KLINGNER & ASSOCIATES, P. C.
Engineers • Architects • Surveyors

www.klingner.com

April 20, 2021

Central Missouri AGRIService
John Fletcher
Waverly, MO

BIDDING ADDENDUM 01

For work titled:
New Barge Loadout Facility

Waverly, MO
Project Number: 18-0223

TO ALL BIDDERS

GENERAL NOTES

This addendum is issued for the purpose of clarifying the intent of the contract documents or for making necessary corrections, deletions, and/or additions to the documents on all items of discrepancy raised up to the time of the issuance of this addendum.

Each bidder is hereby instructed and authorized to incorporate into his proposal the instructions contained in this addendum. This addendum forms a part of the bidding and contract documents and modifies the original bidding documents, dated April 2, 2021 . Acknowledge receipt of this addendum in space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

This addendum consists of seventeen (17) – 8 1/2” x 11” pages including this cover sheet and four (4) - 22” x 34” sheets.

PROJECT MANUAL

1. 004200 Bid Proposal, 10.	**REPLACE with the following sentence** “The undersigned further agrees to begin work not later than ten (10) days after the execution and approval of the contract and performance and payment Bonds or specified Securities, unless otherwise provided, and to prosecute the work in such manner and with sufficient materials, equipment, and labor as will ensure its completion within the time limit specified herein, it being understood and agreed that the completion within the time limit is an essential part of the contract. The undersigned agrees to complete the work on or before **June 15, 2021 and as further described in the Job Special Provisions**, unless additional time shall be granted by the OWNER in accordance with the provisions of the specifications. In case of failure to complete the work within the time named herein or within such extra time as may have been allowed by extensions, the undersigned agrees that the OWNER shall withhold, from such sums as may be due under the terms of this contract, the costs set forth in the specifications, which costs shall be considered and treated not as a penalty but as damages due the OWNER from the undersigned by reason of inconvenience to the public, added cost of engineering, and other items which have caused an expenditure of public funds resulting from the failure of the undersigned to complete the work within the time specified in the contract.”

2. 005200 Contract Agreement, 2.	**REPLACE with the following sentence** "The work as shown on the Plans and described in the Specifications shall be substantially completed as defined in Article 15 of the EJCDC General Conditions, on or before **June 15, 2021 and as further described in the Job Special Provisions**. The Contractor agrees to pay as liquidated damages the OWNER a sum of **$750** for each consecutive calendar day thereafter for each day that expires after the specified time until the work is substantially complete."
3. 011100 Summary of Work, 1.2, D, 4.	**ADD the following:** "The order of the circular cell and concrete dead men construction shall be coordinated with the Owner such that other construction may occur concurrently."
4. 011100 Summary of Work, 1.2, F.	**REPLACE with the following sentence** "The Project shall be completed **by June 15, 2021 and as further described by the Job Special Provisions** with the Notice to Proceed anticipated to be issued prior to April 29, 2021."
5. 352024 Electric Winch System	**ADD this Section to the Project Specifications.**
6. Appendix B, Job Special Provisions	**ADD this Appendix to the Project Specifications.**

DRAWINGS

7. S001 Structural Notes	**REPLACED** S001 Structural Notes with Revised S001 Structural Notes.
8. S101 General Structural Site Layout	**REPLACED** S101 General Structural Site Layout with Revised S101 General Structural Site Layout.
9. S301 Mooring Cell Plan, Elevation, & Cap Details	**REPLACED** S301 Mooring Cell Plan, Elevation, & Cap Details with Revised S301 Mooring Cell Plan, Elevation, & Cap Details.
10. S302 Concrete Dead Man Plan & Details	**REPLACED** S302 Concrete Dead Man Plan & Details with Revised S302 Concrete Dead Man Plan & Details.

ATTACHMENTS

Section 004200 Bid Proposal – (4 pgs., 8.5 x 11)
Section 005200 Contract Agreement – (2 pgs., 8.5 x 11)
Section 011100 Summary of Work – (2 pgs., 8.5 x 11)
Section 352024 Electric Winch System – (3 pgs., 8.5x11)
Appendix B Job Special Provisions – (2 pgs., 8.5 x 11)
Letter for Contractor Questions / Responses and Clarifications – (1 pg., 8.5 x 11)
Pre-Bid Meeting Attendance - (1 pg., 8.5 x 11)
Plan set with addendum items marked on the sheets noted in the document above. – (4 pgs., 22 x 34)
All other terms and conditions of the Project Manual and Drawings shall remain unchanged.

END OF ADDENDUM 01

RETURN WITH BID

SECTION 004200

BID PROPOSAL

TO: _____ Hereinafter Called "OWNER"

PROPOSAL OF: _____
(Name and Address of Bidder)

_____

FOR **New Barge Loadout Facility Project**

1. The plans for the proposed improvement are those prepared by KLINGNER & ASSOCIATES, P.C., ENGINEERS/ARCHITECTS, 616 NORTH 24TH STREET, QUINCY, IL 62301.

2. In submitting this proposal, the undersigned declares that the only persons or parties interested in the proposal as principals are those named herein; and that the proposal is made without collusion with any other person, firm, or corporation.

3. The undersigned further declares that the Bidding and Contract Documents, and the following Addenda, receipt of all which is hereby acknowledged,

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____

have been carefully examined, the site(s) of the proposed work inspected in detail and the undersigned is familiar with all local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal waives all right to plead any misunderstanding regarding the same.

4. The undersigned further understands and agrees, if this proposal is accepted, to furnish and provide all necessary machinery, tools, apparatus and other means of construction, and to do all of the work and to install all of the materials specified in the contract, in the manner and at the time prescribed, and in accordance with the requirements therein set forth.

5. The undersigned further understands and agrees that payment will be made on a **Lump Sum** bid basis for the work specified herein.

6. The undersigned further agrees to the fullest extent permitted by law, to waive any claim it has or may have against the OWNER, the Architect/Engineer, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid; wavier of any requirements under the Bid Documents; or the Contract Documents; acceptance or rejection of any bids; and award of the Contract.

7. The undersigned further agrees that the OWNER may at any time during the progress of the work covered by this contract order other work or materials incidental thereto and that all such work and materials as do not appear in the proposal or contract as a specific item and which are not included under the bid price for other items in this contract, shall be performed as extra work, in accordance with ARTICLE 11 of the General Conditions.

RETURN WITH BID

8. The undersigned further agrees to execute a contract for this work and present the same to the OWNER within fifteen (15) days after the date of notice of the award of the contract to him.

9. The undersigned further agrees to execute and present within fifteen (15) days after the date of Notice of the Award, a performance and payment Bond or other specified Security, satisfactory to and in the form prescribed by the OWNER, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.

10. The undersigned further agrees to begin work not later than ten (10) days after the execution and approval of the contract and performance and payment Bonds or specified Securities, unless otherwise provided, and to prosecute the work in such manner and with sufficient materials, equipment, and labor as will ensure its completion within the time limit specified herein, it being understood and agreed that the completion within the time limit is an essential part of the contract. The undersigned agrees to complete the work on or before **June 15, 2021 and as further described in the Job Special Provisions**, unless additional time shall be granted by the OWNER in accordance with the provisions of the specifications. In case of failure to complete the work within the time named herein or within such extra time as may have been allowed by extensions, the undersigned agrees that the OWNER shall withhold, from such sums as may be due under the terms of this contract, the costs set forth in the specifications, which costs shall be considered and treated not as a penalty but as damages due the OWNER from the undersigned by reason of inconvenience to the public, added cost of engineering, and other items which have caused an expenditure of public funds resulting from the failure of the undersigned to complete the work within the time specified in the contract.

11. Accompanying this proposal is a bid bond, bank cashier's check, or certified check, in the penal sum of five percent (5%) of the total bid price, as provided in paragraph 8.0 (Bid Security) of the Instructions to Bidders, made payable to the City Treasurer of Quincy, Illinois. The amount of the bid deposit is:

$_____DOLLARS ($_____)

Words Figures

If this proposal is accepted and the undersigned shall fail to execute a contract and performance and payment Bond or other specified Security as required herein, it is hereby agreed that the amount of the bid deposit shall become the property of the OWNER, and shall be considered as payment of damages due to delay and other causes suffered by the OWNER because of the failure to execute said contract and contract bond; otherwise said check or draft, or bidder's bond substituted in lieu thereof shall be returned to the undersigned.

ATTACH BANK CASHIER'S CHECK, OR CERTIFIED CHECK HERE - OR

INCLUDE BID BOND WITHIN PROPOSAL FORM

New Barge Loadout Facility Project

The undersigned Contractor hereby proposes to furnish all labor, materials as noted, tools, machinery and equipment necessary to complete the Work in accordance with the Contract Documents for the following

BASE BID LUMP SUM PRICE:

$_____DOLLARS ($_____)

RETURN WITH BID

Words Figures

ALTERNATE BID NO. 1: Install a third 24ft diameter flat sheet piling mooring cell as located on site by the Owner. The add amount below shall be the lump sum total for a third mooring cell that could be added to the Lump Sum Base Bid provided above if the Alternate is selected by the Owner.

