



**To:** Prequalified Contractors of Port KC

**From:** Richard Grenville V.P. Multimodal Logistics

**Date:** October 20, 2021

**Re:** Mooring Replacements & Removal – INVITATION TO BID

Port KC (The Port Authority of Kansas City, Missouri) is accepting Bids from contractors that have been prequalified by Port KC and are currently included on the list of "Port KC Prequalified Contractors" maintained by Port KC. **Interested contractors are advised to verify their prequalification status by visiting [www.portkc.com/rfps-rfqs/prequalified-contractors](http://www.portkc.com/rfps-rfqs/prequalified-contractors) prior to submitting a Bid. Bids from contractors that have not been prequalified by Port KC are ineligible to submit a Bid.**

**SCOPE OF WORK:**

Remove existing damaged mooring dolphin (1) and replace with specifically designed new structures as shown in "**Exhibit A**", and engineering drawings attached, for barge securing at the Port of Kansas City – Woodswether Terminal located at 1724 Market Street, Kansas City, MO 64105 (the "Project").

**Scope of Work (see Exhibit A for photos of fixtures to be refurbished/removed)**

The selected contractor will:

- Remove existing damaged structure and old and worn wire cables
- Replace with specifically designed securing structures and docking piles (see "Exhibit A" and attached technical drawings)

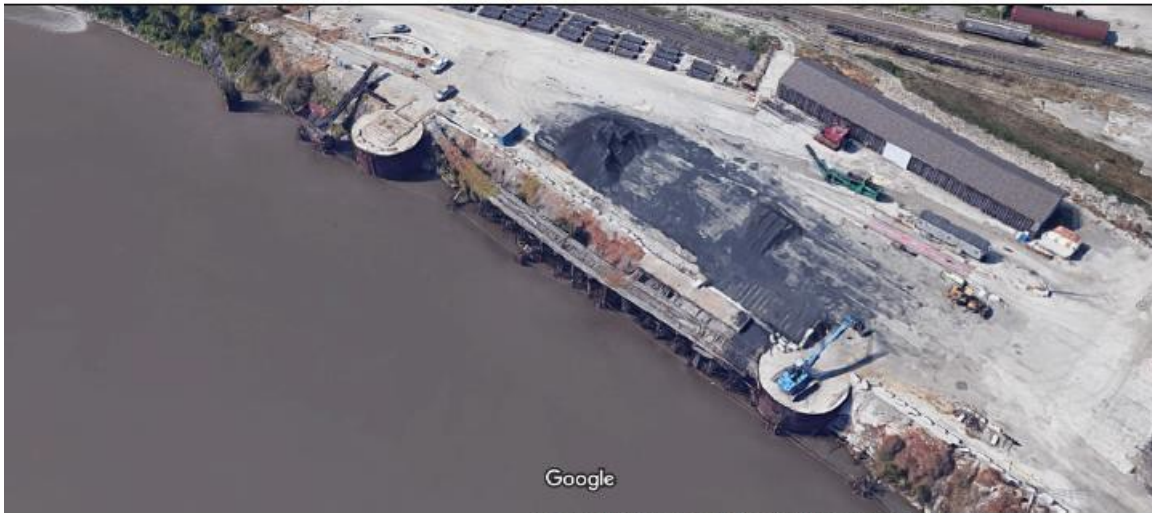
**STANDARD TERMS:**

The terms attached hereto as "Exhibit B", including all addendums thereto, are incorporated into this Invitation to Bid.

**SPECIAL TERMS:**

Project award is contingent on receiving funding from the state of Missouri for FYE 2022 Port Capital Improvement funding. In the event Port KC does not receive that funding, or receives funding in an amount that is insufficient to complete the Project, Port KC may elect to reject all bids, proceed with the Project utilizing other funding sources, or negotiate a reduced Project scope with the selected contractor without issuing any additional Invitation to Bid.

## Exhibit A

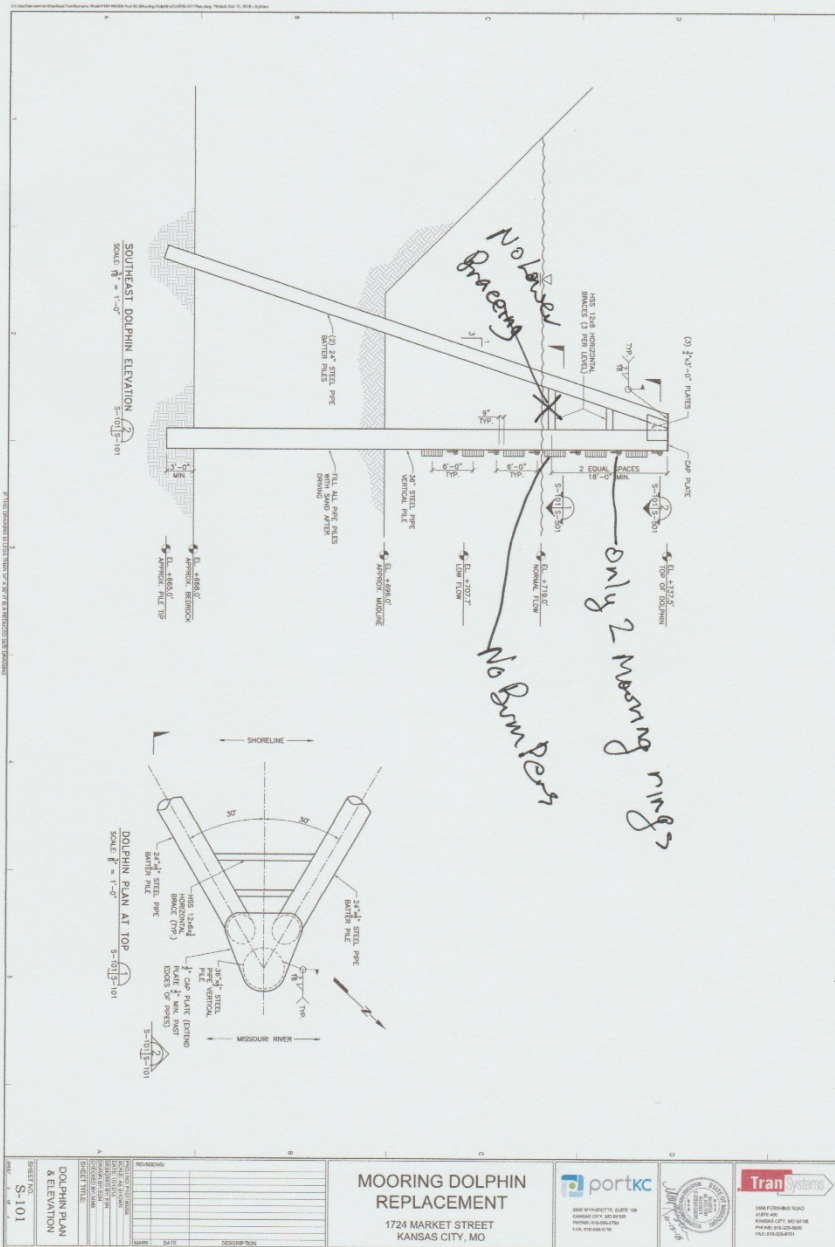


**Downriver**

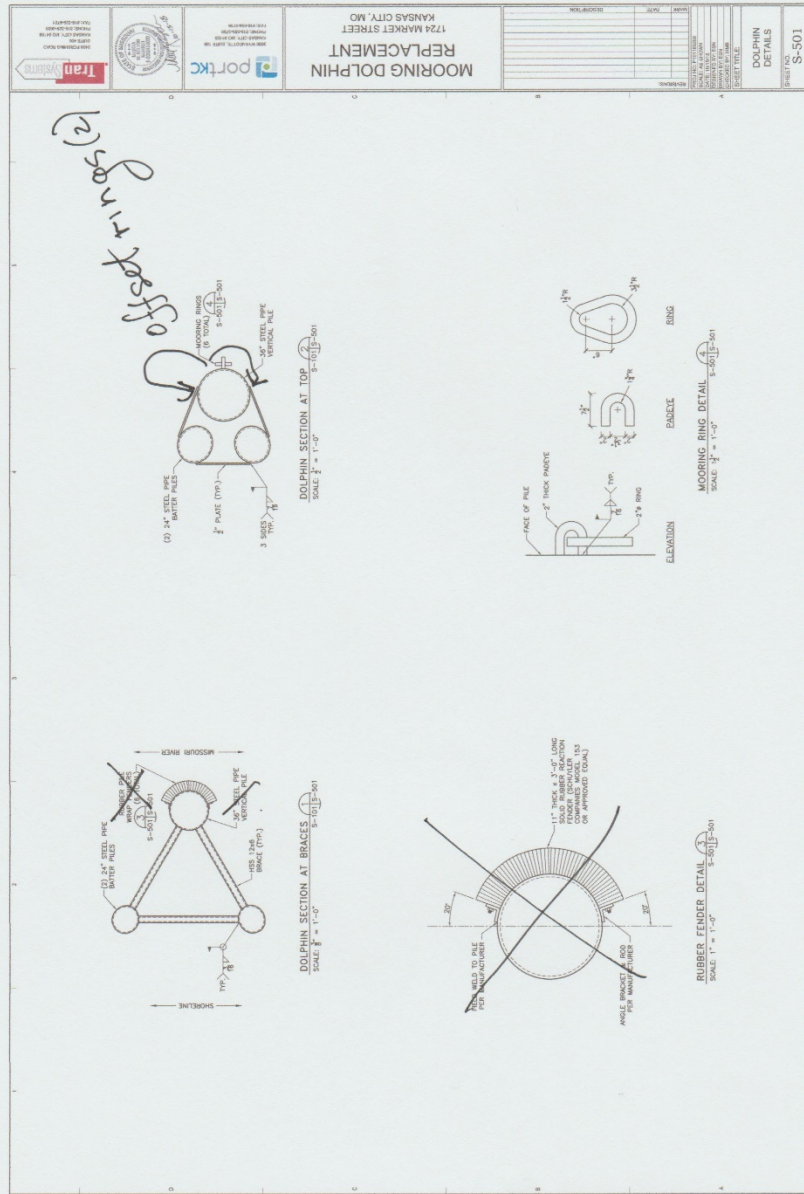
**Upriver**



**Approximate Positions of new structures**







## General Arrangement



**Damaged Structure to be removed**

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# Exhibit B

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## 1. Submission of Bids.

- a. Bids will be accepted until 1:00 p.m., Central Standard Time, on Friday, November 5, 2021, at which time bidding will be closed.
- b. All Bids will be opened and read aloud at 1:30 p.m., Central Standard Time, on Friday, November 5, 2021. The Bid must contain all required submissions. No Bid may be withdrawn for a period of ninety (90) days after the Bid is opened. Bid security shall likewise continue for the same ninety (90) days unless earlier released by Port KC. The successful Bidder shall comply with all Bidding and contract requirements. Bids, once opened and read, may not be withdrawn without forfeiture of the Bid security.
- c. All Bids must comply with the terms of this Invitation to Bid.
- d. All Bids shall be sealed and delivered to the following address:

Port KC  
Attn: Vice President of Multimodal Logistics  
110 Berkley Plaza  
Kansas City, MO 64120

2. On-Site Pre-Bid Meeting. There shall be a pre-bid meeting at the Project site at 9:00 a.m., Central Standard Time, on Tuesday, October 26, 2021. Bidders visiting the Project site shall be responsible for their own safety.

3. Consideration of Bids. Port KC will determine the lowest responsible Bid. Port KC may reject any or all Bids. If Port KC rejects all Bids, Port KC may elect to resolicit Bids following Port KC's normal solicitation procedure. No Bidder responding to this Invitation to Bid has the right to be awarded any contract or be compensated in any way for costs incurred by it in responding to this Invitation to Bid.

Bids shall be submitted as a lump sum bid covering the entirety of the Scope of Work to be performed.

4. Evidence of Competency to Perform. Each Bidder shall furnish with the Bid satisfactory evidence of Bidder's competency to perform the Project. Such evidence of competency shall consist of the following:

- a. Identify the key personnel proposed for the Project.
- b. Discuss generally the tasks involved in the Project.
- c. Illustrate clearly and concisely Bidder's understanding of the technical elements that must be addressed for successful completion of the Project.
- d. Submit a proposed Project schedule with anticipated milestones for Project delivery.
- e. Describe key issues that might affect the Project schedule and how Bidder proposes to address them.
- f. Describe how Bidder proposes to address any unique safety issues for the Project.
- g. Describe Bidder's safety record and environmental compliance record along with its OSHA reportable accident rates on recent comparable size projects.
- h. Identify any other special issues or problems that are likely to be encountered. Outline the manner in which Bidder suggests resolving them.
- i. Statement regarding all work performed two (2) years immediately preceding the date of the Bid, that contains either (a) a contract by contract listing of any written notices of violations of any federal or state prevailing wage statute in which prevailing wage penalties were assessed against the Bidder or paid by the Bidder; or (b) a statement that there have been no such written notices of violations or such penalties assessed.

- j. Statement that Bidder is current on payment of Federal and State income tax withholdings and unemployment insurance payments.
- k. Statement regarding all work performed two (2) years immediately preceding the date of the Bid, that contains either (a) a contract by contract listing of any written notices of violations of any federal, state or local DBE/MBE/WBE program and any damages assessed; or (b) a statement that there have been no such written notices of violations or such penalties assessed.
- l. Statement that the Bidder has not been rescinded or debarred from any bidding, contractual, procurement, or other such programs by federal, state or local entities.
- m. Statement of Bidder's litigation and/or arbitration history over the past five (5) years including final ruling.
- n. Statement of Bidder's bond history over the past five (5) years including any incidences of failure to perform.

