

**IN THE COUNTY LEGISLATURE OF JACKSON COUNTY, MISSOURI**

**A RESOLUTION** awarding a contract on Bid No. PW 05-2021 for the Buckner Tarsney Road Bridge Replacement Project, No. 3252, to WCI, Inc., of Paola, KS, at an actual cost to the County not to exceed \$593,605.00, and authorizing the Director of Public Works to approve line item adjustments under this contract at no additional cost to the County.

**RESOLUTION NO. 20701**, June 21, 2021

**INTRODUCED BY** Theresa Cass Galvin, County Legislator

WHEREAS, due to the deterioration of the bridge on Buckner Tarsney Road north of Ryan Road, the Director of Public Works has solicited formal written bids on Bid No. PW 05-2021 for the replacement of the bridge; and,

WHEREAS, he has received five bids thereon as follows:

<u>VENDOR</u>	<u>BID</u>
WCI, Inc. Paola, KS	\$593,605
Pyramid Excavation & Construction, Inc. Kansas City (Jackson County), MO	\$597,988
Radmacher Brothers Excavating Co., Inc. Pleasant Hill, MO	\$649,983
Tasco, LLC Kingsville, MO.	\$741,641
Kissick Construction Kansas City (Jackson County), MO	\$997,183

and,

WHEREAS, the Director of Public Works recommends that award be made to WCI, Inc.,

of Paola, KS, for the reason that it has submitted the lowest and best bid; and,

WHEREAS, in the event that line item adjustments to the contract become necessary, it is appropriate that the Director of Public Works be authorized to approve said line item adjustments, to the extent there is no additional cost to the County; now therefore,

BE IT RESOLVED by the County Legislature of Jackson County, Missouri, that award be made as recommended by the Director of Public Works and that the Director be and hereby is authorized to execute any documents necessary to the accomplishment of the award; and,

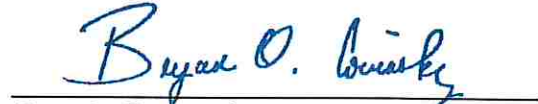
BE IT FURTHER RESOLVED that the Director of Public Works be and hereby is authorized to make adjustments in the contract line item quantities to the extent that there will be no further funding obligation to the County; and,

BE IT FURTHER RESOLVED that the Director of Finance and Purchasing is authorized to make all payments, including final payment on the contract.

Effective Date: This Resolution shall be effective immediately upon its passage by a majority of the Legislature.

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Chief Deputy County Counselor

  
\_\_\_\_\_  
County Counselor

Certificate of Passage

I hereby certify that the attached resolution, Resolution No. 20701 of June 21, 2021, was duly passed on June 28, 2021 by the Jackson County Legislature. The votes thereon were as follows:

Yeas 9

Nays 0

Abstaining 0

Absent 0

6.28.2021  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Mary Jo Spino, Clerk of Legislature

There is a balance otherwise unencumbered to the credit of the appropriation to which the expenditure is chargeable and there is a cash balance otherwise unencumbered in the treasury to the credit of the fund from which payment is to be made each sufficient to provide for the obligation herein authorized.

ACCOUNT NUMBER: 013 1507 58040  
ACCOUNT TITLE: County Improvement Fund  
Special Projects in Public Works  
Roads & Highways  
NOT TO EXCEED: \$593,605.00

6/17/2021  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Chief Administrative Officer



# CONTRACT

Date: August 6, 2021  
File No: 21-CRO-0195

**CONTRACTING PARTY/VENDOR:** WCI, INC.

**TYPE OF CONTRACT:** Resolution

**RESOLUTION/ORDINANCE NO:** R. 20701

**SUBJECT MATTER:** 2021 Buckner Tarsney Road Bridge Replacement Project, No. 3252

**CONTRACT AMOUNT:** \$593,605.00

**NUMBER OF ORIGINALS:** 6

**ORIGINATING DEPARTMENT:** Director of Public Works

**CONTACT PERSON:** Jenkins, Christopher

Department	Date Sent To Department	Dated Returned To Counselor
Originating Dept.		
Counselor	8-9-21	8-9-21
Finance	8-10-21	8-10-21
Clerk	8-11-21	8-11-21
Executive	8-9-21	8.9.21
Other Signature Needed (Optional)	N/A	N/A