ADD $_____DOLLARS ($_____)

Words Figures

ALTERNATE BID NO. 2: Install a fourth 24ft diameter flat sheet piling mooring cell as located on site by the Owner. The add amount below shall be the lump sum total for a fourth mooring cell that could be added to the Lump Sum Base Bid and/or other selected Alternates if Alternate No. 2 is selected by the Owner.

ADD $_____DOLLARS ($_____)

Words Figures

BIDDING SIGNATURE & CERTIFICATION FORM

Failure to complete this notarized certification will result in the bid not being read at the bid opening and thereby rejected.

****
*

(If an individual) Signature of Bidder_____(SEAL)

Business Address _____

_____

****

(If a co-partnership)

Firm Name _____

Signed by _____(SEAL)

Business Address _____

_____

(Insert Names and_____

Addresses of all _____

Members of the _____

Co-Partnership _____

RETURN WITH BID

****
****

Bidding Signature and Certification Form (Cont'd.)

(If a Corporation)

Corporate Name _____

(Corporate SEAL)

Signed by _____

Business Address _____

_____

(Insert Names of _____President

Officers) _____Secretary

_____Treasurer

****
*

SIGNED and SWORN to before me

this _____day of _____, 20_____.

(NOTARY SEAL)

_____

Notary Public

END OF SECTION 004200

SECTION 005200

CONTRACT AGREEMENT

This CONTRACT made and entered into this _____day of_____, 20__21___ by and between _____hereinafter called the CONTRACTOR and _____, hereinafter called the OWNER, WITNESSETH, that the CONTRACTOR and the OWNER for the consideration hereinafter named therefore contract and agree as follows:

1. Scope of Work:

The CONTRACTOR shall furnish all labor, equipment, and machinery and perform all of the work necessary to complete the specified, **New Barge Loadout Facility Project** dated **April 2021** all as shown on the plans and as described in the specifications, as prepared by Klingner and Associates, P.C., Engineers, all in accordance with the terms of the Contract Documents.

2. Time of Completion and Liquidated Damages:

The work as shown on the Plans and described in the Specifications shall be substantially completed as defined in Article 15 of the EJCDC General Conditions, on or before **June 15, 2021 and as further described in the Job Special Provisions**. The Contractor agrees to pay as liquidated damages the OWNER a sum of **$750** for each consecutive calendar day thereafter for each day that expires after the specified time until the work is substantially complete.

3. Contract Sum:

The OWNER shall pay the CONTRACTOR for the performance of the Contract the sum of

_____DOLLARS

_____CENTS ($_____)

4. Progress Payment: Retainage:

The OWNER shall make progress payments on the amount or percentage of Work completed to date, as requested on the basis of CONTRACTOR's Applications for Payment and in accordance with Article 15 of the General Conditions.

There shall be retained from the amount so determined, for the first 50% of the total Work, a sum of 10% until issuance of Substantial Completion. After 50% or more of the Work, the Owner may at his/her discretion reduce the retainage to 5% of the amount of Work completed. Upon issuance of Substantial Completion, the retainage shall be reduced to an amount equal to a maximum of 5% of the Work completed.

5. Acceptance and Final Payment:

Final Payment shall be due thirty (30) days after completion and acceptance of the work, provided the contract be then fully performed, subject to the provisions of Article 15 of the General Conditions.

6. Contract Documents:

Contract Documents are as noted in the General Conditions.

In Witness Whereof, the parties hereto execute this Contract this _____

day of _____ A.D., 20_____.

(If an individual, partnership, or non-incorporated organization)

Signature of Contractor_____

By _____

Title _____

Address _____

Names and Addresses of Members of the Firm _____

_____

_____

(If a Corporation)

Signature of Contractor_____

By _____

Title _____

Business Address _____

Incorporated under the laws of the State of_____

President _____
Name Address

Secretary _____
Name Address

Treasurer _____
Name Address

****

OWNER:

By _____ _____ *(SEAL)*
Name Title

ATTEST:

By _____ (Clerk or Notary Public)

END OF SECTION 005200

SECTION 011100
SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Work covered by the Contract Documents.
2. Work under other contracts.
3. Use of premises.
4. Owner's occupancy requirements.
5. Specification formats and conventions.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Central Missouri AGRIService LLC, New Barge Loadout Facility

1. Project Location: Waverly, Missouri

B. Owner: Central Missouri AGRIService

1. Owner's Representative: John Fletcher, General Manager

C. Engineer/Architect: Klingner & Associates, P.C., 616 N. 24th Street, Quincy, Illinois 62301/217-223-3670.

D. The Work consists of the following:

1. Base Bid Work includes: **The addition of two (2) Owner located 24' diameter flat sheet piling mooring cells and two (2) concrete dead man structures with deep foundations.**

2. Alternate Bid No. 1 Work includes: **The addition of a third Owner located 24' diameter flat sheet piling mooring cell.**

3. Alternate Bid No. 2 Work includes: **The addition of a fourth Owner located 24' diameter flat sheet piling mooring cell.**

4. The sequence of the circular cell and concrete dead men construction shall be coordinated with the Owner such that other construction may occur concurrently.

E. Project will be constructed under a single or multiple prime contract(s).

F. The Project shall be completed **by June 15, 2021 and as further described by the Job Special Provisions** with the Notice to Proceed anticipated to be issued prior to April 29, 2021.

G. A work plan shall be developed and submitted to the Engineer / Owner for review at a minimum of 48 hours in advance to the commencement of work by the Contractor. Said work plan shall

include the anticipated construction sequence, schedule, and equipment to be utilized at a minimum.

1.3 WORK UNDER OTHER CONTRACTS

A. General: Contractor shall work to prevent conflicts in site access, blocking drives, and/or hindering the Owner, Neighbors, and/or other Contractors from accessing the site.

1.4 USE OF PREMISES

A. General: Contractor shall have full use of premises for construction operations, including use of Project site, during construction period. Contractor's use of premises is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

1.5 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Format: The Specifications are organized into Divisions and Sections using the 48-division format and CSI/CSC's "MasterFormat" numbering system.

1. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011100

SECTION 352024
ELECTRIC WINCH SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Provide and install an electric barge winch system as shown on the drawings as specified herein, and as needed for a complete and proper installation.

1.2 SUBMITTALS

A. Shop Drawings: Indicate barge winch system to be provided including specifications for drum, winch, gearbox, controls, consolet, brake, etc. The submittal shall also contain performance information on system and model/manufacturer information.

1.3 DELIVERY, STORAGE AND HANDLING

A. Protection:

1. Deliver products to site.
2. Store winch system at the project site.
3. Store winch system in a manner that will not distort the final condition.
4. Store winch system in a weather-tight and dry place, until ready for use in the work.
5. Store packaged materials in their original unbroken package or container.

PART 2 - PRODUCTS

2.1 Barge Winch System

A. The system shall be a Model CPK35000-25-24-DB-BMS from Wintech Winches & Fairleads or any approved equivalent.

B. The system shall meet the following performance specifications at a minimum:

1. 35,000 lbs continuous linepull on 1st layer at 23 fpm linespeed
2. 32,000 lbs continuous linepull on 3rd layer at 25 fpm linespeed
3. 28,000 lbs continuous linepull on 6th layer at 29 fpm linespeed

C. The system shall contain the necessary winches, electrical enclosures, and operator control consolet.

D. The system shall contain the following equipment:

1. Drum

a. Ø18” smooth drum core for use with 1” rope
b. 24” long between flanges

c. 34” diameter flanges
d. Storage capacity of 700’ of 1” cable on 6 layers
e. Drum conforms to ASME B30.7.94 specification with a minimum drum to rope ratio of 15:1
f. Drum cable clamps for use with 1” cable for cable connection to drum

2. Winch

a. Helical Bevel Gear Reducer with final chain reduction
b. Drum supported by spherical bearings in machined housing
c. One-way clutch and dual over spin brake assembly for controlled back tension
d. Heavy duty welded frame construction
e. Flange guards keep cable spooling on drum in slack conditions
f. Spring applied pressure roller to minimize spooling issues and bird nesting
g. Exit rollers to reduce wear on cable when pulling in under slack conditions
h. Removable winch guards (powder coated safety yellow)
i. Bolt pattern in frame for anchor bolt mounting (can be welded)
j. Winch painted with Marine duty paint
k. Winch requires 38’ fleeting distance from first sheave to ensure proper spooling

3. Gearbox

a. Fully enclosed helical bevel gear reducer
b. 25 HP High Efficiency TEFC Motor Directly connected to the reducer system
c. 460/3/60 Supply Power
d. Electromagnetic disc type brake that activates automatically in the event of a power interruption. Brake will stop the winch and hold the load securely.
e. Designed for long life, low noise, and high output torque
f. Designed and Built to AGMA Standards