5. Completion of Scope of Work. The successful Bidder will be required to complete the entirety of the Scope of Work by a date not later than June 1<sup>st</sup> 2022 or 180 calendar days from the date a contract is executed with the successful Bidder, whichever shall first occur. Port KC reserves the right to extend the completion date due to a force majeure event(s) that would preclude completion by the specified date. Failure to complete the Scope of Work by the completion date, or any extension thereto, shall result in the imposition of liquidated damages for each and every calendar day after the applicable completion date and continuing until such time as the work is completed in full.

6. Waiver of Bid Requirements. Port KC may waive any requirements imposed by this solicitation when failure to grant the waiver will result in an increased cost to Port KC and the requirement waived would be waived for all Bidders for this solicitation and it is in the best interest of Port KC to grant the waiver. Port KC reserves the right to waive any irregularities and/or formalities as deemed appropriate.

7. Late Bids. Bids and modifications of Bids received after the exact hour and date specified for receipt will not be considered unless Port KC extends the time after the deadline for a force majeure event that could potentially effect any or all Bidders' ability to meet the deadline. Bidders are advised that they are solely responsible for selecting a delivery method sufficient to ensure a timely submittal.

8. Interpretations and Addenda. All questions shall be directed to info@portkc.com. Interpretations or clarifications considered necessary by the Vice President of Multimodal Logistics in response to such questions will be issued by addenda. Questions received less than five (5) calendar days prior to the date for opening of Bids may not be answered. Only answers issued by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

9. Bid Security Requirements. All Bids submitted must be accompanied by a Bid deposit in the amount of five percent (5%) of the Bid which shall be in the form of a Bid Bond, Cashier's Check, Letter of Credit, Certificate of Deposit or other instrument approved in advance by Port KC.

10. Forfeiture of Security. If the selected Bidder fails or refuses to execute a contract when requested by Port KC, any Bid security given to Port KC shall immediately become due and payable and forfeited to Port KC as liquidated damages.

11. Post Bid Required Submissions. The successful Bidder will be required to submit the following documents prior to the execution of any contract:

- a. Properly signed, dated, and sealed Performance Bond
- b. Property signed, dated, and sealed Payment Bond;
- c. Properly completed certificates of insurance;
- d. Current Certificate of Good Standing or Fictitious Name Registration from the Missouri Secretary of State.

12. Public Contracting Requirements. The successfully Bidder shall be required to comply with the provisions of the attached policies (as applicable) in the performance of the Project.

13. Nondiscrimination. Port KC will affirmatively ensure that in any contract entered into pursuant to this advertisement, businesses owned and controlled by socially and economically disadvantaged individuals will be

afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, religion, creed, sex, age, ancestry, or national origin in consideration for an award.

14. Debarment and Suspension. By submitting a bid under this solicitation, the bidder certifies that neither it nor its principals are presently debarred or suspended by any Missouri department or agency from participation in this transaction.

15. Affidavit of Non-Collusion. Each bid shall be accompanied by an executed affidavit in a form substantially equivalent to that attached to this Invitation.

16. Buy American. Pursuant to the requirements of Section 34.353, RSMo, any manufactured goods or commodities used or supplied in performing the Scope of Work shall be manufactured or produced in the United States. This provision may be waived in the event only one line of a particular good or product required for the performance of the Scope of Work is manufactured or produced in the United States.

17. Engineered Work. All engineered drawings, plans or specifications required for the performance of the Scope of Work shall be signed and sealed by a registered Missouri professional engineer in good standing.

18. Environmental Permitting. Any permits required by any applicable federal, state or local jurisdiction for the performance of the Scope of Work shall be secured by the selected Bidder and no work shall be permitted to commence or continue in the absence of such permits.

19. Indemnification. The contract will contain a requirement that the successful Bidder indemnify, defend and hold harmless Port KC and any of its agencies, officials, officers, or employees from and against all claims, damages, liability, losses, costs, and expenses, including reasonable attorneys' fees, arising out of or resulting from any acts or omissions in connection with the contract, caused in whole or in part by the successful Bidder, its employees, agents, or subcontractors, or caused by others for whom the successful Bidder is liable. The contract will require the successful Bidder to obtain specified limits of insurance to insure the indemnity obligation. The successful Bidder has the opportunity to recover the cost of the required insurance by including the cost of that insurance in the Bid amount.



# **WORKFORCE PROTECTION**

## **A. Bonds**

### **1. Performance Bond.**

Contractor shall obtain and deliver to Port KC a payment bond naming Port KC as obligee, which payment bond shall be in an amount not less than the total contract amount.

### **2. Payment Bond.**

Contractor shall obtain and deliver to Port KC a payment bond naming Port KC as obligee, which payment bond shall be in an amount not less than the total contract amount.

## **B. Prompt Pay**

Contractor shall pay to its subcontractors and material suppliers, within fifteen (15) days after each payment from Port KC (or such shorter time as their respective contract(s) might provide for), those sums due the same under the terms of their respective contract(s), except that any retention shall not exceed five percent (5%). In the event that a payment is not timely made by Contractor, in whole or in part, on the grounds that the work, or any portion thereof, was not deemed suitable for payment, Contractor shall provide the subcontractors and material suppliers with a written explanation for the withholding or deductions. If Contractor shall fail to make a payment in full within the time allotted herein, without reasonable cause, Contractor shall pay its subcontractors and material suppliers, in addition to any payment due them, interest in the amount of not less than one and one-half percent per month (or such greater interest as their respective contract(s) might provide for), calculated from the date payment was due.

## **C. OSHA 10-Hour**

Contractor shall provide a ten-hour Occupational Safety and Health Administration (OSHA) construction safety program for their On-Site Employees which includes a course in construction safety and health approved by OSHA or a similar program approved by the State of Missouri's Department of Labor and Industrial Relations which is at least as stringent as an approved OSHA program, unless such On-Site Employees have previously completed the required program. All On-Site Employees who have not previously completed the program are required to complete the program within sixty (60) days of beginning work on the Project. Any On-Site Employee found on a work site subject to this paragraph without documentation of the successful completion of the required course shall be afforded twenty (20) days to produce such documentation and Contractor shall cause those failing to do so to be removed from the work site until such time as they shall be in compliance.

The failure to comply with the requirements of this paragraph C may subject Contractor to the payment of statutory penalties to Port KC. Contractor shall incur a statutory penalty of two thousand five hundred dollars (\$2,500) plus one hundred dollars (\$100) for each On-Site Employee employed by Contractor, for each calendar day, or portion thereof, such employee is employed without the required training within the time limits allotted herein. In the event that Port KC shall become entitled to statutory penalties, Port KC shall be entitled to collect the same in any manner authorized by the provisions of any agreement or contract, however denominated, to which the provisions of this Workforce Protections Policy shall be attached or incorporated by reference. Any statutory penalties shall be imposed and collected, if due, consistent with the procedures established by Section 292.675, RSMo.

Contractor shall contractually require its subcontractors of every tier to adhere to the requirements of this paragraph C in every regard.

For purposes of this paragraph C, the following definitions shall be applicable:

"Directly engaged in construction" shall mean work performed in the actual erection of the structure or completion of the Project. In addition, employees working at a nearby or adjacent facility used by Contractor or its subcontractors for construction of the Project shall be deemed on-site employees. Persons engaged solely in the transportation of materials, fuel, or equipment to the site of the Project shall not be deemed to be directly engaged in construction.

"On-site employee", laborers, workmen, drivers, equipment operators, and craftsmen employed by Contractor or its subcontractors to be directly engaged in construction at the site of the Project.

**D. E-Verify (Applicable only to Projects in excess of \$5,000.00)**

Contractor shall not employ any person on the Project who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. 1324a(h)(3). Contractor shall execute an "Employee Eligibility Verification Affidavit" and shall attach thereto documentation sufficient to establish Contractor's enrollment and participation in an electronic verification of work program operated by the United States Department of Homeland Security (E-Verify) or an equivalent federal work authorization program authorized by the United States Department of Homeland Security to verify information of newly hired employees, under the Immigration Reform and Control Act of 1986. For those Contractors enrolled in E-Verify, the first and last pages of the E-Verify Memorandum of Understanding that Contractor will obtain upon successfully enrolling in the program shall constitute sufficient documentation for purposes of complying with this paragraph D. Contractor shall submit the affidavit and attachments to Port KC prior to commencement of the Project, or at any point during the term of the Project if requested by Port KC.

Contractor shall contractually require its subcontractors of every tier to adhere to the requirements of this paragraph D in every regard.

# **PREVAILING WAGES**

**(Applicable only to Projects in excess of \$75,000.00)**

The “Prevailing Wage Requirements” shall collectively refer to the following:

- A. Sections 290.210 to 290.340, RSMo, the State of Missouri Prevailing Wage Law (“Law”); and
- B. 8 CSR 30-3.010 to 8 CSR 30-3.060, the Prevailing Wage Law Rules ( “Rules”); and
- C. The Annual Wage Order (“Wage Order”) issued by the State of Missouri’s Department of Labor and Industrial Relations; and
- D. Any applicable Annual Incremental Wage Increase (“Wage Increase”) to the Wage Order.

In accordance with the provisions of the Prevailing Wage Requirements, Contractor will pay or cause to be paid the applicable prevailing hourly rate of wages to all workers entitled to the same. If and to the extent the Prevailing Wage Requirements are applicable, Contractor will take whatever lawful steps are necessary to ensure that prevailing hourly rate of wages are paid by Contractor and all subcontractors thereunder, of every tier, according to the type of work being performed.

In order to monitor the payment of the prevailing hourly rate of wages, Contractor shall do the following with respect to any and all Prevailing Wage Applicable Work:

- i. Post and require all subcontractors to post and keep posted a clearly legible statement of all prevailing hourly rate of wages to be paid to the workers in a prominent and easily accessible place at the location of the Prevailing Wage Applicable Work; and
- ii. Complete and require all subcontractors to complete Port KC’s “Daily Labor Force Report“ for each calendar day that Prevailing Wage Applicable Work is being performed, and remit the same not less than weekly; and
- iii. Complete and require all subcontractors to complete Port KC’s “Certified Payroll Report” for each calendar week that Prevailing Wage Applicable Work is being performed, and remit the same not more than two weeks after the close of the applicable payroll reporting period; and
- iv. Complete weekly interviews with randomly selected workers to identify any potential compliance issues; and
- v. Review every Daily Labor Force Report in conjunction with the applicable Certified Payroll Report and identify any errors, omissions, or entries inconsistent with the Prevailing Wage Requirements; and
- vi. Correct and require all subcontractors to correct any errors, omissions or entries inconsistent with the Prevailing Wage Requirements that are identified during such review of the same, and to remit to the affected workers any additional sums determined to be due as a result of such corrections; and
- vii. Remit to Port KC, once per month, the Certified Payroll Reports as corrected, if applicable. (The corresponding Daily Labor Force Reports shall **not** be submitted to Port KC but shall be retained as otherwise provided for herein, and are subject to review by Port KC and its authorized agents upon their request); and
- viii. File with Port KC, not more than thirty (30) days following the completion of the Prevailing Wage Applicable Work, the “Affidavit of Compliance With Prevailing Wage Requirements” for the purpose of certifying their compliance with the Prevailing Wage Requirements.

All records submitted with respect to the Prevailing Wage Requirements or otherwise herein required shall be retained by Contractor for not less than three (3) full year following the date upon which Contractor submits to Port KC the “final” Certified Payroll Reports for the Prevailing Wage Applicable Work, and shall be made available for review by Port KC and its authorized agents upon request. Port KC shall have the absolute right to audit Contractor’s compliance with the provisions of this document and to examine, in whole or in part, any records which Contractor is required to obtain and retain, and to interview any workmen in connection therewith. Contractor shall grant Port KC or its authorized representative access to such records and workmen, if applicable, during business hours, and shall make such records and workmen available at the location of the Prevailing Wage Applicable Work or such other location in reasonable proximity thereto as Port KC may identify. Contractor shall require its contract management firm, if applicable, to comply with this Prevailing Wages Policy in every regard.

Contractor is solely responsible for ensuring that its subcontractors comply with the provision of the Prevailing Wage Requirements and shall be the sole point of contact for Port KC with respect such matters. Contractor shall not instruct its subcontractors to submit any documentation required by this Prevailing Wages Policy or the Prevailing Wage Requirements directly to Port KC unless Port KC and Contractor shall have mutually agreed otherwise in writing. Any documentation not otherwise submitted through Contractor may be rejected by Port KC in its sole discretion, in which case Contractor shall resubmit such materials.

If any allegations or inquiries are made with respect to any potential violations of the Prevailing Wage Requirements, or if Contractor’s review of the Daily Labor Force Reports and Certified Payroll Reports indicates a violation, Contractor must notify Port KC in writing within five (5) days of learning of such allegation, inquiry or violation. Contractor must follow up with the relevant contractor(s) and subcontractors thereunder until all allegations, inquiries or violations are satisfactorily resolved and disclose the resolution to Port KC, in writing, within five (5) days following the resolution of all such allegations, inquiries or violations.