**NOTES:**

**Return (3) To:**  
**County Counselor's Office, X13355**

R. 20701

**Contract Documents, Technical Specifications and Plans**

for

# **BUCKNER TARSNEY ROAD BRIDGE REPLACEMENT NORTH OF RYAN ROAD**

**County Project No. 3252  
Bid No. PW 05-2021  
March 30, 2021**

**Jackson County, Missouri  
Department of Public Works  
Engineering Division  
303 West Walnut Street  
Independence, Missouri 64050  
(816) 881-4530**

Director of Public Works – Brian Gaddie, PE  
Chief Engineer – Earl Newill, PE

Plans and Project Manual by Olsson Assoc – Grant Luckenbill, P.E.

Project Manual by JCPW – Chris Jenkins

JCPW Project Manager – Earl Newill

JCPW Project Manager Telephone– 816-881-4538

**FILED**

**AUG 11 2021**

**MARY JO SPINO  
COUNTY CLERK**



**GM PETERS INSURANCE**  
SINCE 1915

July 12, 2021

Jackson County, Missouri  
303 West Walnut Street  
Independence, MO 64050

Re: WCI, Inc.  
Bond No.: GRMO51702  
Project: **Buckner Tarsney Road Bridge Replacement North of Ryan Road Project #3252**

To Whom It May Concern:

Please use this letter as your authority to date the Bonds and Power of Attorney the same date as the contract. Upon signing of the contract, please advise us of the contract date, or forward us a copy of the dated and signed contract.

Thank you for your assistance and please call if you have any questions.

Sincerely,

Peggy Marrs  
Attorney-in-fact



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**APPENDICES**

Paint, Geotextile, Sealer, 404 Permit, Geotech Report, and No-Rise Certificate ..... A thru F

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# **BIDDING REQUIREMENTS**

## ADVERTISEMENT FOR BIDS

**JACKSON COUNTY, MISSOURI  
PUBLIC WORKS – ENGINEERING DIVISION  
BUCKNER TARSNEY ROAD BRIDGE REPLACEMENT NORTH OF RYAN ROAD  
COUNTY PROJECT NO. 3252 - COUNTY BID NO. PW 05-2021**

Bid documents will be available on **March 30, 2021**, for the **Buckner Tarsney Road Bridge Replacement North of Ryan Road**. All sealed proposal bids must be submitted to the office of the Director of Public Works, Engineering Division, 303 West Walnut Street, Independence, Missouri 64050, prior to 2:00 PM on **April 20, 2021**. Sealed proposals will be opened on **April 20, 2021** at 2:05 PM at that same address.

**Project Location:** Buckner Tarsney Road Bridge Replacement approximately 1,075 feet North of the intersection of Buckner Tarsney Road and Ryan Road in Unincorporated Jackson County, MO.

**Project Work Includes:** The General Contractor shall furnish all materials, equipment, tools and labor required to perform the following on Buckner Tarsney Rd Bridge: 1. The demolition of the existing bridge & roadway as shown on the plans. 2. Construction of a new Double 12' x 9' Reinforced Concrete Box. 3. Install new Cast-In-Place retaining walls. 4. Install guardrail systems. 5. Approximately 365' of roadway work. 6. All other incidental work in the most substantial and workmanlike manner for the bridge, and do everything required by the Contract Documents as defined herein.

Any Bidder, who has special needs addressed by the Americans with Disabilities Act, should notify the Project Manager at the number listed below, or through the Missouri Relay System. Jackson County hereby notifies all Bidders that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, disadvantaged, minority and women business enterprises 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, gender or national origin, in consideration for an award. Furthermore, a 9.5% MBE (Minority Business Enterprise), 11.7% WBE (Women Business Enterprise), and 9.5% VBE (Veterans Business Enterprise) goals as established by the Compliance Review Office (CRO) are part of this contract. Contractor shall comply with all requirements of Jackson County Ordinance No. 4636. Contractor shall ensure that it and its subcontractors collectively meet both the MBE, WBE, and VBE goals established by the County or show good faith effort as to why those goals could not be met and comply with all reporting requirements.

