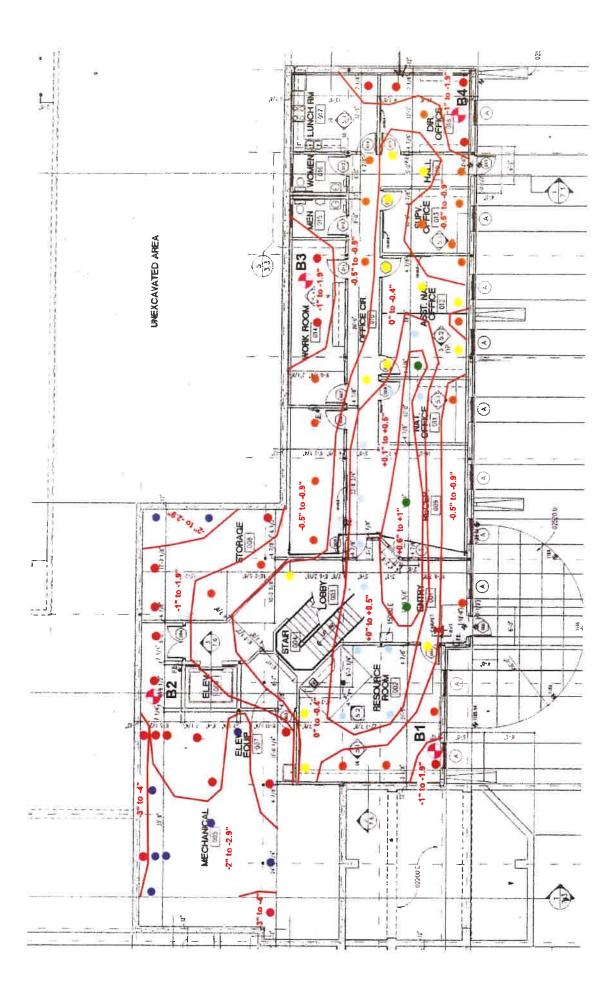
The recommendations submitted are based on the available subsurface information obtained by CTS and information furnished by Mr. Terry Glade, AIA of CMBA Architects, Mr. Kenny Schmitz of Woodbury County, Mr. Dan Heissel and Mr. Brian Stehr of the Woodbury County Conservation Board, and Mr. Corey Erickson of Raker Rhodes. If deviations from the subsurface conditions noted in this report are encountered during the corrective action, CTS should be notified immediately to determine if changes in the recommendations are required. If CTS is not retained to perform these functions, CTS will not be responsible for the impact of those conditions on the project.

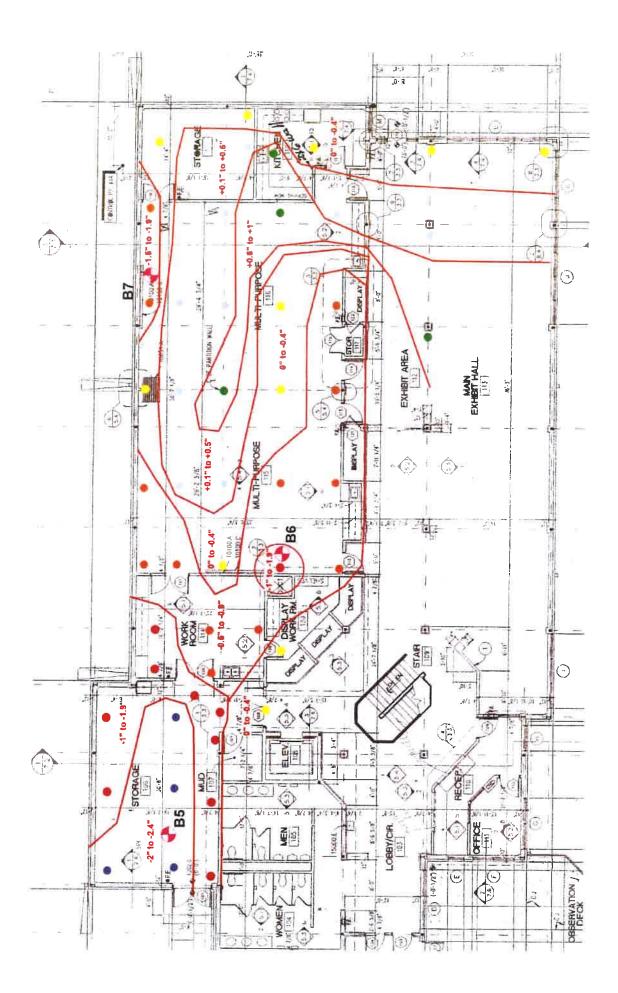
The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

After the plans and specifications for the remedial action are complete, the geotechnical engineer should be retained and provided the opportunity to review the final plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At that time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Woodbury County and their consultants for the specific application to the Dorothy Pecaut Nature Center Building Distress in Woodbury County, Iowa.