If any violations of the Prevailing Wage Requirements are not resolved to the satisfaction of Port KC, Port KC may identify, by written notice to Contractor, the workers claiming to have been underpaid, the days they claim to have been underpaid, and the amounts they claim to have been underpaid. Contractor will have ten (10) days following receipt of such notice, or such longer time as Port KC may authorize in writing, to respond to the notice. Contractor will be given reasonable notice and an opportunity to be heard on the matter. Based on the information in the notice, Contractor’s response, and such additional information as Port KC determines relevant, Port KC will render a written decision as to the amount, if any, of additional wages Port KC concludes is owed. Within ten (10) days following Contractor’s receipt of such Port KC determination, Contractor shall either (i) promptly pay or cause to be paid any such wages that Port KC determines are owed, or (ii) notify Port KC in writing that it disputes Port KC's determination. In the event Contractor elects (ii) above, the matter shall be referred to the State of Missouri’s Department of Labor and Industrial Relations for further enforcement action. Notwithstanding the foregoing, nothing herein shall be construed as precluding Contractor from any additional civil and criminal liability imposed by the Prevailing Wage Requirements.

The failure to comply with the Prevailing Wage Requirements may subject Contractor to the payment of statutory penalties to Port KC. Contractor shall incur a statutory penalty of one hundred dollars (\$100.00) for each worker employed, for each calendar day, or portion thereof, such worker is paid less than the prevailing hourly rate of wages for any work done on behalf of Contractor and all subcontractors thereunder. Any statutory penalties shall be imposed and collected, if due, consistent with the procedures established by Law.



**M/WBE**  
**(Applicable only to Projects in excess of \$300,000.00)**

Projects shall be subject to the following M/WBE goals unless otherwise waived, in whole or in part, pursuant to this policy:

**MBE - 14.7%**

**WBE - 14.4%**

**A. Definitions.**

Commercially Useful Function: Real and actual services that are a distinct and verifiable element of the contracted work based upon private sector trade or industry standards. Determination that an M/WBE performs a commercially useful function will be made based on the following considerations:

- a. An MBE or WBE performs a commercially useful function when it is responsible for execution of the ordinary and necessary work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE or WBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining the quality and quantity, ordering the material, installing (where applicable) and paying for the material itself. To determine whether an MBE or WBE is performing a commercially useful function, one must evaluate the following:
  1. The amount of work subcontracted; and
  2. Industry practices; and
  3. Whether the amount the enterprise is to be paid under the contract is commensurate with the work it is actually performing; and
  4. Whether the MBE or WBE has the skill and expertise to perform work for which it is being utilized; and
  5. The credit claimed for its performance of the work; and
  6. Other relevant factors.
- b. An MBE or WBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of MBE or WBE participation. In determining whether an MBE or WBE is such an extra participant, one must examine similar transactions, particularly those in which MBEs or WBEs do not participate.
- c. An MBE or WBE firm is not performing a commercially useful function if the MBE or WBE subcontracts a greater portion of the work on a contract or purchases a greater amount of material than would be expected on the basis of normal industry practice for the type of work involved.
- d. Whether the MBE or WBE is participating in the contract as a middle person or broker in the normal course of that business or trade by purchasing the goods and/or services from another business, thereby qualifying expenditures for such goods and/or services to be counted toward utilization requirements for MBEs and WBEs.

- e. Whether the MBE or WBE is responsible for the purchase and quality of, and payment for, materials used to perform its work under the contract.

There shall be a rebuttable presumption that, when the MBE or WBE subcontracts a greater portion of the contract work than normal industry practice, the MBE or WBE is not performing a commercially useful function.

Disadvantaged Business Enterprise (DBE): A business concern that meets the federal requirements for certification as a DBE.

Good Faith Waiver: A waiver that is granted by Port KC based upon a showing by a Contractor that despite undertaking in good faith the actions outlined in this Policy, the Contractor may be unable to achieve the M/WBE Goal.

Minority: A person who is a citizen or lawful permanent resident of the United States and who is:

- a. African American, a person whose origins are in any of the Black racial groups of Africa, and who has historically and consistently identified himself or herself as being such a person; or
- b. Hispanic American and/or Latino American, a person whose origins are in Mexico, Central or South America, or any of the Spanish speaking islands of the Caribbean, (for example Cuba and Puerto Rico) regardless of race, and who has historically and consistently identified himself or herself as being such a person; or
- c. Asian and/or Pacific Islander American, a person whose origins are in any of the original peoples of the Far East, Southeast Asia, the islands of the Pacific or the Northern Marianas, or the Indian Subcontinent, and who has historically and consistently identified himself or herself as being such a person; or
- d. Native American, a person having origins in any of the original peoples of North America, and who maintains tribal affiliation or demonstrates at least one-quarter descent from such groups, and who has historically and consistently identified himself or herself as being such a person.

Minority Business Enterprise (MBE): A for-profit small business concern that:

- a. Is at least 51 percent owned, managed, and independently controlled by one or more minorities; and
- b. Performs a commercially useful function; and
- c. Has been certified by the City of Kansas City, Missouri's Human Relations Department, another state or a political subdivision thereof, or by a reputable chamber or organization whose mission includes the promotion of minority owned business interests, as provided by this policy.

M/WBE Goal: A numerical objective stated as a percentage of contract dollars for participation by MBEs, WBEs or DBEs in providing professional services, construction and the equipping Project.

Woman: A person who is a citizen or lawful permanent resident of the United States and who is a female.

Women's business enterprise (WBE): A for-profit small business concern that:

- a. Is at least 51 percent owned, managed, and independently controlled by one or more women; and
- b. Performs a commercially useful function; and
- c. Has been certified by the City of Kansas City, Missouri's Human Relations Department, another state or a political subdivision thereof, or by a reputable chamber or organization whose mission includes the promotion of minority owned business interests, as provided by this policy.

#### **B. Selection of M/WBEs.**

The selection of M/WBEs working on the Project shall be made by Contractor, but shall be drawn from the following sources only:

- i. Those M/WBE entities listed in the Certified Directory maintained by the City of Kansas City, Missouri's Human Relations Department.
- ii. Those M/WBE entities listed in the Certified M/WBE Vendors Directory maintained by the Missouri Office of Equal Opportunity.
- iii. Those M/WBE entities certified as such by another state or a political subdivision thereof.
- iv. Those M/WBEs (or their substantive equivalent) as so certified by any reputable chamber or organization whose mission includes the promotion of minority and women owned business interests.

In the event that M/WBE entities cannot be obtained in an amount sufficient to achieve the M/WBE goals, entities certified as DBEs may be credited towards the M/WBE goals if drawn from the following sources:

Those DBE entities listed in the Certified Directory maintained by the City of Kansas City, Missouri's Human Relations Department

Those DBE entities listed in the Missouri Regional Certification DBE Directory maintained by the Missouri Department of Transportation

Those DBE entities certified as such by another State or a political subdivision thereof.

Any DBE so utilized shall be classified for purposes of M/WBE credit as an MBE or WBE consistent with the status of the person or persons having managerial control of the DBE.

Port KC strongly encourages Contractors to utilize M/WBE firms certified as such by the City of Kansas City, Missouri's Human Relations Department (subparagraph i above) or the Missouri Office of Equal Opportunity (subparagraph ii above) before drawing from any other source. Those firms listed on such directories will be accepted by Port KC without further inquiry. Port KC reserves the right to require that Contractors reasonably establish the basis for its determination that any other entity selected from any other source should be regarded as an M/WBE for purposes of this policy.

**C. Required Submission Prior to Contract Award.**

Contractor will submit a proposed Contractor Utilization Plan/Request for Waiver prior to the execution of any contract. An automatic request for waiver shall be considered by Port KC if the proposed participation is less than the established M/WBE goals, and Contractor has made a Good Faith Effort to obtain M/WBE participation but was unable to achieve the M/WBE goals.

**D. Required Monthly Submissions.**

Contractor must electronically submit the following document to [compliance@portkc.com](mailto:compliance@portkc.com) by the last calendar day of each calendar month until such time as the construction of the Project has been fully completed.

**M/WBE Monthly Utilization Report:** This form identifies the M/WBEs utilized and the amounts paid to each throughout the construction of the Project.

**E. M/WBE Participation Credit.**

The following shall be credited towards achieving the M/WBE goals:

1. One hundred percent (100%) of the dollar amount paid to a general contractor or a subcontractor that is a qualified M/WBE, except as otherwise expressly provided for herein.
2. Sixty percent (60%) of the total dollar amount paid to obtain supplies or goods from a supplier who is a qualified M/WBE
3. Ten percent (10%) of the total dollar amount paid to obtain supplies or goods from a supply broker who is a qualified M/WBE.
4. One hundred percent (100%) of the total dollar amount paid to a manufacturer of construction supplies who is a qualified M/WBE.

**NO CREDIT**, however, will be given for the following:

1. The dollar amount paid to an M/WBE that does not perform a Commercially Useful Function; and
2. The dollar amount that a M/WBE subcontracts to any contractor not a qualified M/WBE; and
3. Materials and supplies used on the project unless the M/WBE is responsible for negotiating the price, determining quality and quantity, ordering the materials and installing (where applicable) and paying for material itself; and
4. Work performed by an M/WBE in a scope of work other than that in which the M/WBE is certified.

**F. Methods for Securing Participation of M/WBEs and Good Faith Efforts.**

In the event Contractor does not meet M/WBE goals, the efforts taken by Contractor will be evaluated to determine whether Good Faith Efforts were made to secure participation. Good Faith Efforts are efforts that, given all relevant circumstances,



Contractor actively and aggressively demonstrates in attempting to meet the M/WBE goals.

**G. Evaluating Good Faith Efforts.** In evaluating good faith efforts, Port KC will consider whether Contractor has performed, or caused to be performed, the following, along with any other relevant factors:

1. **Advertisement.** Advertised opportunities to participate in the contract in general circulation media, trade and professional association publications, small and minority business media, or publications of minority and women' s business organizations at least fifteen (15) calendar days prior to any bid or proposal due date. For purposes of this paragraph, advertisements posted in not less than three (3) of the "News and Print Publications" listed on the attachment to this policy shall be deemed sufficient.
2. **Notice.** Provided notice to minority and women' s business organizations of specific opportunities to participate in the project at least fifteen (15) calendar days prior to any bid or proposal due date.
3. **Direct Contact.**
  - a. Sent written notices, by certified mail, e-mail or facsimile, to not less than eighty percent (80%) of the M/WBE' s listed in the Certified Directory maintained by the City of Kansas City, Missouri' s Human Relations Department at least fifteen (15) calendar days prior to any bid or proposal due date.
  - b. Attempted to identify portions of the work for qualified M/WBE participation in order to increase the likelihood of meeting the goals, including breaking down the scope(s) of work into economically feasible units where reasonably practical.
4. **Contact with Port KC.** Requested assistance in achieving the M/WBE goals from Port KC' s President/CEO and acted on the President /CEO' s recommendations, if any.
5. **Conference.** Conferred with qualified M/WBEs and explained the scope and requirements of the work for which their bids or proposals were solicited.
6. **Negotiations.** Attempted to negotiate in good faith with qualified M/WBEs to perform specific scopes of the Project, not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities.

Written notices and advertisements to be provided pursuant to (1), (2) and (3) above shall include the following information:

- (a) The bid or proposal due date;
- (b) The name of the project;
- (c) The address or general location of the Project;
- (d) The location of plans and specifications for viewing;
- (e) Contact information for the Contractor;
- (f) A general description of the scopes of work that are the subject of the solicitation;
- (g) The date and time of any pre-bid meeting(s) , if any, which have been scheduled; and
- (h) Any other information deemed relevant by the Contractor.

## **H. Access to Documents and Records**

Contractor agrees to permit the Port KC's duly authorized agents or employees access at all reasonable times to the applicable books and business records of Contractor as may be necessary for the limited purposes of ascertaining compliance with the requirements of this policy. Contractor shall require its subcontractors to likewise make its applicable books and records available to the same extent as is applicable to Contractor.

## **I. Remedies; Liquidated Damages**

If Contractor fails to achieve the M/WBE goals as ultimately established in the Contractor Utilization Plan/Request for Waiver approved by Port KC, Port KC will sustain damages, the exact extent of which would be difficult or impossible to ascertain. Therefore, in order to liquidate those damages, the monetary difference between the amount of the M/WBE goals as ultimately established in the Contractor Utilization Plan/Request for Waiver and the amount actually paid to qualified MBEs and WBEs for performing a commercially useful function will be due from Contractor as liquidated damages.

Liquidated damages will not be imposed when, for reasons beyond the control of Contractor, the M/WBE goals as ultimately established in the Contractor Utilization Plan/Request for Waiver are not met and Contractor otherwise establishes its Good Faith Efforts.

# CONSTRUCTION WORKFORCE

**(Applicable only to Projects in excess of \$300,000.00 and requiring more than 800 construction labor hours to complete)**

## **I. Port KC's Construction Workforce Program.**

Projects shall be subject to the following goals, unless otherwise waived, in whole or in part, pursuant to this policy:

<b>Minorities</b>	<b>- 10%</b>
<b>Women</b>	<b>- 2%</b>

The goals are expressed as a percentage of the total Construction Labor Hours performed by minorities and women in constructing a Project. Although it is not a requirement that a Contractor meet or exceed the goals, a Contractor not doing so is required to objectively demonstrate to Port KC that good faith efforts have been made. This policy shall not be construed as requiring or encouraging that employment decisions be made, or that the terms and conditions of employment otherwise be altered, based upon race or gender.

### **A. The following terms shall be defined as follows for purposes of the Construction Workforce Program:**

**Construction Labor Hour:** A sixty minute period of time devoted by a worker in constructing, reconstructing, improving, enlarging or altering any permanent building or structure for the Project.

**Good Faith Waiver:** A waiver that is granted by Port KC based upon a showing by Contractor that despite undertaking in good faith the actions outlined in this policy, Contractor was unable to achieve the goals.