The sealed Proposals and Bid must be made on the forms provided in the contract documents. Each Proposal must include: 1) the completed bidding documents; 2) a cashier's check drawn on an acceptable bank, or an acceptable bidder's bond, in an amount not less than five (5) percent of the total amount of the bid (all surety performance bonds and surety labor and material bonds must be with companies listed in the Department of the Treasury, Federal Register); and, 3) a completed **CERTIFICATE OF COMPLIANCE** with current (issued within the last 12 months) Jackson County Certificate of Compliance attached. Failure to complete this report or attach a current certificate as outlined above may result in the rejection of the bid. For information contact the Compliance Review Officer at (816) 881-3302.

Specifications, and other proposed Contract documents may be secured from the Engineering Division, 303 West Walnut Street, Independence, Missouri 64050, during regular business

hours 7:30 AM to 4:00 PM. A fee of **\$20.00** will be required for each set of contract documents. Fees are not refundable. For an additional \$15.00 fee, plans can be mailed. Checks, if used for payments of deposits, shall be made in favor of the Manager, of Finance.

Bidders may also view and print contract documents for free on line at <http://www.jacksongov.org/322/Bids-RFPs-RFQs>. This website contains a link to the Public Purchase, a web-based e-Procurement service for posting and receiving Public Works related bids. Any bidder using on-line documents must check the website periodically for Notice of Addendums or call the Project Manager at the number listed below.

The successful Bidder, as a condition of the award of this contract must:

Have a surety company which (1) meets the minimum standard for an insurance carrier which currently is in effect for all coverage's purchased by Jackson County; and (2) is on the most current United States Treasury list as a surety whose bonds are acceptable to the United States Government.

The project will be awarded to the lowest, responsive, responsible bidder.

This project will be inspected by Jackson County, or its agent. For project information call Project Manager, Earl Newill at 816-881-4538. Design Plans and Project Manual both Grant Luckenbill, P.E., Olsson Associates Project Manager, Office: 913-748-2506 or Cell: 816-284-9204, or Chris Jenkins, JCPW Project Manager, at 816-881-4429 for project information.

## **INSTRUCTIONS TO BIDDERS**

1. **PROPOSALS**: Each Proposal shall be legibly printed in ink or typed on the form provided with this bound copy of the Contract documents. No alterations in Proposal, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the bidder; if initialed, the County may require the bidder to verify any alteration. No alteration in the Proposal, or in the form, on which it is submitted, shall be made after the Proposal has been submitted. All addenda to the Contract documents, properly signed by the Bidder, shall accompany the Proposal at the time of submittal.

Each Proposal shall be sealed in an envelope. The envelope shall be marked on the outside with the words "**FOR BIDDING PURPOSES – Buckner Tarsney Road Bridge Replacement North of Ryan Road, County Project Number: 3252**".

No Bidder may submit more than one Proposal. Multiple Proposals from one firm or enterprise, but presented under different names, will not be accepted.

2. **NO PRE-BID SITE MEETING FOR THIS PROJECT**:
3. **BIDDER QUESTIONS / ADDENDA**: All questions shall be submitted in writing, with the final submittal accepted at 9:00 a.m. on April 13, 2021. Answers to questions will be provided via addenda issued by 5:00 p.m. on April 15, 2021.
4. **STATE SALES TAX EXEMPTION**: Jackson County is an exempt entity under 144.062, Revised Statutes of Missouri, and will issue the contractor and subcontractors an exemption certificate. Bidders are instructed not to include sales tax in their prices.
5. **PROPOSAL GUARANTEE**: Each Proposal shall be accompanied by a cashier's check drawn on an acceptable bank or an acceptable bidder's bond, in an amount not less than five percent (5%) of the total amount of the bid. **Bids received without a Bid Guarantee or a Bid Bond will not be considered.**  
The successful Bidder, as a condition of the award of this contract must have a surety company which: (1) meets the minimum standard for an insurance carrier which currently is in effect for all coverage's purchased by Jackson County; and (2) is on the most current with United States Department of the Treasury list as a surety whose bonds are acceptable to the United States Government. See the following website:  
[http://www.fiscal.treasury.gov/fsreports/ref/suretyBnd/c570\\_a-z.htm](http://www.fiscal.treasury.gov/fsreports/ref/suretyBnd/c570_a-z.htm) to the Department of the Treasury's Listing of the Certified Companies for Surety Bonds as part of the Financial Management Service, a Bureau of the United States Department of the Treasury.