APPENDIX

FLOOR SURVEY PLANS





**BORING LOGS** 

		L.			LOG	OF	EXPLOR	ATOR	Y BO	RING	3				Shee	et 1	of	1
(		S	Job Numb Project: Date Starte Date Com	ed:	Distress 6/13/23	/ Pec	caut Buildin	יטי E	Boring N Boring L Drill Typ Bround	.ocati be:					unty,	IA		
Depth in Feet	Graphic Log	Sample Type	Shelby Tube Modified California	S S S	Standard Split Spoon Grab Gample	-	Water Level ATD Water Level @ 4-Days	USCS	Blow Counts SPT (N) Blows/Foot	Moisture Content, %	Dry Density (PCF)	% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer (Blows/ 1-3/4")
		0)		SOIL DE	SCRIPTIO	N						%	Pene	Str				Cone
			4-Inch Concre FILL, Poorly G Moist (Clay Lense)			llow	Brown,			19	107	92				-		4
5 -			FILL, Lean Cla Medium Gray, (Brownish Gra	Moist		low I	Brown and			25	99	99	1.00					
-leased a										23	103	99	0.50					
										23	99	90	2.00					13
10 -										22	96	79	2.00					11
ndin melanise		-	LEAN CLAY, Y Oxidized, Weat	ellowisl	h Gray, V Shale	/ery l	Moist,	CL		27	96	99	2.75					
15			END OF BORI	NO AT						27	97	99	2.00					11
			FREE WATER AT TIME OF DI	WAS N	<b>IOT ENC</b>		NTERED											

0	LITING				LOG	OF	EXPLORA	TOR	Y BOF	RING	;				Shee	et 1	of	1
		S	Job Numb Project: Date Starte Date Com	ed:	Distres 6/16/23	S	aut Building	E C	oring N oring L orill Typ fround	ocati e:	оп				unty,	IA		
Depth in Feet	Graphic Log	Sample Type	Shelby Tube Modified California	S S	itandard plit Spoon ample SCRIPTIC	Ţ	Water Level ATD Water Level @ 4-Days	NSCS	Blow Counts SPT (N) Blows/Foot	Moisture Content, %	Dry Density (PCF)	% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer (Blows/ 1-3/4")
	्यत्	_	6 Inch Conora			)N						<u> </u>	_ <u> </u>			_		ပိ
<u>codocodoor</u>			5-Inch Concre FILL, Poorly G Moist FILL, Lean Cla Moist to Very I	Braded S	Sand, Ye		/			22	98	86	3.25					7
										22	102	94	3.00					6
5 -000										24	95	.85	4.50					12
			LEAN CLAY, C Moist, Oxidized	Gray Bro d, Weat	own, Moi hered Sl	st to nale	Very	CL		22	96	82	3.75					16
10 -										27	92	89	2.50					21
			(Medium Gray	and Yel	llow Brov	wn)				26	93	89	3.50					18
15			END OF BORI	NGAT	15 FEFT					27	94	95	3.00					14
			FREE WATER			COUN	VTERED											

	(Litthe			LOC	G OF	EXPLORA	TOR	YBO	RINC	3				She	et 1	of	1
	E	S	Job Numb Project: Date Starte Date Com	Doroti Distre	ny Pe ss 3	caut Building	y E C	Boring N Boring L Drill Typ Bround	.ocati ie:					unty,	IA		
Depth in Feet	Graphic Log	Sample Type	Modified Californía	Standard Split Spoo Grab Sample	Ţ	Water Level ATD Water Level @ 4-Days	USCS	Blow Counts SPT (N) Blows/Foot	Moisture Content. %	Dry Density	% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer
				SOIL DESCRIPTI								Ъ.	5″				õ
			4.5-Inch Conc 4.5-Inch Sand FILL, Lean Cla and Medium G	Layer ay with Sand, Y	'ellow t	v Brown			25	99	96	3.50					1
			(Brownish Gra	y)					21	106	99	4.00					11
9									23	103	99	4.25					1:
turning			LEAN CLAY, Y Moist, Oxidized	/ellowish Gray, d, Weathered S	Very Shale	Moist to	CL		25	98	97	4.50				-	25
10 -			(Dark Gray and	d Yellow Browr	)				16	94	55	4.50					2!
utra da ante									18	101	76	4.50					2
15 -		1	(with Silt Lense Gray) END OF BORII FREE WATER AT TIME OF DI	NG AT 15 FEE WAS NOT EN	г				21	102	90	4.50					20

-	CATERING TO		LOG	OF EXPLORA	TO	RY BO	RIN	3				She	et 1	of	1
		Job Numbe Project: Date Starte Date Compl	Dorothy Distress	r Pecaut Building S	1	Boring Boring Drill Ty Ground	Locat pe:							5.	
Depth in Feet	Graphic Log Sample Type	Shelby Tube Modified California	Standard Split Spoon Grab Sample	✓       Water Level         ▲TD         ✓       Water Level         @ 4-Days	nscs	tts -			% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer (Blows/ 1-3/4")
		4.6-Inch Concre FILL, Poorly Gr Moist (Vapor Barrier a FILL, Lean Clay and Medium Gr	aded Sand, Yel at Bottom of Sa v with Sand, Yel ay, Very Moist	nd) /			26	98	99	0.75					4
- 5 -		(Brownish Gray (Gray Brown)	, Very Moist)				24	100	96	1.00					7
		(Brownish Gray)	)				24	101	99	2.50					11
		LEAN CLAY, Ye Weathered Shal	llowish Gray, N e	loist,	CL		26	94	92	4.50					13
10		(Gray and Yellov	v Brown, Oxidiz	ed)			31	91		2.00					11
		(Fat Clay Lenses	5)				27	94	97	3.00					
15		(Medium Gray) END OF BORING FREE WATER W AT TIME OF DRI	VAS NOT ENC	OUNTERED			24	100	98	4.50					25