**Minority:** A person who is a citizen or lawful permanent resident of the United States and who is:

- a. African American , a person whose origins are in any of the Black racial groups of Africa, and who has historically and consistently identified himself or herself as being such a person ; or
- b. Hispanic American and/or Latino American , a person whose origins are in Mexico, Central or South America, or any of the Spanish speaking islands of the Caribbean, (for example Cuba and Puerto Rico) regardless of race, and who has historically and consistently identified himself or herself as being such a person; or
- c. Asian and/or Pacific Islander American, a person whose origins are in any of the original peoples of the Far East, Southeast Asia, the islands of the Pacific or the Northern Marianas, or the Indian Subcontinent, and who has historically and consistently identified himself or herself as being such a person; or

- d. Native American, a person having origins in any of the original peoples of North America, and who maintains tribal affiliation or demonstrates at least one-quarter descent from such groups, and who has historically and consistently identified himself or herself as being such a person.

**Woman:** A person who is a citizen or lawful permanent resident of the United States and who is a female.

## **II. Required Monthly Submissions.**

- A. Contractor must electronically submit the following document to [compliance@portkc.com](mailto:compliance@portkc.com) by the last calendar day of each calendar month until such time as the construction of the Project has been fully completed.

**Project Workforce Monthly Utilization Report.** Two copies of this report must be submitted to the Port KC each month. The first copy will be utilized to report Contractor's workforce compliance data with regard to the Project. The second copy will be utilized to report consolidated workforce compliance data for every subcontractor retained by Contractor on the Project.

## **III. Methods for Securing Participation and Good Faith Efforts.**

- A. Contractor is required to make good faith efforts to achieve the goals. If Contractor will be unable to secure enough minority and female participation to meet or exceed the goals, Contractor must, within a reasonable time after so learning, request a waiver or modification of the goals by Port KC. Port KC will examine the request and the documentation of good faith efforts and grant or deny a Good Faith Waiver, in whole or in part. Port KC will grant a waiver only if Contractor shows a good faith effort has been made to secure minority and female participation in the construction of the Project.
- B. **Evaluating Good Faith Efforts.** In evaluating good faith efforts, Port KC will consider whether Contractor has performed, or caused to be performed, the following , along with any other relevant factors:
  - 1. For those Contractors with a general contractor that is not signatory to a collective bargaining agreement with organized labor:
    - a. Requested in writing the assistance of Port KC with respect to efforts to promote the utilization of minorities and women in the workforce and acted upon Port KC's recommendations; and
    - b. Advertised in minority or women trade association newsletters and/or minority or women owned media at least 15 calendar days prior to the utilization of any construction services and used terminology that sufficiently describes the work available, the pay scale, the application process, and anything else that one might reasonably be expected to be informed of relevant to the position being advertised ; and
    - c. Maintained copies of each advertisement and a log identifying the publication



and date of publication; and

- d. Conducted real and substantial recruitment efforts, both oral and written, targeting resident, minority and women community-based organizations, schools with a significant minority student population, and training organizations serving the recruitment area; and
  - e. Established and maintained a current list of resident, minority and women recruitment sources, providing written notification to the recruitment sources of available employment opportunities, and maintained records of the notices submitted to the organizations and any responses thereto; and
  - f. Maintained a current file for the time period of the Project with the name, address, and telephone number of each resident, minority and woman job applicant, the source of the referral, whether or not the person was hired, and in the event that the applicant was not hired, the reason there fore; and
  - g. Promoted the retention of minorities and women in its workforce with the goals of achieving sufficient annual hours for minorities and women to qualify for applicable benefits; and
  - h. Required by written contract that Contractor's subcontractors comply with the above efforts.
2. For those Contractors with a general contractor that is signatory to collective bargaining agreements with organized labor:
- a. Requested in writing from each labor union representing crafts to be employed in the construction of the Project that: (i) The labor union make efforts to promote the utilization of residents of the city, minorities and women in the workforce; and (ii) The labor union identifies any residents of the city, minorities and women in its membership eligible for employment; and
  - b. Collaborated with labor unions in promoting mentoring programs for journeypersons intended to assist minorities and women in increasing retention with the goal of achieving sufficient annual hours to qualify for applicable benefits; and
  - c. Maintained a current file with the name, address, and telephone number of each resident, minority and woman worker identified by the labor union, whether or not the person was hired, and in the event the person was not hired, the reason therefore; and
  - d. Required by written contract that that Contractor's subcontractors comply with the above efforts.

To the extent that the good-faith effort requirements set forth in this section are in conflict with the procedures implemented pursuant to a competitive bargaining agreement, such other procedures, as may be approved by Port KC in writing, may be substituted in order to accomplish the purpose and intent of this section.

#### **IV. Access to Documents and Records**

- A. Contractor agrees to permit Port KC's duly authorized agents or employees access at all reasonable times to the applicable books and business records of Contractor as may be necessary for the limited purposes of ascertaining compliance with the

requirements of this policy. Contractor shall require its subcontractors to likewise make its applicable books and records available to the same extent as is applicable to Contractor.

## **V. Remedies; Liquidated Damages**

- A. Contractor shall be liable for compliance with the Construction Workforce Program.
- B. If Contractor fails to achieve the goals and the same have not otherwise been waived or modified, Port KC will sustain damages, the exact extent of which would be difficult or impossible to ascertain. Therefore, in order to liquidate those damages, Port KC shall be entitled to collect the sum of three thousand dollars (\$3,000) for each calendar year during which construction on the Project shall have occurred.
- C. Liquidated damages will not be imposed when, for reasons beyond the control of Contractor, the goals are not met and Contractor otherwise establishes Good Faith Efforts.

## NON-COLLUSIVE AFFIDAVIT OF PRIME BIDDER

State of Missouri ) S.S.  
County of \_\_\_\_\_)

\_\_\_\_\_, being first duly sworn, deposes and says that:

1. They are the (owner, partner, officer, representative, or agent) of \_\_\_\_\_, the Bidder that has submitted the attached Bid;
2. They are fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3. Such bid is genuine and is not a collusive or sham bid; and that all statements made and fact set out in the Proposal are true and correct;
4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest including this affidavit, has in any way colluded, considered, connived, or agreed, directly or indirectly with any other bidder, firm, or person, to submit a sham bid in connection with the Contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract; or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm, or person to fix the price or prices in the attached Bid or of any other bidder, or to fix the overhead, profit, or cost element of the Bid price of the other bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the Port KC or any person interested in the Proposed Contact.
5. The price or prices quoted in the attached Bid are fair and proper, and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit; and
6. They further certify that bidder is not financially interested in or financially affiliated with any other Bidder on this project.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public

My Commission expires: \_\_\_\_\_

October 4, 2018

Project B1809590

Mr. Kevin Rohner, PE  
TranSystems  
2400 Pershing Road, Suite 400  
Kansas City, Missouri 64108

Re: Geotechnical Evaluation  
Port KC Mooring Dolphin  
Near State Street and Market Street  
Kansas City, Missouri

Dear Mr. Rohner:

We are pleased to present this letter summarizing the results of our analyses for the new mooring dolphin to be constructed for the Port of Kansas City facility near the intersection of State Street and Market Street in Kansas City, Missouri. Our scope of services was outlined in our proposal (QTB085577) dated September 7, 2018, which was authorized with the request for services number P101160208-TSK009 on September 11, 2018.

## **PROJECT DESCRIPTION**

Based on correspondence with Eric Newman of TranSystems, we understand the project involves replacing a failed mooring dolphin with steel pipe piles in the Missouri River. We understand the existing mooring dolphin might consist of three driven, wood piles. The configuration that Massman suggested for the new, planned mooring dolphin will consist of a vertically driven, 30-inch-diameter, steel, pipe pile with two, 24-inch-diameter, steel, pipe piles driven battered at a 1-horizontal-to-3-vertical (3H:1V) slope. A second possible configuration for the mooring dolphin consists of a vertically driven, 24-inch-diameter, steel, pipe pile with two, 20-inch-diameter steel, pipe piles driven battered at a 1H:3V slope. All the piles are planned to have a wall thickness of 1/2 inch for the pipe. There are three, unfactored loads that the mooring dolphin will be subjected to: 1) 55 kips perpendicular to the shore, 2) 12 kips parallel to the shore and 3) 17 kips perpendicular to the shore and 11 kips parallel to the shore (see Figure 1). Additionally, we were told that scour is approximately two times the diameter of the piles. We further understand that the mooring dolphin can tolerate a lateral deflection of approximately 1 inch at the top of the piles, at an elevation of 737 ½ feet.

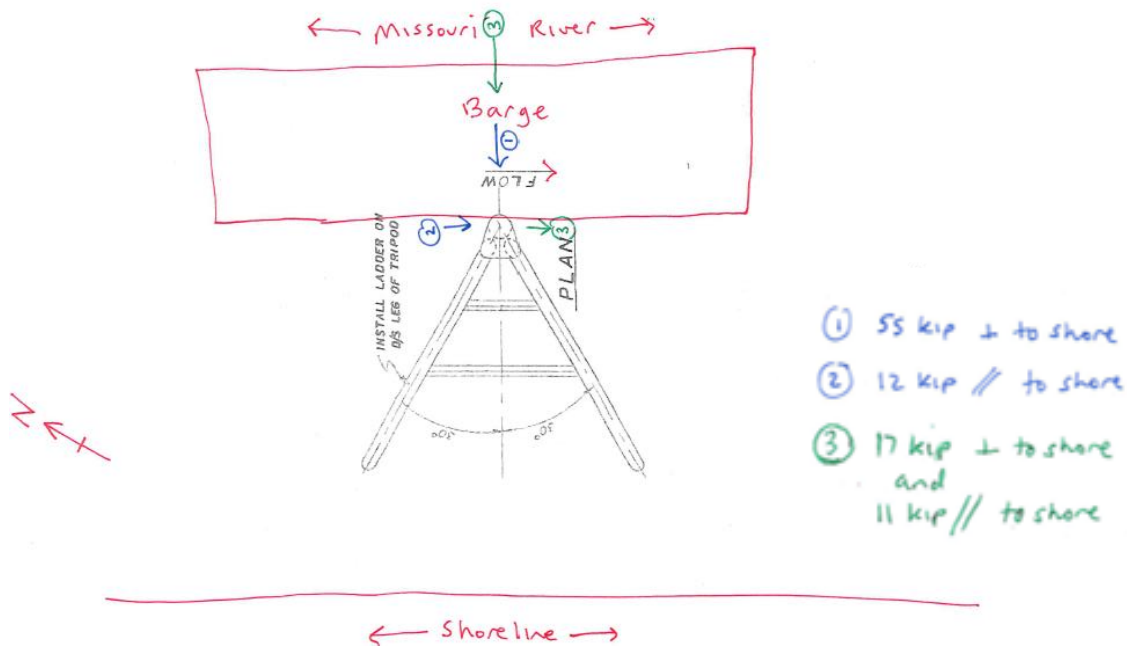


Figure 1. Proposed mooring dolphin loading diagram provided by Mr. Eric Newman of TranSystems on September 28, 2018.

## PURPOSE AND SCOPE OF SERVICES

The purpose of our geotechnical evaluation was to evaluate and provide pipe pile foundation recommendations for the new mooring dolphin summarized above.

## BACKGROUND INFORMATION

We previously performed a subsurface exploration near the project site and issued a geotechnical evaluation report for proposed fertilizer domes dated August 31, 2017. To facilitate our evaluation, we reviewed the following information:

- Geotechnical Evaluation Report, Port KC Fertilizer Domes, Braun Intertec Project B1706411, dated August 31, 2018
- Email correspondence with Mr. Newman in September of 2018 regarding boring elevations, mooring configuration and design loads.

## SUBSURFACE CONDITIONS

Based on borings completed in a nearby subsurface investigation, we anticipate subsurface conditions in the vicinity of the mooring dolphin will generally consist of loose sandy and clayey alluvial soils underlain by shale bedrock (see Table 1). Shale bedrock was encountered at an approximate elevation of 668 feet below mean sea level (MSL). Based on our conversation with Mr. Eric Newman, the normal water level is at approximate elevation of 719 feet MSL and the mudline is at elevation 696 feet MSL.

**Table 1. Subsurface Profile Summary\***

Approximate Elevation (feet MSL)**	Strata	Soil/Rock Type - ASTM Classification	Soil/Rock Characteristics	Commentary and Details
696-668	Alluvium	SM, SP	Loose	<ul style="list-style-type: none"> <li>▪ We anticipate the alluvial sandy soils to exhibit a loose relative density.</li> <li>▪ Moisture condition will generally be wet.</li> </ul>
< 668	Bedrock	Shale	50 blows for 2 inches of penetration	<ul style="list-style-type: none"> <li>▪ Encountered at Boring B-3 (Braun Intertec Project B1706411) at an approximate depth of 82 feet from a ground surface elevation of 750.3 feet MSL.</li> <li>▪ Shale bedrock generally became less weathered and harder with depth.</li> <li>▪ Contained apparent sandstone seams.</li> <li>▪ Bedrock units classified based on visual classification and drilling characteristics.</li> <li>▪ Core samples were not obtained and may reveal other rock types.</li> </ul>

\*Abbreviations defined in the attached Descriptive Terminology sheets.

\*\*Approximate elevations are based on boring elevations provided to us by TranSystems on September 24, 2018.

## ANALYSES AND RESULTS

### Axial Resistance

We used the computer program UniPile, version 5.0, to estimate the static, ultimate, geotechnical resistance of the pile sections. UniPile software, developed by UniSoft Geotechnical Solutions Ltd., can calculate pile resistance using a variety of methods.