4. Controls

a. Main electrical enclosure NEMA 4 (48” x 36” x 12”)
b. (2) 25HP VFD Controllers
c. 24VDC Power Supply
d. Transformer from 460V to 115V
e. PLC to control operation functions
f. Brake contactors for each winch
g. DB resistor for power dissipation
h. Main fusing
i. Brake fusing

5. Operator Control Consolet

a. Auto/Manual Control Selector Switch
b. Right Winch Pull In/Hold/Pay Out spring centering switch
c. Left Winch Pull In/Hold/Pay Out spring centering switch
d. Auto Left /Hold/Auto Right spring centering joystick
e. Adjustable speed control potentiometer
f. E-Stop mushroom type button

6. Wireless Remote-Control System

a. Wireless remote-control system with handheld transmitter for control from within 300ft of main control panel

1) (2) Transmitters
2) (1) Receiver (installed in main panel)
3) On/Off Pushbutton
4) Auto Move Up/Down Pushbuttons
5) Downstream Pull In/Pay Out Pushbuttons
6) Upstream Pull In/Pay Out Pushbuttons
7) Breasting Pull In/Pay Out Pushbuttons
8) Auto Move/Downstream/Upstream pushbuttons are two speed buttons
9) Half press winch operates at half speed
10) Full press winch operates at full speed
11) Speed settings can be adjusted at VFD in main control panel above
12) Belt clip on back of remote and safety lanyard provided

PART 3 - EXECUTION

3.1 INSTALLATION

A. The system shall be installed on the dead man locations specified by the Owner.

B. Contractor shall provide all electrical materials, hookups, and labor for the winch system. Electrical work shall be completed in compliance with all applicable codes.

C. Following installation, the Contractor shall test the system prior to delivery to the Owner.

D. The system shall be installed to operate as follows:

1. The winches can be operated individually for pulling the barges into the dock using the Manual Operation switches for each winch. The winches work in conjunction with each other in Auto mode when moving the barge. Each winch is equipped with a one-way clutch and a bronze drag brake to provide drag on the opposing winch during the moving operation. The drag brake is fully adjustable as may be required in varying current conditions.
2. To move the barge upstream in Auto Mode, pushing the Auto joystick to the upstream direction will pull-in on the upstream winch and at the same time release the holding brake on the downstream winch. The drag brake on the downstream winch provides the back tension in the barge moving line to eliminate sag and keep the barge breasted.
3. To move the barge downstream in Auto Mode, pushing the Auto joystick to the downstream direction will pull-in on the downstream winch and at the same time release the holding brake on the upstream winch. The drag brake on the upstream winch provides the back tension in the barge moving line to eliminate sag and keep the barge breasted.
4. Back tension is variable using the manual adjustment handles on the drag brake calipers Moving speed is infinitely variable from 0-40 feet per minute in either direction using a speed potentiometer. The control system is designed so that the winch accelerates and decelerates over a controlled rate and the brake application timing is determined by the drive to allow smooth starting and stopping of the barge movement and to allow settling of the barges before the holding brakes are set. All the controls will be located in a central control panel.

END OF SECTION 352024

JOB SPECIAL PROVISIONS TABLE OF CONTENTS

(Job Special Provisions shall prevail over General Provisions whenever in conflict therewith.)

<table>
<tr><td rowspan="3"> 
</td><td>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 W. CAPITOL AVE.
JEFFERSON CITY, MO 65102
Phone 1-888-275-6636</td></tr>
<tr><td>CONSULTANT NAME
Klingner & Associates, P.C.
616 N. 24th St., Quincy, IL 62301

Certificate of Authority: E-000866
Consultant Phone:217.223.3670</td></tr>
<tr><td>JOB NUMBER: 18-0223
LAFAYETTE COUNTY, MO
DATE PREPARED: 04/20/2021</td></tr>
<tr><td>Date: 04/20/2021</td><td>ADDENDUM DATE:
04/20/2021</td></tr>
<tr><td colspan="2">Only the following items of the Job Special Provisions are authenticated by this seal: All</td></tr>
</table>

JOB
SPECIAL PROVISIONS

A. PROJECT DATES

1.0 Description. The project specifications indicate a substantial completion date of June 15, 2021. However, the June 15, 2021 date is applicable only to procurement of all project materials with the proof of purchase (i.e. purchase order / invoice) submitted to the Owner by that date. The construction of the circular cells, concrete dead men, and winch system shall be completed by August 31, 2021. No additional construction time will be alotted to the contractor unless agreed upon with the Owner.

2.0 Basis of Payment. Payment for the procurement of all project materials is intended to be made by June 15, 2021 and shall be based upon the invoices/receipts submitted to the Owner. Payment for the construction of the circular cell and concrete dead men construction shall be made based upon progress with substantial completion by August 31, 2021.

KLINGNER
& ASSOCIATES, P. C.
Engineers • Architects • Surveyors

616 N. 24th Street • Quincy, IL 62301 • voice 217.223.3670 • fax 217.223.3603

April 20, 2021

All Bidders on Central Missouri AGRIService, LLC New Barge Loadout Facility Project

RE: Contractor Questions / Responses and Clarifications

Dear Bidders:

Clarifications to Contractor questions are below.

Contractor Questions / Responses and Clarifications

1. ***Clarification:*** Project questions will be accepted until April 22, 2021 at 11:00 am. All questions after this will be addressed following project award.

2. ***Question:*** "Have the permits been obtained for this project?"
   a. ***Response:*** The USACE project permit is attached at the end of the project specifications.

3. **Question/Statement:** "The documents state the project shall be completed 6/15/21. Please confirm the completion deadline has not changed from 6/15/21 and would include base bid plus any alternates awarded."
   a. **Response:** Please review Addendum 1 dated 04/20/2021.

4. **Question/Statement:** "Please confirm a contract would be issued by 4/30/21."
   a. **Response:** Please review Addendum 1 dated 04/20/2021.

5. **Question/Statement:** "Please confirm the only existing structure removal will be the W sections bracing the existing mooring dolphins and that all existing dolphins will remain."
   a. **Response:** Your statement is correct. Existing dolphins remain and existing W-shapes will need to be removed for the installation of the new cells.

ATTENDANCE

Meeting Description: **Central Missouri AGRIService, LLC New Barge Loadout Facility Pre-Bid Meeting** **Project #** 18-0223

Time: 11am

Place: Project Site

Date: 04/13/2021

Page: 1 **of** 1

Attendees:

Name	Representing (if appropriate)	Phone Number	E-Mail address
Alan Balzer	Klingner & Associates, P.C.	N/A	N/A
Randall Miller	CMAS	N/A	N/A
Jerry Young	CMAS	N/A	N/A
Tim Trigg	Earthworks	N/A	N/A
Andrew Schive	OCCI	N/A	N/A
Adam Kaufmann	Newt Marine	N/A	N/A
Brian Twellman	Magruder	N/A	N/A
Brian Koelling	Massman	N/A	N/A
Aaron Griffith	Massman	N/A	N/A
Robert Brand	J.F. Brennan	N/A	N/A
Ryan Porter	Lehman Construction	N/A	N/A

DESIGN CRITERIA

1. U.S. ARMY CORPS OF ENGINEERS: ETL-1110-2-584 DESIGN OF HYDRAULIC STEEL STRUCTURES (1994)
2. U.S. ARMY CORPS OF ENGINEERS: EM 1110-2-2503 DESIGN OF SHEET PILE CELLULAR STRUCTURE COFFERDAMS AND RETAINING STRUCTURES (1989)
3. AASHTO LRFD BRIDGE DESIGN SPECIFICATION, 8TH ED., 2017
4. INTERNATIONAL BUILDING CODE 2012
5. ASCE 7-10

DESIGN LOADS:

1. AS PER DESIGN CRITERIA ABOVE
2. TOWER REACTIONS BASED UPON ALL STATE TOWER SHEET SOV DATED 10/25/2017.
3. RIVER ELEVATION ZERO GAUGE ELEVATION = 646.17 (NAVD '88).
4. NORMAL POOL ELEVATION (EST.) = 656.80.
5. ACTION STAGE ELEVATION (EST.) = 663.17
6. FLOOD STAGE ELEVATION (EST.) = 666.17.
7. MODERATE FLOOD STAGE ELEVATION (EST.) = 675.17.
8. MAJOR FLOOD STAGE ELEVATION (EST.) = 677.17.
9. FLOOD OF RECORD ELEVATION (EST.) = 678.09.