ł

2	<b>ILITIME</b>					EXPLOR/	ATOR	Y BOF	RINC	3				She	et <b>1</b>	of	1
((		9)	Job Numb Project: Date Starte Date Com	Doro Dist	othy Peo ess 23	caut Buildin	a 1	Boring N Boring L Drill Typ Bround	.ocati e:	ion:	<b>B-5</b> Woo Hand		y Coi jer	unty,	IA		
Depth in Feet	Graphic Log	Sample lype	Shelby Tube Modified California	Standard Split Spo Grab Sample		Water Level ATD Water Level @ 4-Days	USCS	Blow Counts SPT (N) Blows/Foot	Moisture Content, %	Dry Density (PCF)	% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer
		4 F ≥ F	-Inch Concre -Inch Void Be ILL, Poorly G loist ILL, Lean Cla loist	elow Concrete raded Sand,	Yellow	/			15	110	79	4.50					1
5 -									16	93	55	4.25					e
2 2 2									16	102	67	4.50					1:
									16	101	67	4.50					1!
10 -000									15	108	76	4.50					2
11111111		LE Mo	AN CLAY, B bist, Weather	rownish Gray red Shale	, Moist	to Very	CL		18	103	80	4.50					21
									24	99	95	1.75					6
		FR	id of Borit Ree Water Time of Di	WAS NOT E		NTERED											

	Job Number: G70	othy Pecaut Building ress /23	B( B( D)	Y BOR oring N oring Lo rill Type round E	o.: ocatio	on:				Shee u <b>nty</b> ,		of	1
Depth in Feet Graphic Log Samole Type	Shelby Tube Standar Split Sp Modified California Sample SOIL DESCRIF	oon ATD Water Level @ 4-Days	USCS	Blow Counts SPT (N) Blows/Foot	Moisture Content, %	Dry Density (PCF)	% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer
253		TION						Ľ					ŭ
	5-Inch Concrete Layer 5-Inch Void Below Concret	e	_										
	FILL, Poorly Graded Sand, Moist FILL, Lean Clay with Sand,	/			18	108	89	4.50					8
	and Medium Gray, Moist to	Very Moist			14	100	57	3.75					11
5 -													
	(Gray Brown)				18	112	97	4.00					8
					20	93	69	1.50					4
10 -					21	102	89	2.00					6
					27	95	95	0.75					25
	End of Boring at 12.7 ( Auger Refusal Free Water Was not e at time of drilling												

				L	OG OF	EXPLORA	TOR	Y BOF	RING	;				Shee	et 1	of	1
		S	Job Numbo Project: Date Starte Date Comp	Do Dis ed: 6/1	stress 19/23	caut Building	9 E C	Boring N Boring L Drill Type Bround I	ocati e:	on:				unty,	IA		
Depth in Feet	Graphic Log	Sample Type	Shelby Tube Modified California	Stand Split S Grab Samp SOIL DESCF	Spoon Le	Water Level ATD Water Level @ 4-Days	nscs	Blow Counts SPT (N) Blows/Foot	Moisture Content, %	Dry Density (PCF)	% Saturation	Hand Penetrometer (TSF)	Unconfined Comp. Strength (TSF)	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cone Penetrometer (Blows/ 1-3/4")
			5-Inch Concre FILL, Poorly G Moist FILL, Lean Cla Moist, Oxidize	iraded San		/		-	15	106	73	4.50					15
- 5 -			(Medium Gray	and Gray	Brown)				16	110	81	4.50					25
			(Brownish Gra	y)					15	96	56	4.50					25
			Oxidized, Wea END OF BORI AUGER REFU FREE WATER AT TIME OF D	NG AT 8.5 SAL WAS NO	FEET DI												

SOIL CLASSIFICATION CHART AND GENERAL NOTES

		JIL CLASSIF			1
N	AJOR DIVIS	ONS	GRAPH	BOLS	TYPICAL DESCRIPTIONS
	GRAVEL	CLEAN GRAVELS	GIVARTI	GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE FRACTION	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS	SAND AND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
LARGER THAN NO. 200 SIEVE SIZE	SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
	PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
-		-		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE		-		МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
JIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY
				он	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIG	GHLY ORGANIC SC		र का का का राज का का क राज का का क	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

### SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

### **GENERAL NOTES**

### SAMPLING SYMBOLS:

STANDARD PENETRATION TEST - 1 3/8: I.D., 2" O.D.