For our analysis, we utilized the Beta-method, an effective stress method, to estimate the static, geotechnical resistance for these piles. This method determines shaft resistance using Bjerrum-Burland beta coefficients ( $\beta$ ), which are based on soil type and effective friction angle. We estimated the  $\beta$  values for each layer based on our experience and on Figure 9.20 from the Federal Highway Administration (FHWA) Publication No. NHI-05-042, Design and Construction of Driven Pile Foundations, April 2006. The Beta-method determines end-bearing resistance using toe bearing capacity factors ( $N_t$ ), which are also based on soil type and effective friction angle. We estimated the  $N_t$  values from our experience and Table 9-6 of the April 2006 FHWA publication identified previously. We provided ultimate and allowable unit side and end bearing resistances in Table 2.

**Table 2. Geotechnical unit resistances for driven, steel, pipe piles**

Approximate Elevation (feet MSL)	Strata	Unit Side Resistance, $f_s$ (ksf)		Unit End Bearing Resistance, $q_p$ (ksf)	
		Ultimate	Allowable*	Ultimate	Allowable*
690**-668	Loose Sand	0.5	0.15	---	---
< 668	Shale	5	1.6	90	30

\*A factor of safety of 3.0 was used for the allowable geotechnical resistances.

\*\*We anticipate an approximate scour elevation of 690 feet MSL.

### Lateral Group Analysis

We analyzed the pile group response to the provided lateral loads for the two, pile group configurations. We used the computer program GROUP (2016) to evaluate the lateral resistance of each pile group with the subsurface soil parameters in Table 3. For the lateral analysis, we assumed the pipe piles would be ASTM A252 Grade 3 steel having a yield strength of at least 45 kips per square inch (ksi). We understand the piles will have a minimum pile wall thickness of 1/2 inches and be infilled with sand after driving.

**Table 3. GROUP Lateral Soil Parameters**

Approximate Elevation (feet MSL)	Material	p-y Model	Effective Unit Weight (pcf)	Friction Angle, $\phi$ (deg)*	Horizontal Modulus of Reaction (pci)*	Rock Quality Designation, RQD (%)	Strain Factor, $k_{rm}$
690**-668	Loose Sand	Sand (Reese)	48	27	20	---	---
< 668	Shale	Weak Rock	130	80 psi	3,000 ksi	80	0.0005 to 0.00005

\*For weak rock p-y model, we used unconfined compression strength (psi) and initial modulus of rock mass (ksi) instead of friction angle and horizontal modulus of reaction.

\*\*We anticipate an approximate scour elevation of 690 feet MSL.

Table 4 contains the maximum deflection, moment and shear of the two pile configurations with the three load cases, described in the Project Description Section above. The maximum deflection, shear and moment values are the maximum, resultant values from the controlling load case (Load Case 1 with 55 kips perpendicular to the shoreline).

**Table 4. GROUP Analysis Results**

Pile Group	Pile Sizes	Wall Thickness (inches)	Battered	Maximum Deflection (inches)	Maximum Shear (kip)	Maximum Moment (kip-in)
1	1- 30-inch CEP 2- 24-inch CEP	0.5	Vertical 1H:3V	1.2 1.2	52 27	3,000 1,400
2	1- 24-inch CEP 2- 20-inch CEP	0.5	Vertical 1H:3V	3.1 3.1	61 34	2,650 1,375

#### **Minimum Embedment Length**

Based on a maximum, lateral pile top movement of 1-inch and the three load cases provided, we recommend a minimum embedment depth of 3 feet into the shale bedrock. Based on elevations from our nearby boring (B-3), we estimate the minimum tip elevation to be 665 feet MSL.

#### **Driveability**

The contractor should review the boring logs to assess the potential problems with completing pile driving in the subsurface materials encountered at this site. Braun Intertec performed a preliminary drivability analysis using the GRLWEAP program, the subsurface profile from boring B-3 for the Port KC dome, and a Delmag D30, diesel, pile-driving hammer with a rated energy of 60 foot-kips. Results of our preliminary evaluation indicated that the piles for the mooring dolphin can be driven to the required pile tip elevation without over-stressing. We recommend using a pile driving hammer with a minimum rated energy of 60 foot-kips to drive the piles, but the contractor should perform a driveability analysis to confirm their hammer can drive the piles to the required minimum tip elevation.



## CLOSURE

Thank you for making Braun Intertec your geotechnical consultant for this project. If you have questions about this letter, or if there are other services that we can provide in support of our work to date, please call Morgan Race at 612.708.6791.

Sincerely,

BRAUN INTERTEC CORPORATION

### Professional Certification:

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Missouri.

Morgan Race, PhD, PE  
Project Engineer

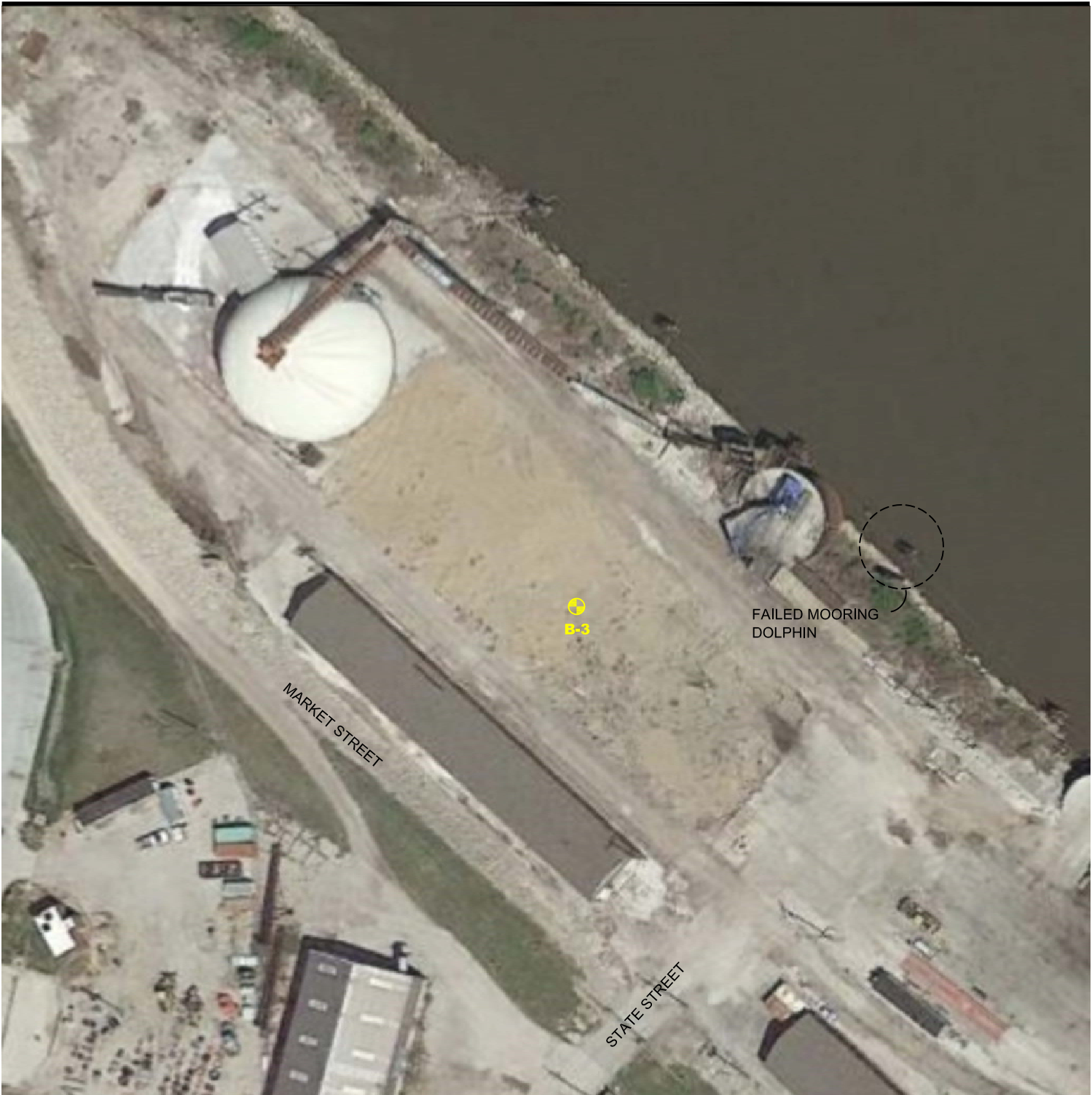


Matthew Glisson, PE  
Principal/Principal Engineer

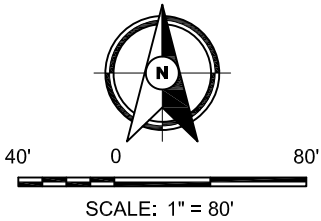




### Attachments

Figure A-1: Boring Location Sketch  
Boring B-3 (from Braun Intertec Project B1706411)



 **DENOTES APPROXIMATE LOCATION OF  
STANDARD PENETRATION TEST BORING**



 11001 Hampshire Avenue S Minneapolis, MN 55438 952.995.2000 braunintertec.com	Project No: B1809590	Port KC Mooring Dolphin	<b>Boring Location Sketch</b>  
	Drawing No: B1809590	Near State Street and Market Street	
	Drawn By: LAO Date Drawn: 10/3/18 Checked By: MR Last Modified: 10/3/18	Kansas City, Missouri	

(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\KANSAS CITY\2017\B1706411\_PORT OF KC.GPJ BRAUN\_V8\_CURRENT.GDT 8/31/17 16:00

Braun Project B1706411 Port KC - Fertilizer Domes State Street and Market Street Kansas City, Missouri					BORING: <b>B-3</b>		
DRILLER: RC Drilling		METHOD: 6 1/4" HSA, Autohammer		DATE: 8/18/17		SCALE: 1" = 4'	
Elev. feet 93.9	Depth feet 0.0	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
		FILL	FILL, Silty Sand, brown, fine grained, moist, trace gravel	5		5.7	BC=2,3,2
90.9	3.0	SP	POORLY GRADED SAND, brown, fine to medium grained, moist, very loose  ...trace wood	2		3.1	BC=3,3,5
84.9	9.0	SP	POORLY GRADED SAND, gray, fine to medium grained, wet, medium dense, trace wood and clay seams/lenses	13		13.8	BC=3,3,4 Mud rotary started at 10'.
			...with wood	12	▼	33.0	BC=2,2,2,
			...fine to coarse grained	13		19.7	BC=3,2,4
65.9	28.0	CL	LEAN CLAY, gray, wet, soft	9		20.1	BC=2,4,4
				3		29.2	BC=3,4,5

LOG OF BORING N:\GINT\PROJECTS\KANSAS CITY\2017\B1706411\_PORT OF KC.GPJ BRAUN\_V8\_CURRENT.GDT 8/31/17 16:00  
(See Descriptive Terminology sheet for explanation of abbreviations)

<b>Braun Project B1706411</b> <b>Port KC - Fertilizer Domes</b> <b>State Street and Market Street</b> <b>Kansas City, Missouri</b>					BORING: <b>B-3 (cont.)</b> LOCATION: Lat: 39.11136°, Long: -94.60653° See Sketch			
DRILLER: RC Drilling		METHOD: 6 1/4" HSA, Autohammer		DATE: <b>8/18/17</b>		SCALE: <b>1" = 4'</b>		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
61.9	32.0							
60.9	33.0		LEAN CLAY, gray, wet, soft ( <i>continued</i> )					
			SILTY SAND, gray, fine grained, wet, loose, trace organics	6		49.1	BC=3,3,3,	
56.9	37.0		POORLY GRADED SAND, gray, fine grained, wet, medium dense	10		31.3	BC=3,5,5 #200 Wash = 7.0% fines	
			...fine to medium grained	24		26.2	BC=5,10,14	
			...becoming dense	35		17.9	BC=11,14,21	
			...fine to coarse grained, trace gravel	37		21.8	BC=16,20,17	

(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\KANSAS CITY\2017\B1706411\_PORT OF KC.GPJ BRAUN\_V8\_CURRENT.GDT 8/31/17 16:00

Braun Project B1706411 Port KC - Fertilizer Domes State Street and Market Street Kansas City, Missouri				BORING: <b>B-3 (cont.)</b> LOCATION: Lat: 39.11136°, Long: -94.60653° See Sketch			
DRILLER: RC Drilling		METHOD: 6 1/4" HSA, Autohammer		DATE: 8/18/17		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
29.9	64.0		POORLY GRADED SAND, gray, fine grained, wet, medium dense ( <i>continued</i> )  ...becoming medium dense				
				19		10.7	BC=9,10,9 #200 Wash = 4.6% fines
				34		5.3	BC=13,16,18
11.9	82.0	SH	SHALE, highly weathered, olive gray to gray, soft, with sandstone seams  ...becoming light gray, slightly weathered, moderately hard				
				50/2"		9.1	BC=50/2"
3.9	90.0		END OF BORING.  Boring backfilled with cement-bentonite grout.				