SOILS

1. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE SURVEY AND THE GEOTECHNICAL INVESTIGATION MEMORANDUM BY GEOTECHNICS DATED SEPTEMBER 18, 2020, AND OTHER AVAILABLE SUBSURFACE DATA, BEFORE STARTING CONSTRUCTION.
2. A SOILS TESTING LABORATORY SHALL BE RETAINED BY THE OWNER FOR PROJECT CONSTRUCTION REVIEW TO ENSURE CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS DURING THE EXCAVATION, BACK FILL, AND FOUNDATION PHASES OF THE PROJECT.
3. ALL FILL MATERIAL SHALL BE FREE OF ORGANIC CONTAMINATIONS AND OTHER DELETERIOUS MATTER.
4. NOTIFY STRUCTURAL ENGINEER OF ANY UNUSUAL SOIL CONDITIONS THAT ARE IN VARIANCE WITH THE GEOTECHNICAL MEMORANDUM.

ABBREVIATIONS

&	AND	HORIZ. (H)	HORIZONTAL
A.B.	ANCHOR BOLT	H.S.B.	HIGH STRENGTH BOLT
ALT.	ALTERNATE	HT.	HEIGHT
ARCH.	ARCHITECT	I.F.	INSIDE FACE
ARCH'L.	ARCHITECTURAL	I.D.	INSIDE DIAMETER
@	AT	JST.	JOIST
B.O.F.	BOTTOM OF FOOTING	KB	KNEE BRACE
BLDG.	BUILDING	L.B.	LAG BOLT
BLK.	BLOCK	LG.	LONG
BM.	BEAM	L.L.	LIVE LOAD
B.N.	BOUNDARY NAIL	LLH	LONG LEG HORIZONTAL
B.O.	BOTTOM OF	LLV	LONG LEG VERTICAL
BTM.	BOTTOM	LONGIT.	LONGITUDINAL
BRG.	BEARING	L.P.	LOW POINT
BRDG.	BRIDGING	L.W.C.	LIGHT WEIGHT CONCRETE
BT.	BENT	MAS.	MASONRY
C.B.	CARRIAGE BOLT	MAX.	MAXIMUM
C.J.	CONSTRUCTION JOINT	MECH.	MECHANICAL
CL. (℄)	CENTERLINE	MIN.	MINIMUM
CLR.	CLEAR	N.I.C.	NOT IN CONTRACT
CMU	CONCRETE MASONRY UNIT	NO. (#)	NUMBER
COL.	COLUMN	N.T.S.	NOT TO SCALE
COLS.	COLUMNS	O.C.	ON CENTER
CONC.	CONCRETE	O.F.	OUTSIDE FACE
CONT.	CONTINUOUS	O.H.	OPPOSITE HAND
COORD.	COORDINATE	OPNG.	OPENING
CSK.	COUNTERSINK	OVHD.	OVERHEAD
CTR.	CENTER	PL (℄)	PLATE
d	PENNEY (NAILS)	PLY.	PLYWOOD
DBL.	DOUBLE	P.S.F.	POUNDS PER SQUARE FOOT
D.F.L.	DOUGLAS FIR LARCH	P.S.I.	POUNDS PER SQUARE INCH
DIA (Ø)	DIAMETER	P.T.	PRESSURE TREATED
DIAPH.	DIAPHRAGM	P.T.S	POST TENSION SLAB
D.L.	DEAD LOAD	REINF.	REINFORCING
do.	DITTO	R.O.	ROUGH OPENING
dp.	DEEP	SCH.	SCHEDULE
DWG.	DRAWING	SHT.	SHEET
DWLS.	DOWELS	SIM.	SIMILAR
EA.	EACH	SIMP.	SIMPSON CONNECTOR
EA. END	EACH END	SPC'G.	SPACING
EA. SIDE	EACH SIDE	STAGG.	STAGGERED
E.B.	EXPANSION BOLT	STD.	STANDARD
ELEV.	ELEVATION	STIFF.	STIFFENER
E.F.	EACH FACE	STR.	STRUCTURAL
E.N.	EDGE NAIL	THK.	THICK
E.W.	EACH WAY	THRU.	THROUGH
EX.	EXISTING	T. & B.	TOP & BOTTOM
F.B.	FLAT BAR	T.N.	TOE NAIL
FDN.	FOUNDATION	T.O.	TOP OF
FIN.	FINISHED	T.O.B.	TOP OF BEAM
FLR.	FLOOR	T.O.F.	TOP OF FOOTING
F.N.	FIELD NAILING	T.O.G.	TOP OF GIRT
F.O.C.	FACE OF CONCRETE	T.O.M.	TOP OF MASONRY
F.O.M.	FACE OF MASONRY	T.O.S.	TOP OF STEEL
F.O.S.	FACE OF STUDS	T.O.W.	TOP OF WALL
FTG.	FOOTING	TRANSV.	TRANSVERSE
F.V.	FIELD VERIFY	T.SL.	TOP OF SLAB
GA.	GAUGE	TYP.	TYPICAL
GALV.	GALVANIZED	U.O.N.	UNLESS OTHERWISE NOTED
G.C.	GENERAL CONTRACTOR	VERT. (V)	VERTICAL
GLB.	GLUE-LAMINATED BEAM	W/	WITH
HDR.	HEADER	WD.	WOOD
HGR.	HANGER	W.W.F.	WELDED WIRE FABRIC

GENERAL

1. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND ENSURE THE SAFETY OF THE CONSTRUCTION PERSONNEL, PUBLIC, AND ADJACENT PROPERTIES. THIS INCLUDES THE ADDITION OF WHATEVER TEMPORARY OR PERMANENT SHORING, BRACING, NEEDLING, UNDERPINNING, OR SHEET PILING, ETC. THAT MAY BE NECESSARY TO BRACE NEW CONSTRUCTION, SO THAT THE STRUCTURE IS BRACED FOR WIND, GRAVITY, CONSTRUCTION LOADS, ETC. TEMPORARY SUPPORTS SHALL BE MAINTAINED IN PLACE UNTIL PERMANENT SUPPORTS AND/OR SHORING AND BRACING ARE INSTALLED.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENFORCE ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
3. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION FOR THE PROJECT IN A MANNER AND SEQUENCE THAT ARE BASED ON ACCEPTED INDUSTRY STANDARDS THAT RECOGNIZE THE INTERACTION OF THE COMPONENTS THAT COMPRISE THE STRUCTURE, WITHOUT CAUSING DISTRESS, UNANTICIPATED MOVEMENTS OR IRREGULAR LOAD PATHS AS A RESULT OF THE CONSTRUCTION MEANS AND METHODS EMPLOYED.
4. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LOADS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DESIGN REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT USED IN CONSTRUCTING THIS PROJECT. SHORING AND RESHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL CONTRACTORS ARE REQUIRED TO EXAMINE THE DRAWINGS AND SPECIFICATIONS CAREFULLY, VISIT THE SITE AND FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS, PRIOR TO AGREEING TO PERFORM THE WORK. FAILURE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE THE CONTRACTOR FROM FURNISHING ANY MATERIALS OR PERFORMING ANY WORK IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
6. DETAILS LABELED "TYPICAL DETAILS" ON DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFIC DETAILS. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY ENGINEER FOR CLARIFICATION REGARDING APPLICABILITY OF "TYPICAL DETAILS".
7. WORK THESE DRAWINGS WITH CIVIL AND SITE DRAWINGS AS WELL AS OTHER TRADES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
8. DO NOT SCALE DRAWINGS.
9. SHOULD ANY OF THE GENERAL NOTES CONFLICT WITH ANY DETAILS OR INSTRUCTIONS ON PLANS, OR IN THE SPECIFICATIONS, THE STRICTEST PROVISION SHALL GOVERN.
10. THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONSTRUCTION MATERIALS, DEBRIS, AND OTHER FOREIGN MATERIAL FROM ENTERING THE RIVER WATERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTAINMENT AND REMOVAL OF ALL MATERIALS PRODUCED DURING THE CONSTRUCTION PHASE.
11. THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING AN AS-BUILT SURVEY OF THE INSTALLED STRUCTURES. SURVEY SHALL BE PERFORMED BY A LICENSED SURVEY. THE RESULTS SHALL BE PROVIDED WITH GPS COORDINATES AND STATE PLANE COORDINATES.
12. SHOP DRAWINGS AND SUBMITTALS:
    A. THESE DRAWINGS SHALL BE CHECKED AND COORDINATED WITH OTHER MATERIALS AND CONTRACTS BY THE GENERAL CONTRACTOR AND SHOP DRAWINGS AND SUBMITTALS SHALL BEAR THE CONTRACTOR'S REVIEW STAMP WITH THE CHECKER'S INITIALS BEFORE BEING SUBMITTED TO THE ARCHITECT OR ENGINEER FOR REVIEW.
    B. WHEN THE FABRICATOR HAS BEEN AUTHORIZED TO USE THE ENGINEER'S DRAWINGS AS ERECTION DRAWINGS, THE FABRICATOR MUST REMOVE ALL TITLE BLOCKS, PROFESSIONAL SEALS AND ANY OTHER REFERENCE TO THE ENGINEER FROM THAT ERECTION DRAWING. THE FABRICATOR'S NAME AND TITLE SHALL BE PLACED ON THE ERECTION DRAWING.
    C. WHERE DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION COULD AFFECT THE NEW CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE FIELD MEASUREMENTS IN TIME FOR THEIR INCORPORATION IN THE SHOP DRAWINGS.