SHELBY THIN-WALLED TUBE - 3" O.D. UNDISTURBED SAMPLE

GRAB SAMPLE

ROCK CORE

AUGER SAMPLE

NO RECOVERY

### WATER LEVEL MEASUREMENT SYMBOLS:

CONSISTENCY OF FINE-GR	AINED SOILS
UNCONFINED COMPRESSIVE STRENGTH, QU, PSF	CONSISTENCY
< 500	VERY SOFT
500 - 1,000	SOFT
1,001 - 2,000	MEDIUM
2,001 - 4,000	STIFF
4,001 - 8,000	VERY STIFF
8,001 - 16,000	HARD
> 16,000	VERY HARD

Ā	WATER LEVEL AT TIME OF DRILLING
¥.	WATER LEVEL AFTER 7 DAYS

	ENSITY OF COARSE
N-BLOWS/FT.	RELATIVE DENSITY
0 - 3	VERY LOOSE
4 - 9	LOOSE
10 - 29	MEDIUM DENSE
30 - 49	DENSE
50 - 80	VERY DENSE
+ 08	EXTREMELY DENSE

<b>RELATIVE PROPORTIONS OF</b>	SAND AND GRAVEL
DESCRIPTIVE TERM(S) (OF COMPONENTS ALSO PRESENT IN SAMPLE)	PERCENT OF DRY WEIGHT
WITH	15 - 29
MODIFIER	> 30

RELATIVE PROPORTIO	NS OF FINES
DESCRIPTIVE TERM(S) (OF COMPONENTS ALSO PRESENT IN SAMPLE)	PERCENT OF DRY WEIGHT
WITH	15 - 29
MODIFIER	> 30

GRAIN SIZE TERMINOLOGY		
MAJOR COMPONENT OF SAMPLE		
BOULDERS	OVER 12 IN. (300MM)	
COBBLES	12 IN. TO 3 IN. (300 MM TO 75 MM)	
GRAVEL	3 IN. TO #4 SIEVE (75MM TO 4.75MM)	
SAND	#4 TO #200 SIEVE (4.75MM TO 0.075 MM)	
SILT OR CLAY	PASSING #200 SIEVE (0.075MM)	



Subject: RE: Dorothy Pecaut Plans

Date: 6/29/2023	10:00 AM
-----------------	----------

From: "Kenny Schmitz" <kschmitz@woodburycountyiowa.gov>

To: "Terry Glade" <glade.t@cmbaarchitects.com>, "Corey Erickson (CErickson@rakerrhodes.com)" <cerickson@rakerrhodes.com>

"Brian Stehr" <bstehr@woodburyparks.org>, "Daniel Heissel"

Cc: <dheissel@woodburyparks.org>, "James Bertsch" <JBertsch@ctsgeo.com>, "Matthew Dailey" <mdailey@ctsgeo.com>

### Matt received the report- thank you

Corey/ Terry- looks like next steps we need may be:

- 1. Set of specs for a surveyor
- 2. Set of specs for under-slab foam filling
- 3. Getting quotes from both a surveyor (for current survey baseline & through 1-year) & concrete slab foam filling in areas required from an appropriate party.

### Thoughts??

Kenny Schmitz Director | Building Services 401 8<sup>th</sup> Street Sioux City, Iowa 51101 712.279.6539 kschmitz@woodburycountyiowa.gov

An onthing Day sugar discourse to Monthing Consider some 20.15

From: Matthew Dailey <mdailey@ctsgeo.com> Sent: Wednesday, June 28, 2023 4:00 PM To: Kenny Schmitz <kschmitz@woodburycountyiowa.gov> Cc: Terry Glade <glade.t@cmbaarchitects.com>; Corey Erickson (CErickson@rakerrhodes.com) <cerickson@rakerrhodes.com>; Brian Stehr <bstehr@woodburyparks.org>; Daniel Heissel <dheissel@woodburyparks.org>; James Bertsch <JBertsch@ctsgeo.com> Subject: RE: Dorothy Pecaut Plans

CAUTION: This email originated from OUTSIDE of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. If you are asked for your username and password, please call WCICC and DO NOT ENTER any data. Kenny,

Attached is the geotechnical report discussing the results of the subsurface evaluation at the Dorothy Pecaut Nature Center. Please note that the floor survey sheet will look slightly different than was previously shown as we adjusted the benchmark point to provide a more accurate settlement amount. Please review the report and let us know if there are any questions. I will send the invoice to you directly shortly.

Thanks,



### **PROJECT MEETING MINUTES**

PROJECT: Dorothy Pecaut Nature Center Floor Investigation

PROJECT #: 23186

LOCATION: Sioux City, Iowa

DATE: 08/03/23

REPORT BY: Terry Glade, AIA

### PHEREN TAT MEETIND

NAME Brian Stehr Bryan Wells, PE Matt Dailey, PE Terry Glade, AIA REPRESENTING Dorothy Pecaut Nature Center DGR Engineering CTS, Inc. CMBA Architects

### DISCUSSION

- 1. Reviewed areas of concern and viewed previously noted floor cracks, heaves, affected interior doors and frames, soil test locations, etc.
- 2. Brian indicated that the issues have continued to worsen over a period of years.
- 3. Review of original civil site plan showed drainage swales that would've drained water out to the north and south ends of the building on the east side. These swales are gone and the area leveled out for the handicap accessible sidewalk that runs along that side. Brian indicated that the sidewalk was in place when he began work at the facility in 2016 and a portion was replaced since but no change in grade.
- 4. Building grade on the east side is up on the brick and over the level of the through-wall flashing and weeps in some locations.
- 5. East downspouts were all collected and run underground by Mike Barkley in recent years. The main collector line appears to empty into the new manhole at the south end of the building at least 5' below grade.
- 6. East retaining wall appears to be original and still in good condition. With no swale designed behind/at the top of the wall, water could sheet down the embankment and also land on the grade east of the building but it didn't appear to be a major contributor to the issues.
- Collective opinion was that potentially before downspouts were collected and because of the loss of the swales, water made its way under the floor slabs and washed away some subgrade material and possibly caused other areas to heave. No other possible current contributors were noted at this time.