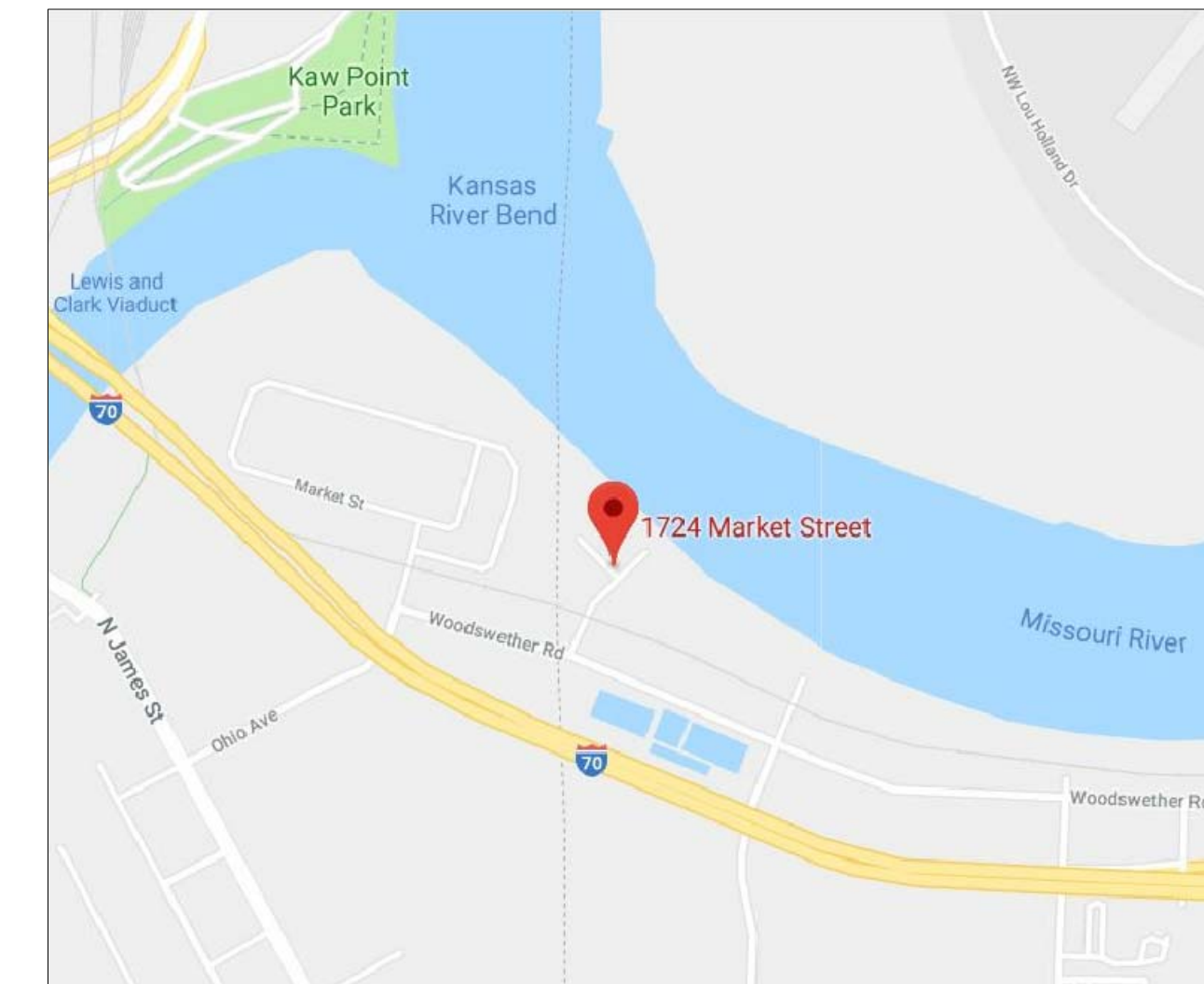




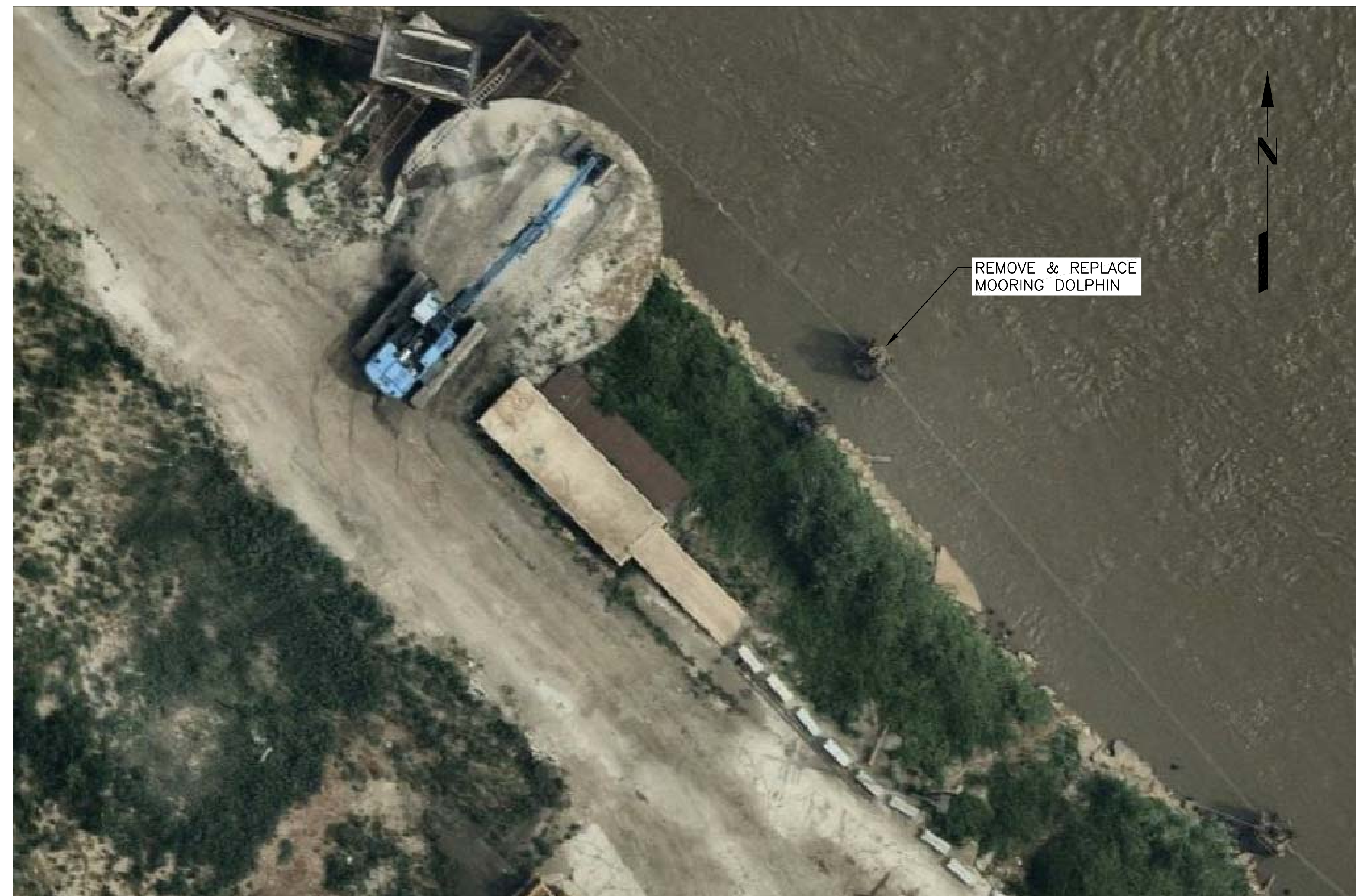
VICINITY MAP  
NOT TO SCALE

# MOORING DOLPHIN REPLACEMENT

1724 MARKET STREET  
KANSAS CITY, MO



LOCATION MAP  
NOT TO SCALE



SITE PLAN  
NOT TO SCALE

SHEET INDEX	
G-001	TITLE SHEET
S-001	STRUCTURAL NOTES
S-101	DOLPHIN PLAN & ELEVATION
S-501	DOLPHIN DETAILS

[illegible]

**MOORING DOLPHIN  
REPLACEMENT**

1724 MARKET STREET  
KANSAS CITY, MO



2400 PERSHING ROAD  
SUITE 400  
KANSAS CITY, MO 64108  
PHONE: 816-329-8600  
FAX: 816-329-8701



3000 WYANDOTTE, SUITE 100  
KANSAS CITY, MO 64105  
PHONE: 816-559-3750  
FAX: 816-559-3759

PROJ NO: P101160208
SCALE: AS SHOWN
DATE: 10/15/18
DESIGNED BY: ESN
DRAWN BY: ESN
CHECKED BY: MMB

SHEET TITLE:

TITLE SHEET

SHEET NO.  
**G-001**  
SHEET 1 OF 4



# STRUCTURAL NOTES

## A. GENERAL

1. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THESE GENERAL NOTES AND TYPICAL DETAILS. TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK, AND SHALL RESOLVE CONFLICTS ON THE PLANS WITH THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. IN NO CASE SHALL DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THE STRUCTURAL DRAWINGS.
3. WHERE A CONSTRUCTION DETAIL IS NOT SHOWN OR NOTED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
4. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE 2015 IBC.
5. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND JOB SITE SAFETY.
6. EACH SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS RELATING TO HIS WORK BEFORE BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONTRACTOR IMMEDIATELY. FAILURE TO REPORT SUCH DISCREPANCIES INDICATES THE SUBCONTRACTOR'S ACCEPTANCE OF SUCH CONDITIONS.

## B. FOUNDATION

1. CHARACTER OF FOUNDATION SOIL BASED ON REPORT BY BRAUN INTERTEC, LENEXA, KS TITLED 'GEOTECHNICAL EVALUATION, PORT KC MOORING DOLPHIN, NEAR STATE STREET AND MARKET STREET, KANSAS CITY, MISSOURI' DATED OCTOBER 4, 2018.
2. PILES ARE DESIGNED FOR A MINIMUM EMBEDMENT OF 3' INTO SHALE BEDROCK.

### C. STRUCTURAL STEEL

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO AISC 360-10 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.
2. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 FOR PLATES, CHANNELS & ANGLES, ASTM A500 GRADE B FOR HOLLOW STRUCTURAL SHAPES, ASTM A53 GRADE B FOR PIPES, ASTM A992 FOR WF BEAMS, AND ASTM A252 GRADE 2 FOR DRIVEN PILES.
3. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC PROCESS USING APPROVED ELECTRODES PER AWS SPECIFICATION E70XX (LOW HYDROGEN ELECTRODES). WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1 AND SHALL BE PERFORMED BY CERTIFIED WELDERS QUALIFIED UNDER THE PROCEDURES CONTAINED THEREIN.
4. STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER BEFORE FABRICATION.

#### D. SPECIAL INSPECTION

1. SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 OF THE 2015 IBC FOR DRIVEN FOUNDATIONS AND STEEL CONSTRUCTION.
2. REFER TO THE MATERIAL SPECIFIC TABLES FOR ACTIVITY INSPECTION AND FREQUENCY.

## E. DESIGN CRITERIA

1. DESIGN CODE:
  - a. 2015 INTERNATIONAL BUILDING CODE (IBC)
2. RISK CATEGORY = II
3. DESIGN LIFE = 50 YEARS
4. DESIGN BARGE: 195'x35'x11', 1,500 TON
5. BERTHING CRITERIA:
  - a. BERTHING VELOCITY = 0.5 FT/SEC
6. MOORING CRITERIA:
  - a. WIND SPEED:  $V_{wsd} = 90$  MPH,  $V_{ult} = 115$  MPH
  - b. CURRENT VELOCITY = 5 FT/SEC
  - c. MAXIMUM WAVE HEIGHT = 4'

## ABBREVIATIONS

Ø	AT
ALT	ALTERNATE
APPROX.	APPROXIMATE
ARCH'L	ARCHITECT/ARCHITECTURAL
BLDG	BUILDING
BLK	BLOCK
BLK'G	BLOCKING
BM	BEAM
BOT.	BOTTOM
BRG.	BEARING
C.I.P.	CAST-IN-PLACE
C.J.	CONSTRUCTION JOINT
℄	CENTERLINE
CL, CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
DIA., Ø	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
EL., ELEV.	ELEVATION
EMBED.	EMBEDMENT
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.S.	EACH SIDE
E.W.	EACH WAY
EXIST.	EXISTING
EXP.	EXPANSION
FTG	FOOTING
GA.	GAGE/GAUGE
GR. BM	GRADE BEAM
GALV.	GALVANIZED
G.S.M.	GALVANIZED SHEET METAL
H, HORIZ.	HORIZONTAL
HDR	HEADER
H.D.G.	HOT DIPPED GALVANIZED
HT	HEIGHT
INSP.	INSPECTION
I.D.	INSIDE DIAMETER
KSI	KIPS PER SQUARE INCH
MAX.	MAXIMUM
MECH.	MECHANICAL

MECH'L	MECHANICAL
MFR	MANUFACTURER
MIN.	MINIMUM
MID.	MIDDLE
MTL	METAL
(N)	NEW
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPN'G	OPENING
OPP.	OPPOSITE
OPT.	OPTIONAL
PL	PLATE
PLY.	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PCF	POUNDS PER CUBIC FOOT
PMPCM	POLYMER MODIFIED PORTLAND CEMENT MORTAR
PSI	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PVC	POLY VINYL CHLORIDE
REINF.	REINFORCEMENT
REQ'D	REQUIRED
SCHED.	SCHEDULE
SHT	SHEET
SMS	SHEET METAL SCREW
S.O.G.	SLAB—ON—GRADE
S.M.S.	SHEET METAL SCREW
SPEC.	SPECIAL
S.S.	STAINLESS STEEL
STA.	STATION
STD	STANDARD
STL	STEEL
STRUCT.	STRUCTURAL
SQ.	SQUARE
TEMP.	TEMPERATURE, TEMPORARY
T.O.S.	TOP OF STEEL, TOP OF SLAB
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V, VERT.	VERTICAL
W	WIDTH
W/	WITH
WWF	WELDED WIRE FABRIC
W.P.	WORKING POINT
W.P.J.	WEAKENED PLANE JOINT