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE" AND ACI 302, "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION", ACI 305 "SPECIFICATION FOR HOT WEATHER CONCRETING" AND ACI 306, "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING", UNLESS NOTED OTHERWISE FOR THE YEAR REFERENCED IN THE BUILDING CODE NOTED.
2. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 117, "SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AND THE LATEST ACI DETAILING MANUAL.
3. CONCRETE TYPES:
    a. CONCRETE PERMANENTLY EXPOSED TO WEATHER; EXTERIOR SLAB; EXTERIOR WALLS; AND FOUNDATIONS:
        I. MIN. CEMENTITIOUS CONTENT = 564 LB/CU YD
        II. MAX. WATER CEMENT RATIO = 0.45
        III. SPECIFIED 28-DAY COMPRESSIVE STRENGTH, FC' = 4500 PSI
        IV. SPECIFIED AIR CONTENT % BY VOLUME = 6 ± 1.5%
        V. MAX. SIZE AGGREGATE = ¾"
    b. ALL CEMENT SHALL BE TYPE I OR TYPE III PORTLAND CEMENT PER ASTM C150. TYPES IA AND IP ARE NOT ACCEPTABLE. USE ONE BRAND OF CEMENT THROUGHOUT PROJECT.
    c. MINIMUM CEMENTITIOUS CONTENT SHALL CONSIST OF 100% CEMENT OR A COMBINATION OF CEMENT AND FLYASH PER NOTE D, OR A COMBINATION OF CEMENT AND GROUND GRANULATED BLAST FURNACE SLAG (GGBFS) PER NOTE E. FLYASH SHALL NOT BE USED IN COMBINATION WITH GGBFS AS A SUBSTITUTE FOR CEMENT.
    d. FLYASH IS PERMITTED AND SHALL CONFORM TO ASTM C618 TYPE C OR F, BUT SHALL NOT EXCEED 20% OF CEMENTITIOUS CONTENT BY WEIGHT INDICATED ABOVE ON A SUBSTITUTION BASIS AND SHALL BE INCLUDED IN THE WATER-TO-CEMENT RATIO.
    e. GROUND GRANULATED BLAST FURNACE SLAG (GGBFS) IS PERMITTED AND SHALL CONFORM TO ASTM C989, BUT SHALL NOT EXCEED 15% OF CEMENTITIOUS CONTENT BY WEIGHT INDICATED ABOVE ON A SUBSTITUTION BASIS AND SHALL BE INCLUDED IN THE WATER-TO-CEMENT RATIO.
    f. ALL ADMIXTURES OTHER THAN SUPERPLASTICIZERS SHALL BE ADDED AT THE BATCH PLANT. SUPERPLASTICIZERS, DESIGNED FOR ADDITION TO THE MIX AT THE PLANT, MAY BE ADDED AT THE BATCH PLANT WITH VERIFICATIONS FROM THE ENGINEER AND VERIFICATION THAT THE WATER TO CEMENT RATIO HAS NOT BEEN EXCEEDED. SUPERPLASTICIZERS ADDED AT THE SITE SHALL BE IN PRE-MEASURED CONTAINERS FROM THE BATCH PLANT.
    g. ALL CONCRETE USED FOR CAST-IN-PLACE CONCRETE SLABS SHALL CONTAIN THE SPECIFIED WATER REDUCING OR WATER REDUCING/RETARDING ADMIXTURE. ALL CONCRETE SLABS, PLACED AT AIR TEMPERATURE BELOW 50°F SHALL CONTAIN THE SPECIFIED NON-CORROSIVE, NON-CHLORIDE ACCELERATOR. ALL CONCRETE PLACED AT AIR TEMPERATURE ABOVE 80°F SHALL CONTAIN SPECIFIC WATER-REDUCING/RETARDER ADMIXTURE. ALL CONCRETE REQUIRED TO BE AIR-ENTRAINED SHALL CONTAIN AN APPROVED AIR-ENTRAINING ADMIXTURE. ALL PUMPED CONCRETE SHALL CONTAIN THE SPECIFIED HIGH-RANGE WATER-REDUCING ADMIXTURE. CONCRETE WITH A WATER-CEMENT RATIO BETWEEN 0.4 AND 0.6 SHALL CONTAIN THE SPECIFIED WATER REDUCER.
    h. CALCIUM CHLORIDE SHALL NOT BE PERMITTED NOR SHALL ANY ADMIXTURE CONTAINING CALCIUM CHLORIDE PER PERMITTED.
4. CONCRETE SHALL BE DISCHARGED AT THE SITE WITHIN 1 ½ HOURS AFTER WATER HAS BEEN ADDED TO THE CEMENT AND AGGREGATES. ADDITION OF WATER TO THE MIX AT THE PROJECT SITE WILL NOT BE PERMITTED. ALL WATER MUST BE ADDED AT THE BATCH PLANT. SLUMP MAY BE ADJUSTED ONLY THROUGH THE USE OF ADDITIONAL WATER REDUCING ADMIXTURES OR HIGH RANGE WATER REDUCING ADMIXTURE.
5. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, NO TACK WELDING OF REINFORCING IN THE FIELD WILL BE PERMITTED.
6. REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS UNLESS OTHERWISE NOTED ON DRAWINGS.
7. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL RUN CONTINUOUSLY AROUND CORNERS AND BE LAPPED AT NECESSARY SPLICES OR HOOK AT DISCONTINUOUS ENDS. LAP LENGTHS SHALL BE AS GIVEN AND DEVELOPMENT TABLE BELOW.
8. ALL HOOKS SHOWN ON DRAWINGS ARE STANDARD HOOKS, UNLESS NOTED OTHERWISE.
9. NO ELECTRICAL CONDUIT SHALL BE PLACED ABOVE THE TOP REINFORCING OF THE SLAB.
10. ALL PIPE SLEEVES THROUGH CONCRETE SHALL BE FORMED WITH STANDARD PIPE.
11. ALL ALUMINUM IN CONTACT WITH CONCRETE OR DISSIMILAR METALS SHALL BE COATED WITH TWO COATS COAL TAR EPOXY OR REVIEWED BY THE ENGINEER OF RECORD, UNLESS NOTED OTHERWISE.
12. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT, UNLESS OTHERWISE NOTED:
    a. EARTH FORMED AND CAST DIRECTLY AGAINST SOIL - 3"
    b. CAST AGAINST FORMS BUT EXPOSED TO EARTH AND WEATHER
       #6 AND LARGER - 2"
       #5 AND SMALLER - 1 ½"
    c. OTHERS - 2"
13. SPLICE LENGTHS

BAR SIZE	MIN.LAP
#3	1'-3"
#4	1'-11"
#5	2'-5"
#6	2'-11"
#7	3'-10"
#8	4'-5"

    a. WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP DIMENSION OF THE LARGER BAR.
    b. SPLICES SHALL BE STAGGERED.

STRUCTURAL STEEL

1. DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO THE AISC SPECIFICATIONS AND STANDARD CODE OF PRACTICE FOR THE YEAR REFERENCED IN THE BUILDING CODE NOTED, EXCEPT AS MODIFIED BY THESE NOTES AND THE PROJECT SPECIFICATIONS.
2. STEEL SHALL CONFORM TO THE FOLLOWING GRADES UNLESS OTHERWISE NOTED:
    A. PLATES - ASTM A572 (Fy = 50 KSI)
    B. C-CHANNELS, ANGLES - ASTM A36 (Fy = 36 KSI)
    C. SHEET PILING - ASTM A572 (Fy = 50 KSI)
    D. BOLTS - ASTM A325-N
    E. WASHERS - ASTM F436
    F. HEADED ANCHOR STUDS - ASTM A108 (Fy = 50KSI)
    G. WELDING ELECTRODES - E70XX
    H. W-SHAPES - ASTM A992 (Fy = 50 KSI)
    I. HP-SHAPES - ASTM A572 (Fy = 50 KSI)
3. STEEL FABRICATION AND ERECTION SHALL FOLLOW OSHA REQUIREMENTS.
4. ALL WELDING SHALL BE IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE", AWS D1.1, LATEST EDITION.
5. SPLICING OF STRUCTURAL MEMBERS WHERE NOT DETAILED ON THE DRAWINGS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
6. CUTS, HOLES, COPING, ETC. REQUIRED FOR WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN THE STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED, UNLESS SPECIFICALLY REVIEWED IN EACH CASE BY THE ENGINEER OF RECORD.
7. THE MINIMUM WELD SIZE SHALL BE 5/16", UNLESS OTHERWISE NOTED.
8. STEEL SHEET PILING AND HP-PILE INSTALLATION
    A. CONTRACTORS SHALL INVESTIGATE PRIOR TO INSTALLATION, THE LOCATIONS INTENDED FOR SHEET PILING AND HP-PILE INSTALLATION. SHOULD ANY LARGE DEBRIS OR ITEMS FOUND TO INHIBIT THE INSTALLATION PROCESS BE FOUND, THEY SHALL BE REMOVED ACCORDINGLY.
    B. CONTRACTOR SHALL RECORD AND REPORT DAILY DRIVING LOGS TO INDICATE EACH PILE LOCATION, WATERLINE ELEVATION, ESTIMATED WATER DEPTH, FINAL EMBEDMENT DEPTH, CUTOFF ELEVATION, EQUIPMENT AND METHOD EMPLOYED FOR DRIVING AND ANY OTHER PERTINENT DATA REGARDING THE DRIVING OPERATIONS.