The Proposal Guarantee shall be made payable without condition to Jackson County, Missouri, hereinafter referred to as County. The Proposal Guarantee may be retained by and shall be forfeited to the County as liquidated damages if the Proposal is accepted and a Contract based thereon is awarded and the bidder should fail to enter into a Contract in the form prescribed, with legally responsible sureties, within ten (10) days after such award is made by the County.

6. **RETURN OF PROPOSAL GUARANTEE**: The Proposal Guarantee deposit of each unsuccessful bidder will be returned upon request, when their Proposal is rejected. Similarly, the Proposal



Guarantee deposit of the Bidder, to whom a Contract is awarded, will be returned when they execute a Contract and file a satisfactory performance bond. The Proposal deposit of the second lowest responsible bidder may be retained for a period not to exceed ninety (90) days, pending the execution of the contract and bond by the successful Bidder.

7. **WITHDRAWAL OF BID:** No bidder may withdraw their Proposal for ninety (90) days after the date and hour set for the opening. A bidder may withdraw their Proposal any time prior to expiration of the period during which Proposals may be submitted by a written request signed in the same manner and by the same person who signed the Proposal.
8. **ACCEPTANCE AND REJECTION OF BIDS:** The County reserves the right to accept the bid which, in its judgement, is the lowest and best bid; to reject any or all bids; and to waive irregularities or informalities in any bid. Bids received after the specified time of closing will be returned unopened.
9. **SIGNATURE OF BIDDERS:** Each bidder shall sign their Proposal using their usual signature and giving their full business address. Bids by partnerships shall be signed with the partnership name followed by the signature and designation of one of the partners or other authorized representative(s). Bids by corporations shall be signed with the name of the corporation followed by the signature and designation of the president, secretary, or other person authorized to bind the corporation. The names of all persons signing should also be typed or printed below the signature. A bid by a person who affixed to their signature the word "president", "secretary", "agent", or other designation without disclosing their principal, may be held to be the bid of the individual signing. When requested by the County, satisfactory evidence of the authority of the person signing shall be furnished.
10. **INTERPRETATION OF CONTRACT DOCUMENTS:** If any person who contemplated submitting a bid is in doubt as to the true meaning of any part of the Plans, Specifications, or other proposed Contract Documents, they may submit to the engineer a written request for an interpretation thereof. The person submitting the request shall be responsible for its prompt delivery. Interpretation of the proposed Contract documents will be made only by addendum. A copy of each addendum will be mailed or delivered to each person obtaining a set of Contract documents from the Director of Public Works. The County will not be responsible for any other explanations or interpretations of the proposed Contract documents.
11. **LOCAL CONDITIONS AFFECTING WORK:** Each Bidder shall visit the site of the work and shall completely inform themselves relative to construction hazards and procedure, labor, and all other conditions and factors, local and otherwise, which would affect prosecution and completion of the work and its cost. Such considerations shall include the arrangement and condition of existing structures and storage facilities, the procedure necessary for maintenance of uninterrupted operation of existing facilities for transportation, handling, and storage of materials and equipment. All such factors shall be properly investigated and considered in the preparation of the bidder's proposal. There will be no subsequent financial adjustment for lack of such prior information.
12. **INSURANCE:** Throughout the life of the contract, the contractor will be required to carry the types and amounts of insurance named in the General Conditions paragraph GC-33.
13. **PAYMENTS:** Payment for all work performed under the proposed Contract will be made by the County in the manner set forth in the Special Conditions.