TABLE 1705-2 REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION				
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1. MATERIAL VERIFICATION OF STRUCTURAL STEEL:				
a. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.	---	X	aisc 360, SECTION A3.1	---
b. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	X	APPLICABLE ASTM MATERIAL STANDARDS	---
c. MANUFACTURER'S CERTIFIED MILL TEST REPORTS	---	X	---	---
2. MATERIAL VERIFICATION OF WELD FILLER MATERIALS				
a. IDENTIFICATION MARKING TO CONFORM TO AWS SPECIFICATION	---	X	aisc 360, SECTION A3.5 & APPLICABLE AWS A5 DOCUMENTS	---
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE	---	X		
3. INSPECTION OF WELDING:				
a. STRUCTURAL STEEL:				
1. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	X	---	AWS D1.1	1704.3.1
2. MULTIPASS FILLET WELDS	X	---		
3. SINGLE-PASS WELDS $> \frac{5}{16}$ "	X	---		
4. PLUG & SLOT WELDS	X	---		
5. SINGLE-PASS WELDS $< \frac{5}{16}$ "	---	X		

TABLE 1705.7 REQUIRED VERIFICATION AND INSPECTION OF DRIVEN DEEP FOUNDATIONS		
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. VERIFY ELEMENT MATERIALS, SIZES AND LENGTHS COMPLY WITH THE REQUIREMENTS.	X	---
3. OBSERVE DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	---
4. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED PENETRATIONS TO ACHIEVE DESIGN CAPACITY, RECORD TIP AND BUTT ELEVATIONS AND DOCUMENT ANY DAMAGE TO FOUNDATION ELEMENT.	X	---
5. MATERIAL INSPECTIONS PER APPLICABLE MATERIAL TABLE.	AS SHOWN	



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SUITE 400  
KANSAS CITY, MO 64108  
PHONE: 816-329-8600  
FAX: 816-329-8701



3000 WYANDOTTE, SUITE 100  
KANSAS CITY, MO 64105  
PHONE: 816-559-3750  
FAX: 816-559-3759

**MOORING DOLPHIN  
REPLACEMENT**

1724 MARKET STREET  
KANSAS CITY, MO

[illegible]

PROJ NO: P101160208

SCALE: AS SHOWN

DATE: 10/15/18

DESIGNED BY: ESM

DRAWN BY: ESN  
CHECKED BY: MMS

SHEET TITLE

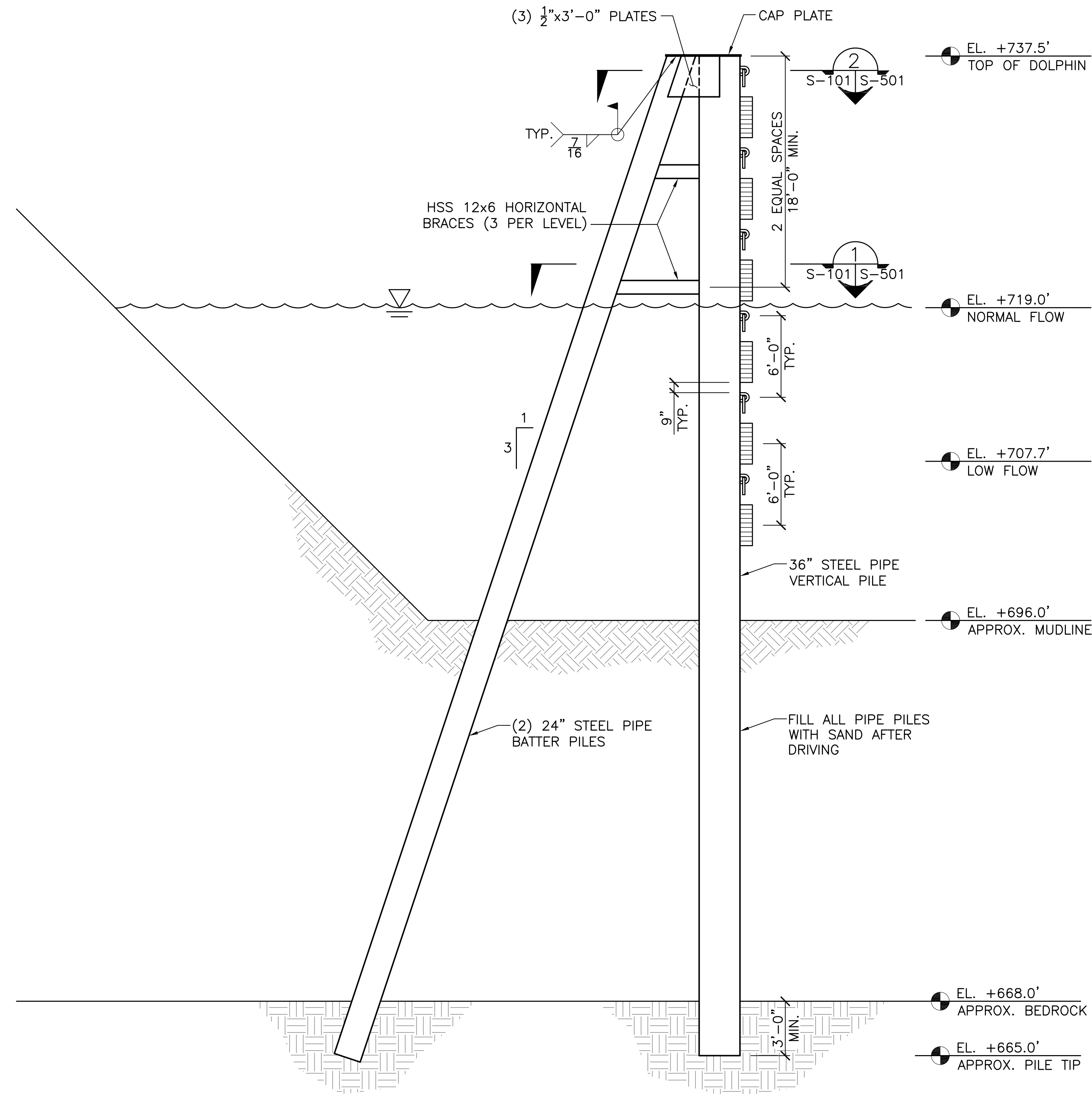
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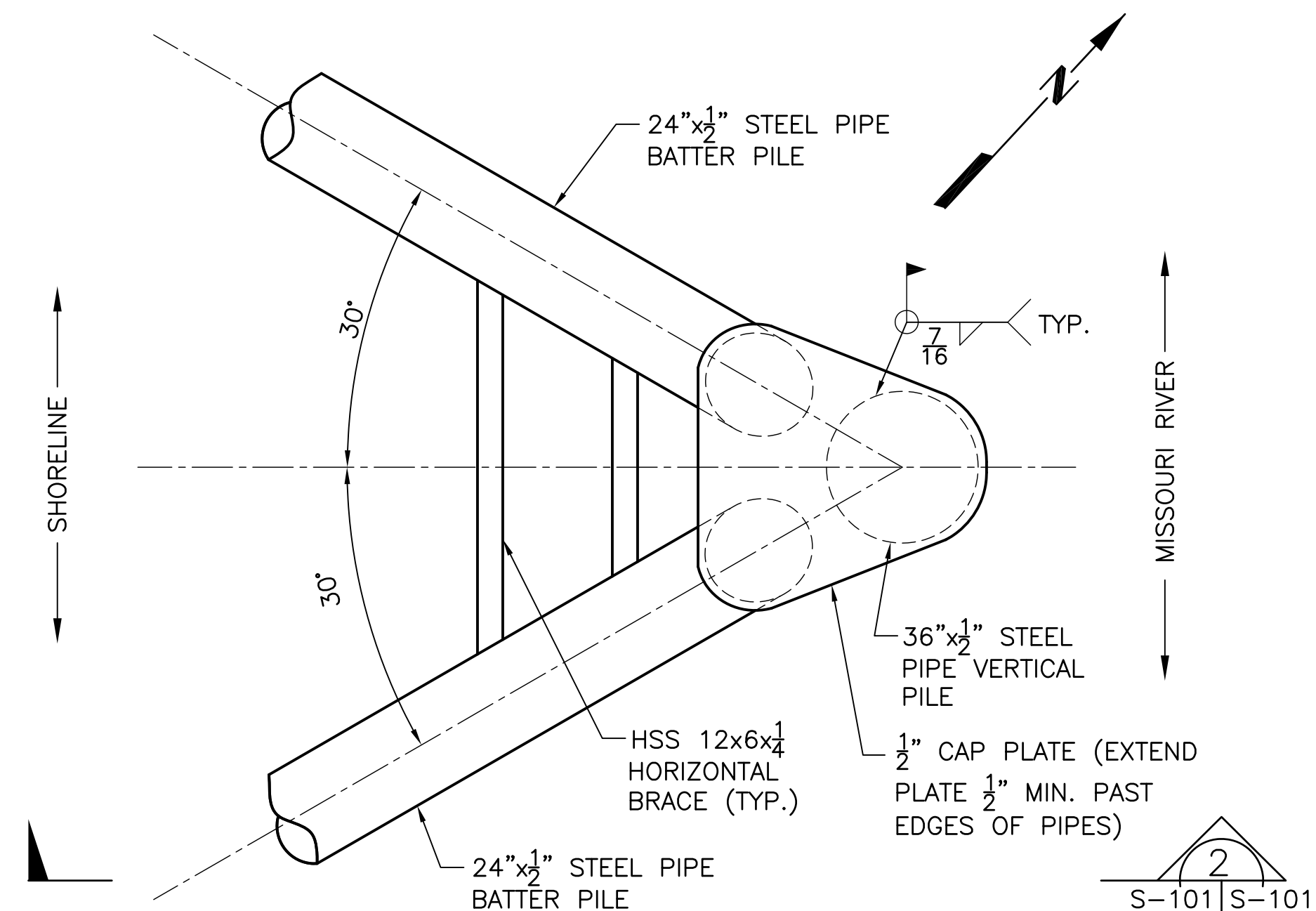
S-001

SHEET 2 OF 4

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SOUTHEAST DOLPHIN ELEVATION 2  
SCALE: 3/16" = 1'-0" S-101 S-101



DOLPHIN PLAN AT TOP 1  
SCALE: 3/8" = 1'-0" S-101 S-101

**TranSystems**  
2400 PERSHING ROAD  
SUITE 400  
KANSAS CITY, MO 64108  
PHONE: 816-325-8600  
FAX: 816-325-8701

STATE OF MISSOURI  
MARCIA H. BOLTON  
REGISTERED PROFESSIONAL ENGINEER  
NUMBER E-2920160000  
10-15-18

**portkc**  
3000 WYANDOTTE, SUITE 100  
KANSAS CITY, MO 64105  
PHONE: 816-559-3750  
FAX: 816-559-3759

**MOORING DOLPHIN  
REPLACEMENT**  
1724 MARKET STREET  
KANSAS CITY, MO

REVISIONS:		DESCRIPTION	
MARK	DATE		

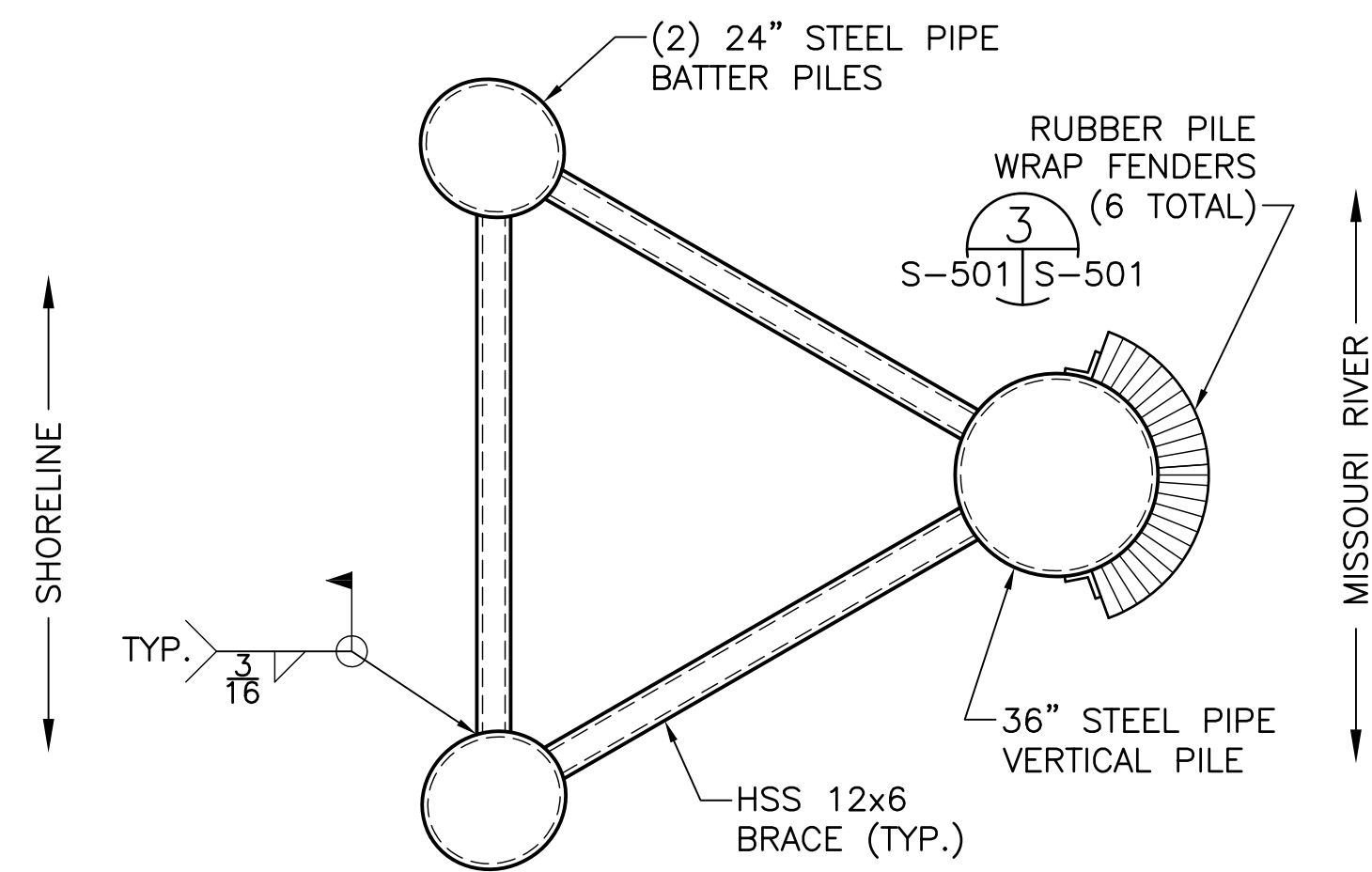
PROJ NO: P101160208  
SCALE: AS SHOWN  
DATE: 10/15/18  
DESIGNED BY: ESN  
DRAWN BY: ESN  
CHECKED BY: MMB