### RECOMMENDED ACTION ITEMS

- 1. CTS to provide a proposal to perform at least two more soil borings outside of the building on the east side to check for any abnormalities.
- 2. Recommend running a camera through the main downspout collector to look for any breaks in the system. Morningside Plumbing was suggested as a potential contractor for that work. Brian to coordinate.
- DGR to provide a proposal to install settlement monitors in specific locations to check for additional floor movement, Initial periods of monitoring recommended at every three months. CMBA to coordinate with all parties on potential locations for testing. If any additional settling detected, further investigation will be warranted.
- 4. Recommend using ground-penetrating radar to scan the slab-on-grade areas to determine areas where subgrade has washed away. CMBA to contact GPRS to discuss and request a proposal if their services are appropriate.
- 5. CMBA to investigate stabilizing materials that can be placed in identified hollow spots.
- 6. Proposals for service to be provided to Kenny Schmitz, Director Building Services, Woodbury County

Dan Heissel, Brian Stehr - Woodbury County Conservation Board, Dorothy Pecaut Nature Center Kenny Schmitz - Woodbury County Matt Dailey, PE - CTS, Inc. Bryan Wells, PE - DGR Engineering Corey Erickson, Jerad Hoffman - Raker Rhodes Engineering



**Certified Testing Services, Inc.** 

419 W. 6th Street • P.O. Box 1193 • Sioux City, Iowa 51102 • Phone (712) 252-5132

September 6, 2023

Kenny Schmitz Director – Building Services Woodbury County 401 8<sup>th</sup> Street Sioux City, Iowa 51101

> RE: Additional Geotechnical Exploration Services Building Distress Dorothy Pecaut Nature Center Sioux City, Iowa CTS Proposal No. 6528

Dear Mr. Schmitz,

Introduction

Certified Testing Services, Inc. is pleased to submit this proposal to perform additional geotechnical exploration services for the above referenced project. The reason for this proposal is that during a site meeting on August 3, 2023, with Mr. Brian Stehr of the Dorothy Pecaut Nature Center, Mr. Bryan Wells, P.E. of DGR Engineering and Mr. Terry Glade, AIA of CMBA Architects, it was discussed to provide three additional soil borings on the exterior of the east side of the Dorothy Pecaut Nature Center building. The purpose of the additional soil borings is to evaluate the subsurface soils on the exterior of the building and obtain ground water readings, if groundwater is present.

### Scope of Work

Based on the additional information supplied, CTS proposes to perform three additional soil test borings to depths of 20 feet below the existing grade on the east side of the existing building and perform 24 hour water readings. The additional borings will be performed using a truck mounted drill rig. At the completion of the fieldwork, samples collected in the field will be transported to the laboratory and tested to determine select engineering properties that will be used in our analysis. The results of the fieldwork,

Woodbury County September 6, 2023 CTS Proposal Number 6528 Page 2 of 5

laboratory testing, project information and other information will be evaluated by a professional engineer familiar with the soil conditions in the project area and presented in an addendum report.

Items that will be addressed in the addendum report include our analysis of the subsurface materials, additional recommendations based on the results of the subsurface investigation, if needed, and groundwater information.

The scope of services is based on the public utilities being located by CTS through the Iowa One Call Service and the boring location being accessible to a truck mounted drill rig. It should be noted that the Iowa One Call Service will not locate private utilities, which are utilities that are owned and maintained by the property owner. Woodbury County should make CTS aware of all private utilities that the Iowa One Call Service will not locate. CTS cannot be held responsible for private utilities that we cut that we are not made aware of their specific location. CTS cannot be held responsible for drill holes that settle after we have left the site or damage caused accessing the site due to soft conditions. Field and laboratory testing will be performed, where applicable, in accordance with ASTM procedures. Our scope of work does not include an evaluation of existing environmental conditions.

### <u>Cost</u>

Based on the scope of work discussed above, CTS proposes to perform the additional work for a lump sum amount of \$2,450.00, which includes an electronic copy of the addendum report. It is further proposed to perform the work in accordance with the CTS "General Conditions", were included in the original proposal.

### Schedule and Authorization

Based on our present schedule, we can commence the fieldwork within ten to fifteen working days after receiving written notice to proceed if site access is supplied

Woodbury County September 6, 2023 CTS Proposal Number 6528 Page 3 of 5

and weather and site conditions allow. Working days are Monday through Friday with the exception of holidays. CTS's written addendum report would be completed within seven working days of completion of the fieldwork.