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Davenport, IA Hannibal, MO Columbia, MO
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616 North 24th Street
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REVISION HISTORY

MARK	DESCRIPTION	DATE	APPR
1	ADDENDUM 1 UPDATES	04/20/21	AMB

Klingner & Associates, P.C.
Missouri State Certificate of Authority
No. E-000866

STATE OF MISSOURI
ALAN M. BALZER
KLINGNER
PE-2010038874
PROFESSIONAL ENGINEER
04/02/2021

NEW BARGE LOADOUT FACILITY
CENTRAL MISSOURI AGRISERVICE, LLC
WAVERLY, MO

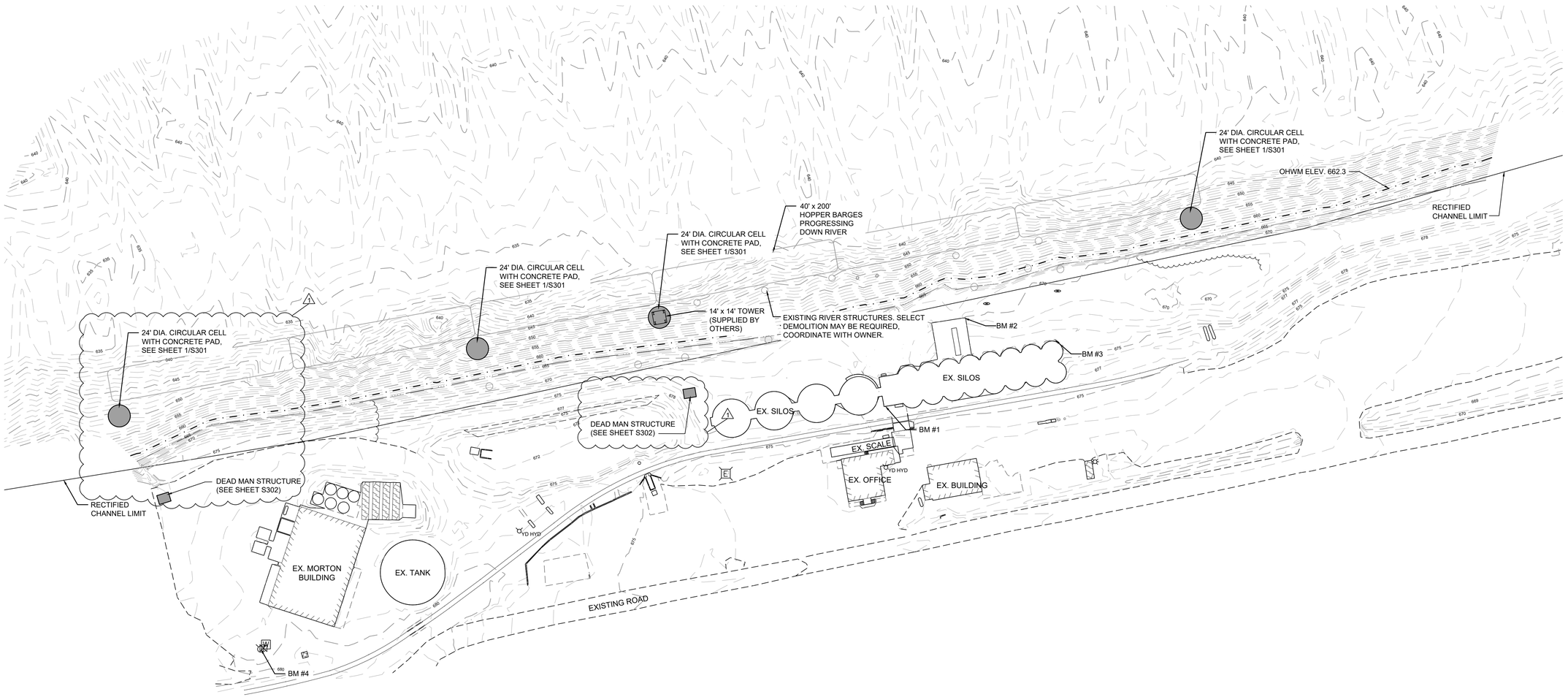
Non-Reduced Sheet Size: 22" x 34"
Full sized plans have been prepared using standard scales. Reduced size plans may not conform to standard scales.

DESIGNED	DRAWN
AMB	AMB
FIELD	FIELD BOOK
CHECKED KTH	CHECK DATE 04/02/2021

SHEET TITLE

STRUCTURAL NOTES

PROJECT NO. 18-0223
DRAWING ISSUED DATE: 04/02/2021
SHEET
S001



GENERAL STRUCTURAL SITE LAYOUT

N.T.S.

NOTES:

1. LAYOUT IS PROVIDED FOR REFERENCE ONLY. ALL MOORING AND CONCRETE DEAD MAN STRUCTURES SHALL BE FIELD LOCATED WITH THE OWNER.
2. SELECTIVE DEMOLITION MAY BE REQUIRED. COORDINATE WITH OWNER. IF POSSIBLE, NEW MOORING STRUCTURES MAY BE INSTALLED TO ENCOMPASS EXISTING MOORING STRUCTURES. SHOULD THIS BE ACCEPTABLE BY THE OWNER, CONTRACTOR SHALL ENSURE THAT NO VOIDS ARE PRESENT WITHIN OR AROUND THE EXISTING STRUCTURE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL STRUCTURE LOCATIONS AND FINAL ELEVATIONS WITH OWNER.

BENCHMARKS:

1. USGS DISK SET VERTICALLY IN SOUTHWEST CORNER OF SMALL BUILDING NEAR THE CENTER OF THE ELEVATOR - ELEV 676.76
2. CHISELED "□" NORTHEAST CORNER CONCRETE PAD, NORTH SIDE OF SILOS - ELEV 672.24
3. CHISELED "□" NORTH SIDE OF EAST SILO - ELEV 673.82
4. CHISELED "+" NORTH BOLT FIRE HYDRANT SOUTHWEST CORNER OF PROPERTY - ELEV 680.56

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FIELD	FIELD BOOK
.	.
CHECKED	CHECK DATE
KTH	04/02/2021