SHEET TITLE:

**DOLPHIN PLAN  
& ELEVATION**

SHEET NO.  
**S-101**  
SHEET 3 OF 4

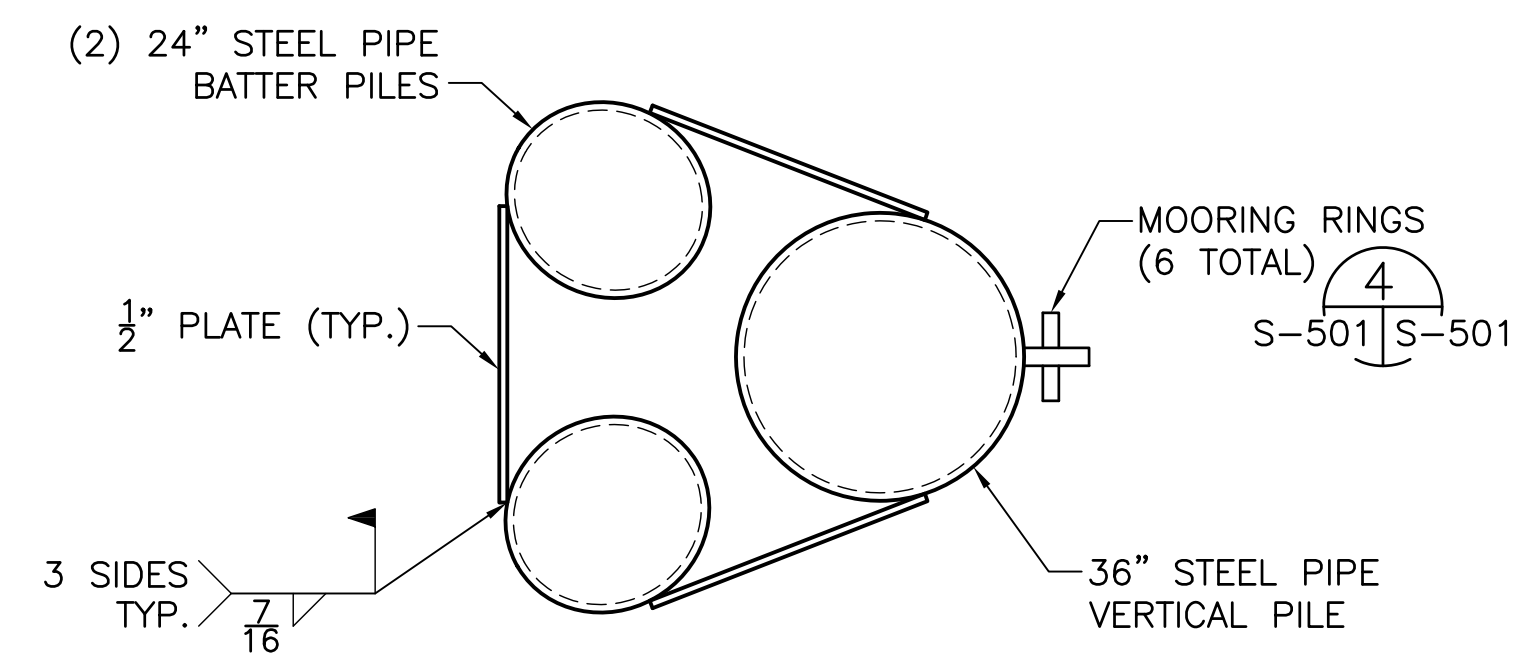




DOLPHIN SECTION AT BRACES

SCALE:  $\frac{3}{8}'' = 1'-0''$

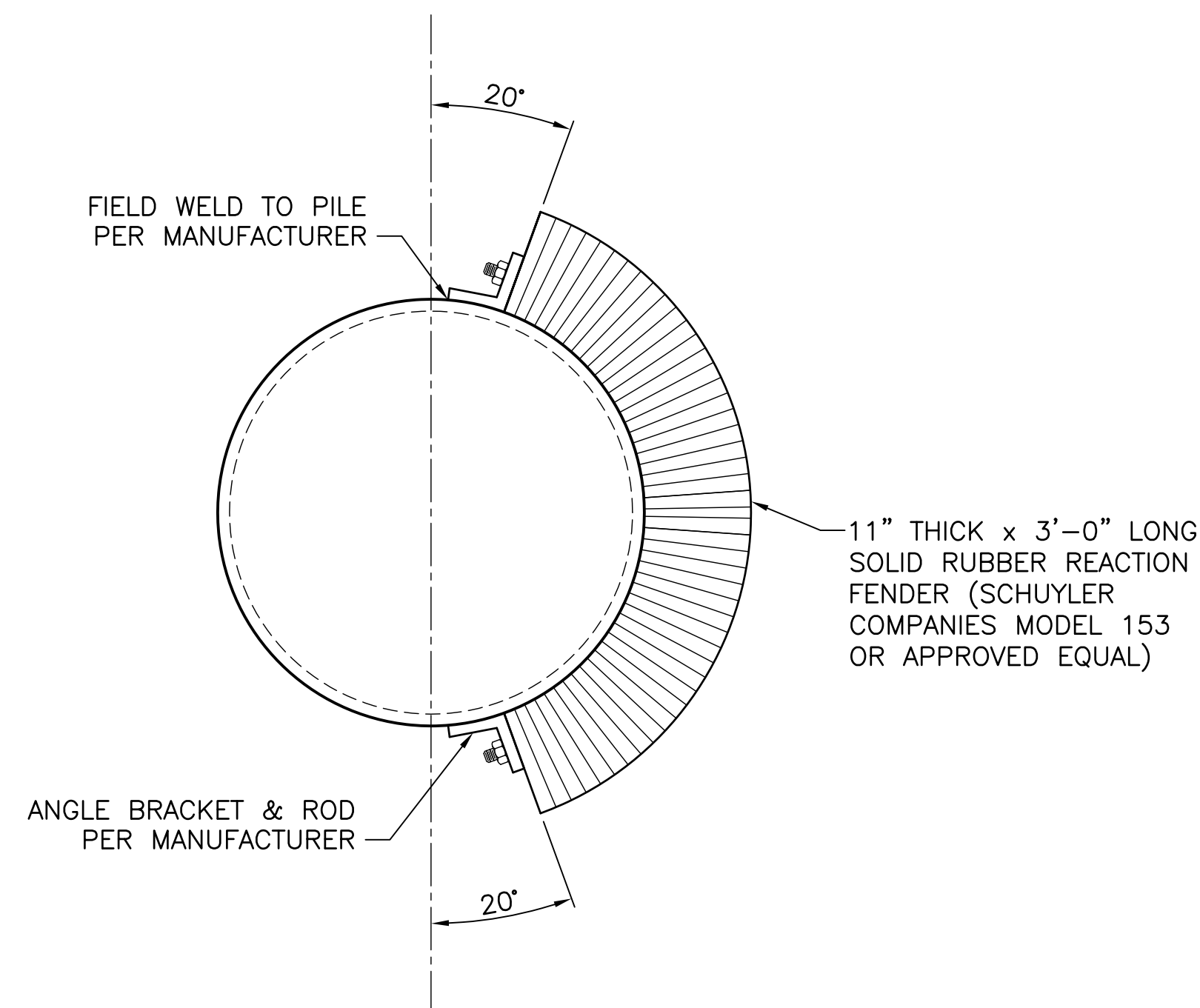
S-101 S-501



DOLPHIN SECTION AT TOP

SCALE:  $\frac{1}{2}'' = 1'-0''$

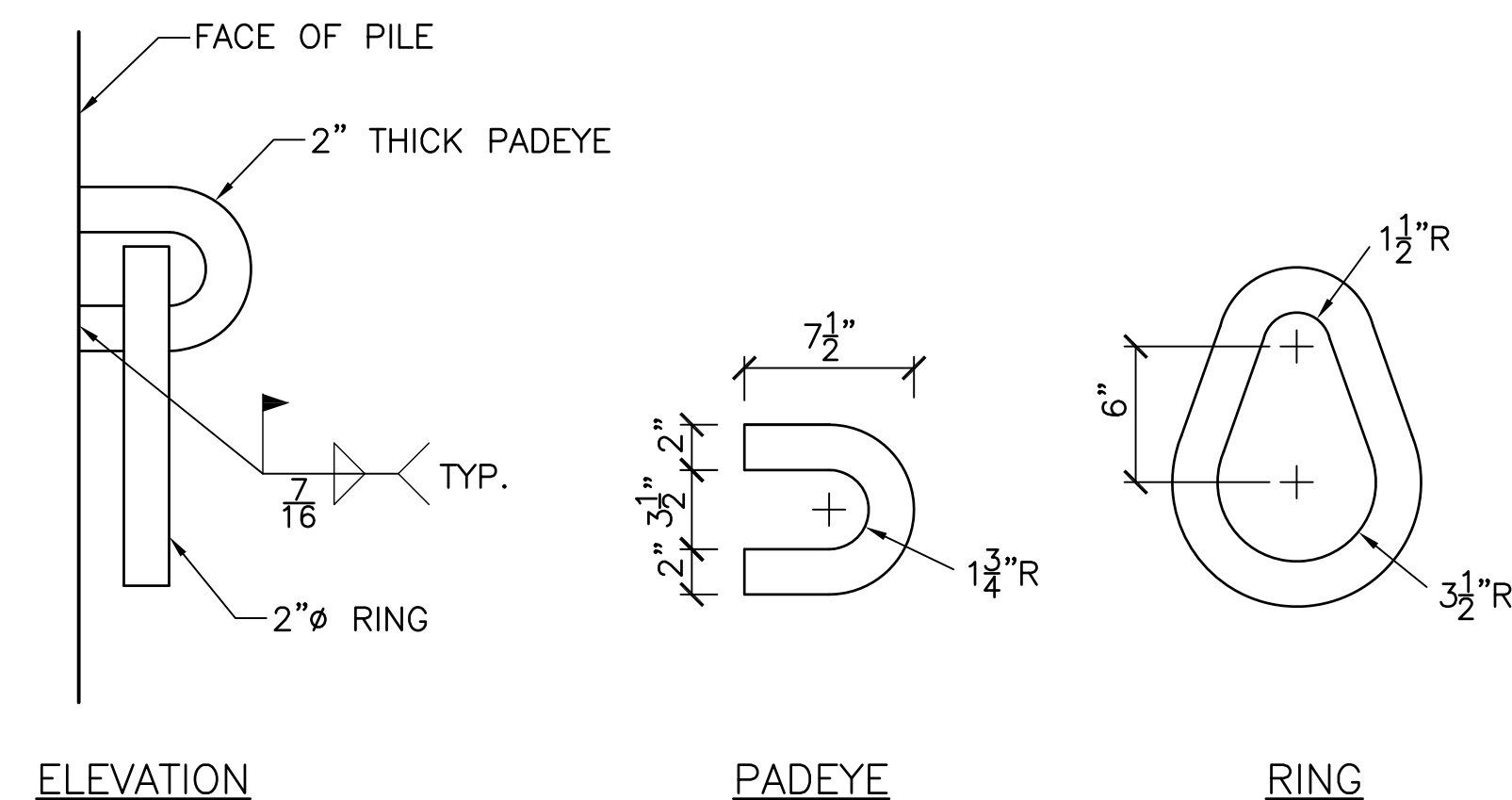
S-101 S-501



RUBBER FENDER DETAIL

SCALE: 1" = 1'-0"

S-501 | S-501



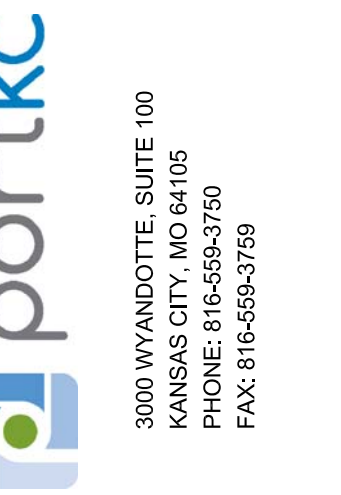
MOORING RING DETAIL

SCALE:  $1\frac{1}{2}" = 1'-0"$

S-501

4

S-501



MOORING DOLPHIN  
REPLACEMENT  
1724 MARKET STREET  
KANSAS CITY, MO

[illegible]

COJ NO: P101160208
SALE: AS SHOWN
DATE: 10/15/18
SIGNED BY: ESN
DRAWN BY: ESN
CHECKED BY: MMB

SHEET TITLE:

## DOLPHIN DETAILS

SHEET NO.  
**S-501**  
SHEET 4 OF 4