CTS will proceed with the fieldwork based on the receipt of a signed copy of this proposal. To speed up the process a copy of the signature page may be faxed to (712) 252-0110 or emailed to <u>mdailey@ctsgeo.com</u> and would serve as written authorization. Please complete as many items as possible on the attached project data sheet and return the signed agreement.

CTS appreciates the opportunity to submit this proposal and looks forward to continuing to work with you on this project. If you should have any questions or need additional information, feel free to contact our office.

Sincerely, CERTIFIED TESTING SERVICES, INC.

Jonnes Batel MD

James A. Bertsch, P.E. Senior Geotechnical Engineer

Matthew R. Dailey, P.E. Geotechnical Department Manager

JAB/MRD/md

- Attachments: Schedule of Services and Fees Project Data Sheet General Conditions
- cc: CMBA Architects Woodbury County Conservation Board

Woodbury County September 6, 2023 CTS Proposal Number 6528 Page 4 of 5

AGREED TO THIS	DAY OF	. 20	
SIGNATURE:			
PRINTED NAME:			
<i>TITLE:</i>			
FIRM:			-

Woodbury County September 6, 2023 CTS Proposal Number 6528 Page 5 of 5

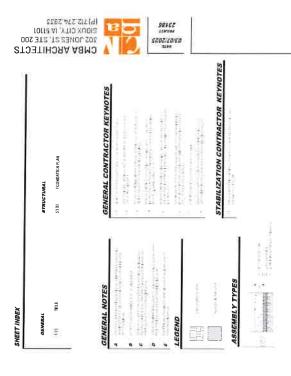
### SCHEDULE OF SERVICES AND FEES

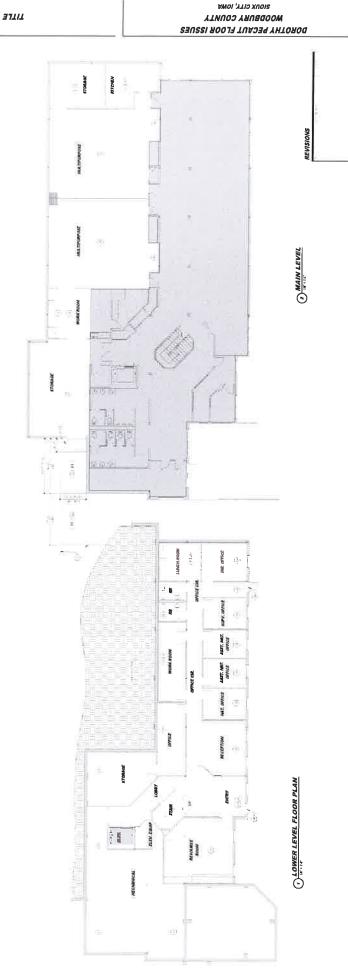
Field Services	<u>Unit</u>	<u>Unit Fees</u>
Mobilization	Per Trip	\$260.00
Mobilization, Pickup	Per Trip	30.00
Drilling	Per Foot	11.00
Sampling	Each	10.00
Standby	Hour	150.00
Lab Services		
Atterberg Limits	Each	\$90.00
Moisture Content	Each	9.00
Dry Density	Each	11.00
Unconfined Compression	Each	16.00
Consolidation Test	Each	250.00
Report		
Senior Engineering Technician	Hour	68.00
Crew Chief	Hour	78.00
Staff Engineer	Hour	130.00
Senior Engineer	Hour	160.00



SIOUX CITY, IOWA

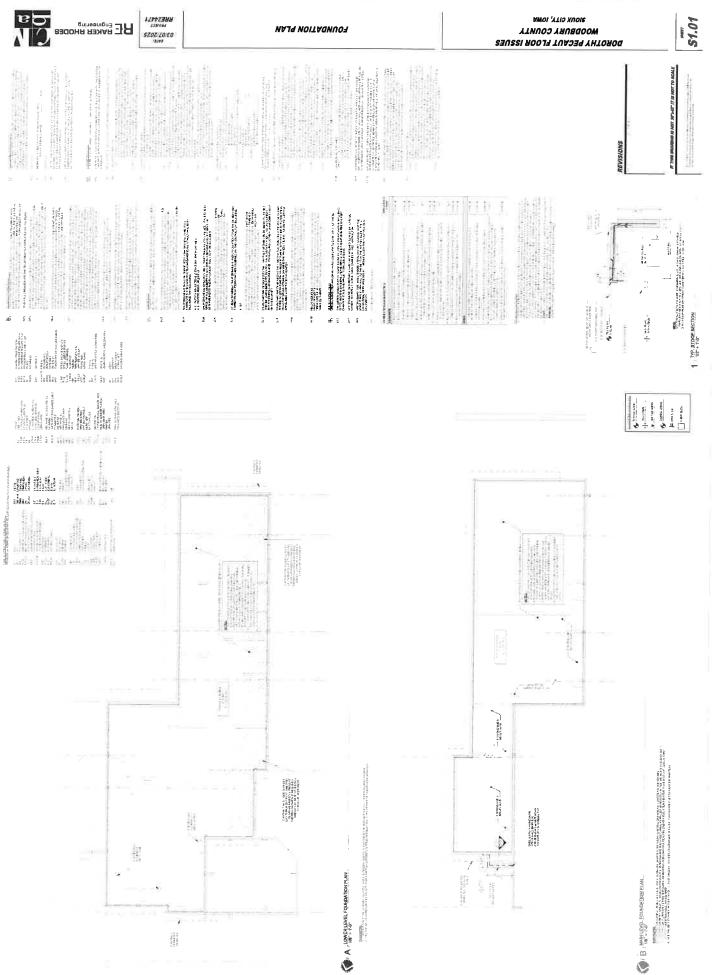






T.01

1. 1. 1. A start & minutes representation of a second start of a start start of the second start of the start start start of a second start.