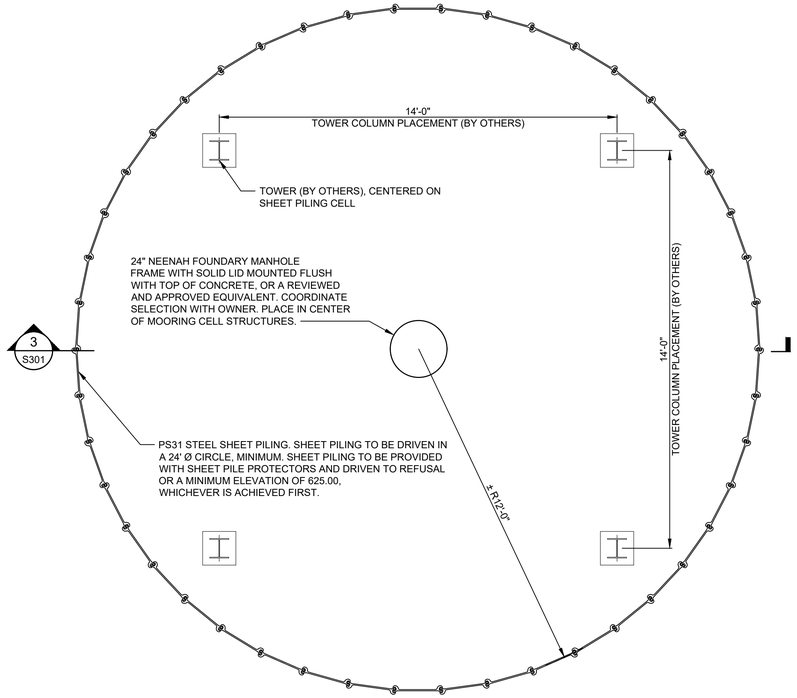
SHEET TITLE

GENERAL STRUCTURAL SITE LAYOUT

PROJECT NO.
18-0223

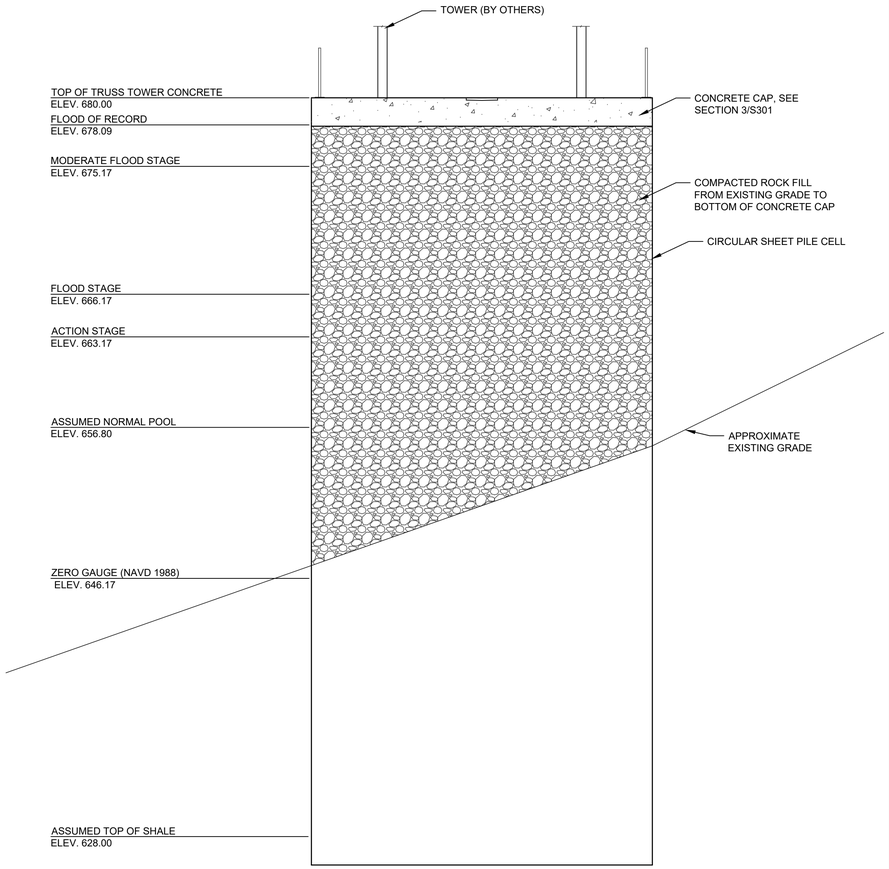
DRAWING ISSUED DATE:
04/02/2021

SHEET
S101



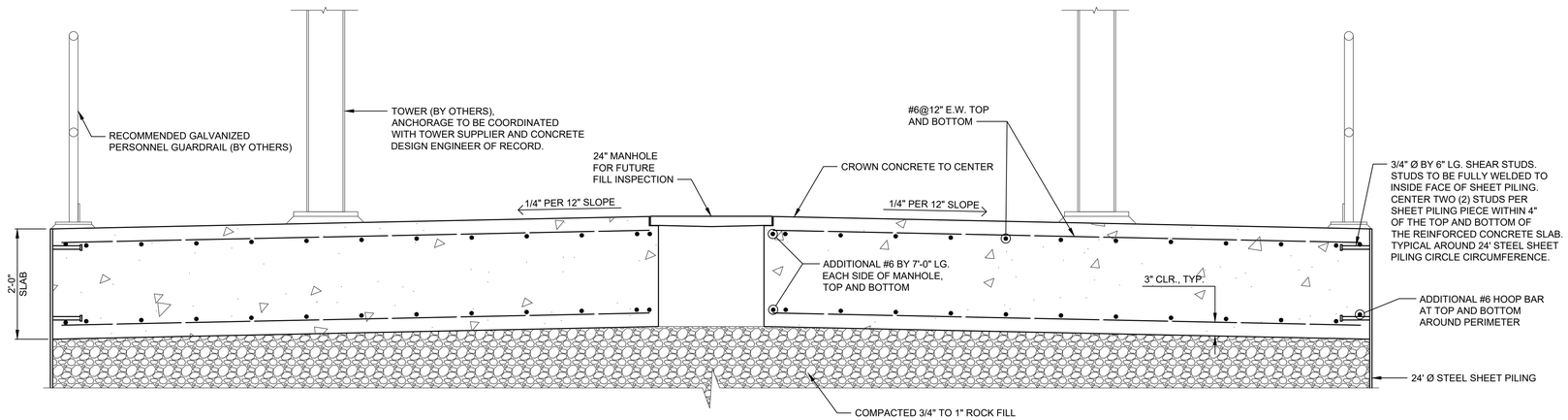
1 TOWER SHEET PILING CELL PLAN VIEW
3/8" = 1'-0"

NOTES:
1. QUANTITY AND LOCATION OF CELLS TO BE DETERMINED BY OWNER.
2. TOWER DIMENSIONS BASED UPON ALL STATE TOWER SHEET SOV DATED 10/25/2017.
3. MOORING RINGS
   A. PROVIDE (4) MOORING RINGS SPACED AT 5' O.C. ON EACH SIDE OF THE CENTERLINE OF THE CELL. COORDINATE LOCATIONS WITH OWNER.
   B. MINIMUM SAFE WORKING LOAD (SWL) SHALL BE TWICE (2X) THAT OF THE MAXIMUM LINE PULL OF THE CONTRACTOR SUPPLIED, OWNER SELECTED WINCH(ES).
   C. REINFORCE CELL STEEL BEYOND RINGS BY MINIMUM 5' IN ALL DIRECTIONS USING MINIMUM 1/2" THICK STEEL PLATE.
   D. FINAL LOCATION AND INSTALLATION DETAIL TO BE COORDINATED WITH CELL ENGINEER OF RECORD.



2 TOWER SUPPORT ELEVATION
3/16"=1'-0"

NOTE:
1. PROVIDE 2" Ø WEEP HOLE WITH 14GA PERFORATED STEEL WELDED TO INSIDE FACE OVER HOLE. SPACE (8) EIGHT WEEP HOLES EQUALLY AROUND THE CELL.
   1.1. WEEP HOLES TO BE LOCATED AT ELEVATION ±659.00.



3 SECTION
3/4"=1'-0"

0 5' 10'
SCALE: 3/16" = 1'-0"

0 2 4
SCALE: 3/8" = 1'-0"

0 1' 2'
SCALE: 3/4" = 1'-0"

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1	ADDENDUM 1 UPDATES	04/20/21	AMB

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No. E-000866

NEW BARGE LOADOUT FACILITY
CENTRAL MISSOURI AGRISERVICE, LLC
WAVERLY, MO

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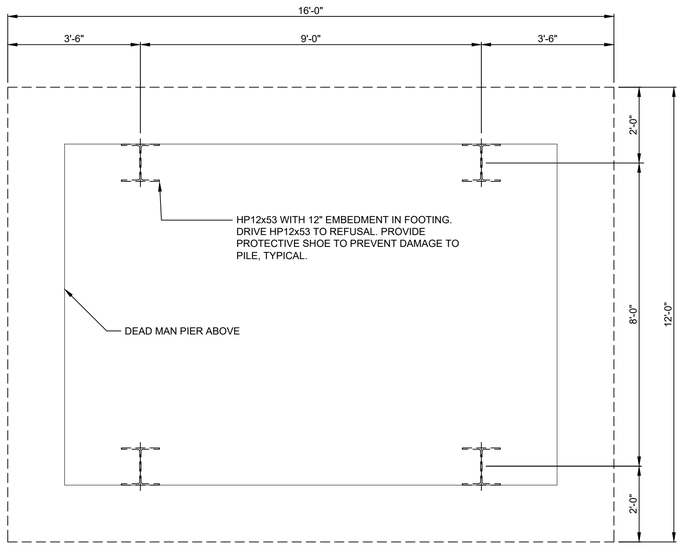
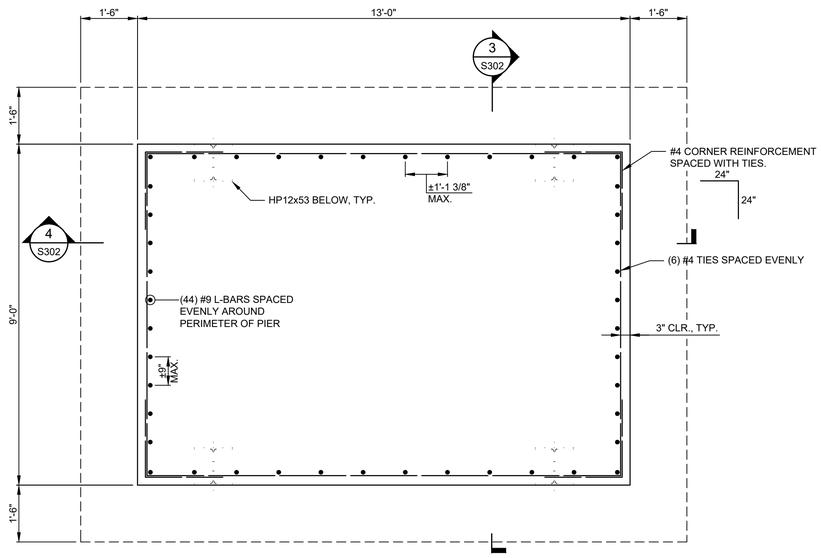
AMB	AMB
FIELD	FIELD BOOK
-	-
CHECKED	CHECK DATE
KTH	04/02/2021