### **REQUEST FOR PROPOSAL (RFP) FORM**

### THE PROJECT AND THE PARTIES

### 1.01 TO:

 A. Woodbury County (Owner) 620 Douglas St Suite 210 Sioux City, IA 51101

### 1.02 FOR:

- A. Project: Floor Issues Dorothy Pecaut Nature Center 4500 Sioux River Road Sioux City, IA 51109
- B. CMBA Project Number: 23186

#### 

### 1.04 SUBMITTED BY: (RESPONDENT TO ENTER NAME AND ADDRESS)

- A. Respondents Full Name Holly EASTON/FRED MATHIESEN
  - 1. Address 120 N 10TH ST NALLING
    - 2. City, State, Zip: DAKOTA CITY, NE 68731 CONCRETE RAISING SERVICE PD. BOX 1002
    - 3. Phone: 712-203-8262 South Stoux City,ME,68776

### 1.05 OFFER

- A. Having examined the Place of The Work and all matters referred to in the Summary and the Contract Documents prepared by CMBA and their consultants for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:
- C. Concrete Stabilizers Price: \_\_\_\_\_\_ FOURTY EIGHT THOUSAND DOLLARS \_\_\_\_\_\_ dollars (\$\_\_\_\_\_\_\$48,000 \_\_\_\_\_\_), in lawful money of the United States of America.
- C. Project is sales tax exempt.

### 1.06 ACCEPTANCE

- A. This offer shall be open to acceptance and is irrevocable for thirty (30) days from the proposal closing date.
- B. If this proposal is accepted by Owner within the time period stated above, we will:
  - 1. Execute the Agreement within seven (7) days of receipt of Notice of Award.
  - 2. Furnish the required bonds within seven (7) days of receipt of Notice of Award.

### 1.07 CONTRACT TIME

- A. If this Proposal is accepted, we will:
- B. Commence work no later than April 15, 2025
- C. Substantial Completion to be on or before June 1, 2025
- D. Procurement work may begin as soon as the contract is awarded.

### 1.08 UNIT PRICES

A. The Owner has requested Unit Pricing for specific portions of the Work as listed. Unit prices shall be total cost to Owner, per unit of Work, including indirect costs and overhead and profit.

B. Respondent, in submitting his proposal response, shall include Unit Pricing for the following items:

	ITEM DESCRIPTION	UNIT PRICE	UNIT OF MEASURE
1.	Additional Poly Level	s <u>N/A</u>	Per cubic yard (CY)
2.	General Contractor Hourly Rate	\$	Hourly (HR)

\*OUR SERVICE PRICES ARE INDIVIDUALLY BASED ON A NUMBER OF FACTORS. DUR PRICE IS FRIM UNLESS SOME VERY UNUSUAL AND UNFORESEEN OCCURS. WE THEN STOP AND DISCUSS WITH IN CHARGE PARTIES WHAT DIRECTION THEY WANT TO GO. THEN A CHANGE ORDER WOULD TAKE PLACE, - CONCRETE **RAISING/HOLLY EASTON** 

### 1.09 CHANGES TO THE WORK

- A. When Architect establishes that the method of valuation for Changes in the Work will be net cost plus a percentage fee in accordance with General Conditions, our percentage fee will be
  - 1..... 5 percent overhead and profit on the net cost of our own Work;
  - 2. 5 percent on the cost of work done by any Subcontractor.
- 8. On work deleted from the Contract, our credit to Owner shall be Architect-approved net cost plus 5 percent of the overhead and profit percentage noted above.

#### PROPOSAL FORM SIGNATURE(8) 1.1

The Corporate Seal of Δ. **CONCRETE RAISING SERVICE** 8.

(Respondent - print the full name of your firm)

- C.
- Weight of the presence of: 0. (Authorized signing officer, Title)

Ε. (Seat)

- **F**.
- G (Authorized signing officer, Title)

END OF SECTION



PO B0X 1002 South Sioux City NE 68776 Phone (402) 494-2003 www.concreteraisingservice.com concreteservices@aol.com Concrete Raising Service P.O. BOX 878 Dakota City NE 68731

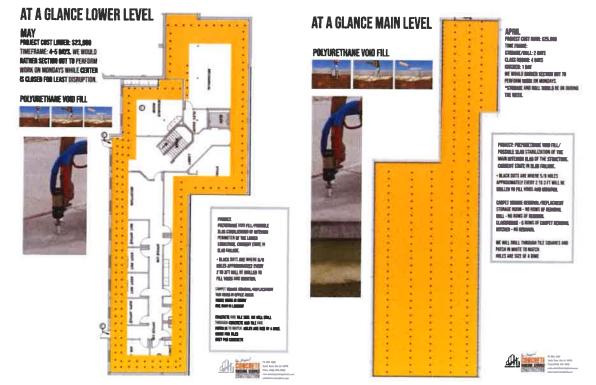
Estimate # DUE
EST3579594
Date
Mar 19, 2025

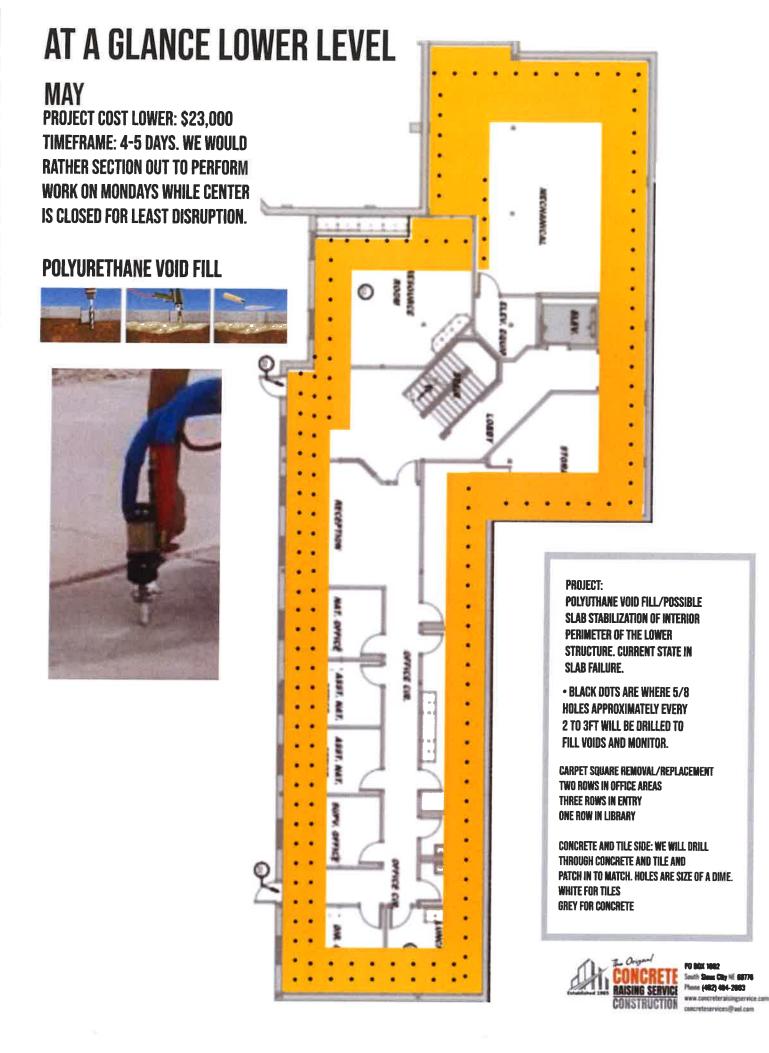
ltem	Price	Quantity	Total
Polyurethane Lower Level According To Specs Given	\$23,000.00	1	\$23,000.00
Polyurethane Main Level According To Specs Given	\$25,000.00	1	\$25,000.00
	Subto	otal	\$48,000.00
	Gran	d Total	\$48,000.00

See Concrete Raising Service At A Glance attached sheets for details on Schedule, Carpet Removal and Injection Details.

Project Location Dorothy Pecaut Nature Center 4500 Sioux River Rd Sioux City, IA

SEE ATTACHMENTS FOR FULL SIZE





# AT A GLANCE MAIN LEVEL

## **POLYURETHANE VO**





FILL				•••••••••••••••••••••••••••••••••••••••
	:			•••••••••••••••••••••••••••••••••••••••
•	•	•	•	• • • •
	•			•
	•	•	•	• • • •
		•	•	•

**APRIL** 

PROJECT COST MAIN: \$25,000 TIME FRAME: STORAGE/HALL: 2 DAYS CLASS ROOMS: 4 DAYS **KITCHEN: 1 DAY** WE WOULD RATHER SECTION OUT TO PERFORM WORK ON MONDAYS. \*STORAGE AND HALL WOULD BE OK DURING THE WEEK.

**PROJECT: POLYURETHANE VOID FILL/ POSSIBLE SLAB STABILIZATION OF THE** MAIN INTERIOR SLAB OF THE STRUCTURE. CURRENT STATE IN SLAB FAILURE.

 BLACK DOTS ARE WHERE 5/8 HOLES **APPROXIMATELY EVERY 2 TO 3 FT WILL BE** DRILLED TO FILL VOIDS AND MONITOR.

**CARPET SQUARE REMOVAL/REPLACMENT** STORAGE ROOM - NO ROWS OF REMOVAL HALL - NO ROWS OF REMOVAL **CLASSROOMS - 5 ROWS OF CARPET REMOVAL KITCHEN - NO REMOVAL** 

WE WILL DRILL THROUGH TILE SQUARES AND PATCH IN WHITE TO MATCH. HOLES ARE SIZE OF A DIME



PO 60X 1003 South Simue City NE 58776 ne (402) 494-2003 www.concreteraisingservice.con concreteservices/@aol.com