SHEET TITLE
MOORING CELL PLAN, ELEVATION, & CAP DETAILS

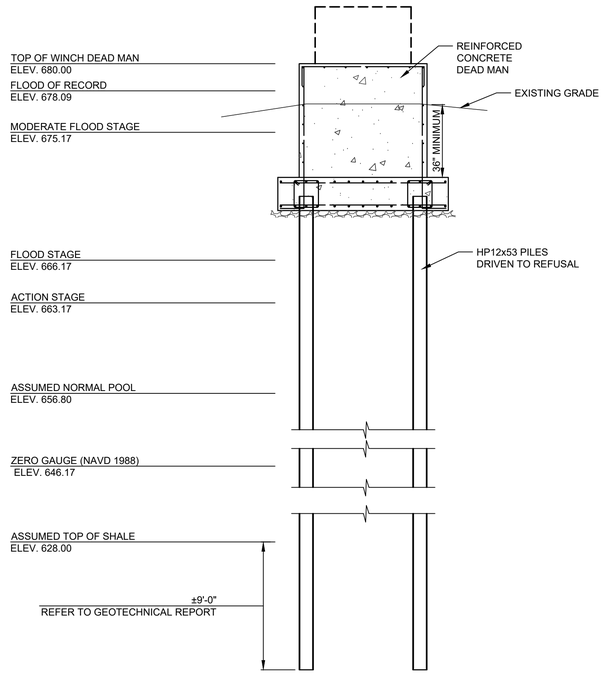
PROJECT NO.
18-0223
DRAWING ISSUED DATE:
04/02/2021
SHEET
S301



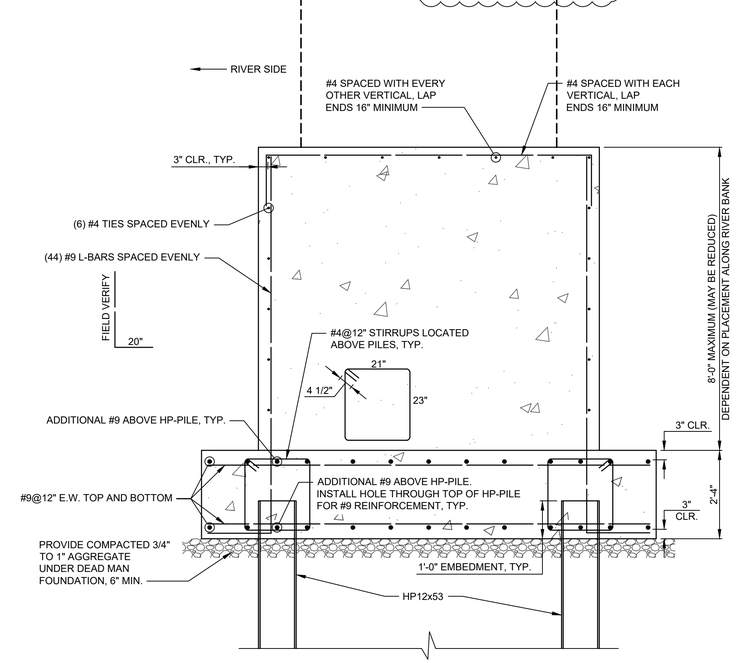
1 CONCRETE DEAD MAN FOOTING PLAN VIEW
1/2"=1'-0"



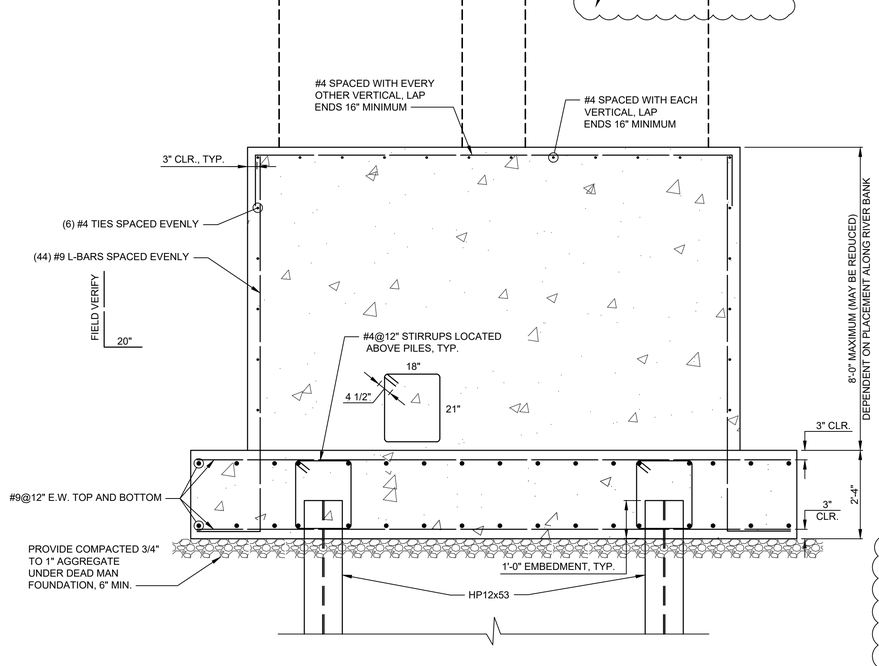
2 CONCRETE DEAD MAN PIER PLAN VIEW
1/2"=1'-0"



5 CONCRETE DEAD MAN ELEVATION
N.T.S.



3 CONCRETE DEAD MAN SECTION
1/2"=1'-0"



4 CONCRETE DEAD MAN SECTION
1/2"=1'-0"

NOTES:
1. QUANTITY AND LOCATION OF CONCRETE DEAD MAN TO BE DETERMINED BY OWNER.
2. CONTRACTOR TO SUPPLY OWNER SPECIFIED WINCHING SYSTEM(S). OWNER SPECIFIED WINCHING SYSTEM(S) IS WINTECH MODEL CPK35000-25-24-DB-BMS, OR OWNER APPROVED EQUIVALENT. COORDINATE THIS WINCHING SYSTEM SELECTION WITH THE OWNER.
   - 2.1. UPON FINAL WINCH ALIGNMENT ATOP THE CONCRETE DEAD MAN, WINCH(ES) ARE TO BE INSTALLED USING POST-INSTALLED 1" Ø EPOXY ANCHORS WITH 14" MINIMUM EMBEDMENT OR SELECTED CONTRACTOR MAY EMBED A 3/4" THICK PLATE OVER THE ENTIRE DEAD MAN.
     - 2.1.1. SHOULD THE CONTRACTOR CHOOSE TO EMBED A PLATE, THE PLATE SHALL HAVE STUDS SPACED AT 12" CENTERS AROUND THE PERIMETER AND THROUGHOUT THE CENTER. AFTER THE WINCH FINAL ALIGNMENT, THE WINCH MAY BE WELDED TO THE PLATE USING FILLET WELDS THAT ARE 1/16" LESS THE THICKNESS OF THE WINCH BASE PLATE AROUND THE ENTIRE WINCH BASE PLATE.

0 1' 2' 4'
SCALE: 1/2" = 1'-0"

KLINGNER & ASSOCIATES, P.C.
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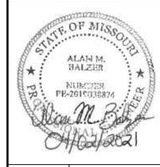
REVISION HISTORY

MARK	DESCRIPTION	DATE	APPR
1	ADDENDUM 1 UPDATES	04/20/21	AMB

Klingner & Associates, P.C.
Missouri State Certificate of Authority
No. E-000866



NEW BARGE LOADOUT FACILITY
CENTRAL MISSOURI AGRISERVICE, LLC
WAVERLY, MO

Non-Reduced Sheet Size: 22" x 34"
Full sized plans have been prepared using standard scales. Reduced size plans may not conform to standard scales.

DESIGNED	DRAWN
AMB	AMB
FIELD	FIELD BOOK
-	-
CHECKED	CHECK DATE
KTH	04/02/2021

SHEET TITLE
CONCRETE DEAD MAN PLAN & DETAILS

PROJECT NO.
18-0223
DRAWING ISSUED DATE:
04/02/2021
SHEET
S302