14. **TIME OF COMPLETION:** The time of completion is an essential part of the contract and it will be necessary for each bidder to satisfy the County of their ability to complete the work within the allowable time set forth in the Proposal. In this connection, attention is directed to the provisions of the General Conditions and Special Conditions relative to delays, extensions of time, and liquidated damages.
15. **QUALIFICATIONS OF BIDDERS:** The Director of Public Works reserves the right to inspect and approve the bidder's equipment before the award of contract. Both the prime contractor and all potential subcontractors must comply with all Affirmative Action provisions of this contract. The Contractor's attention is directed to the General Conditions paragraph GC-37 regarding subcontractors and to the Affirmative Action sheets given in the bid documents. The contractor shall identify all potential subcontractors on or before the bid opening, whether or not they eventually request that they be approved, on this Affirmative Action sheet.
16. **MINORITY, WOMEN & VETERAN BUSINESS ENTERPRISE UTILIZATION:** Contractor shall comply with all requirements of Jackson County Ordinance No. 4636. Contractor shall ensure that it and its subcontractors collectively meet the MBE, WBE, and VBE goals established by the County, or show good faith effort as to why those goals could not be met, and comply with all reporting requirements.
17. **TAXES AND PERMITS:** Attention is directed to the requirements of the **TAX CLEARANCE FORM** regarding payment of taxes.
18. **PERFORMANCE BOND:** Each Bidder to whom a contract is awarded will be required to furnish a performance bond to the County in an amount equal to one hundred percent (100%) of the Contract Price. All surety performance and surety labor and material bonds must be with companies listed in the Department of the Treasury, Federal Register as surety companies acceptable on federal bonds. Accompanying the bond shall be a "Power of Attorney" authorizing the attorney-in-face to bind the surety company and certified to include the date of the bond.
19. **BID SUBMITTAL:** The bidder's attention is called to the packet, marked "FOR BIDDING PURPOSES", which is included with the bound copy. All necessary forms for bid submittal are found therein. **USE THE PACKET FORMS FOR SUBMITTING BIDS** instead of the proposal forms bound with the Specifications.
20. **COPIES OF PLANS AND SPECIFICATIONS:** Copies of the plans and specifications for use in preparing bids may be obtained from the Jackson County Public Works Department, Engineering Division, 303 West Walnut Street, Independence, Missouri 64050. A fee of **\$20.00** shall be required for each set of contract documents. Fees will not be refunded. Checks are to be made in favor of Manager, of Finance, Jackson County, Missouri.
21. **BUSINESS EXPECTANCY:** The lowest bidder shall not be considered as having received business expectancy merely because of submitting the lowest bid. Business expectancy does not exist until the contract is awarded by the Jackson County Legislature.
22. **RETAINAGE:** Contractor's attention is directed to the Special Conditions, which provides for a reduced retainer as long as the project schedule is maintained.

23. **WAGE LAW:** The Contractor shall comply with all requirements of the prevailing wage law of Jackson County, Missouri Chapter 19 Prevailing Wage Compliance Program, including the latest amendments thereto.
24. **ADDITIONAL INFORMATION:** The County, in its sole discretion, may request additional information from any or all bidders.
25. **SUBSTITUTIONS:**
- A. Prior to receipt of bids, should bidder wish to incorporate in Base Bid, brands or products other than those named in Drawings and Specifications, he shall submit, on the form included herein, a written request for substitution to Engineer no later than 5:00 p.m. on **April 13, 2021**. Engineer will consider requests, and items approved will be listed in an Addendum issued to principal bidders.
  - B. By making requests for substitutions the bidder:
    - 1. Represents that the bidder has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to the product specified.
    - 2. Represents that the bidder will provide the same warranty for the substitution that would be provided for that specified.
    - 3. Will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.
26. **DISCUSSIONS AND NEGOTIATIONS:** The County, in its sole discretion, may do any or all of the following:
- A. Evaluate bids and award a contract with or without discussions or negotiations with any or all of the bidders;
  - B. Discuss and negotiate anything and everything with the apparent low bidder at any time.
  - C. Request additional information from any or all bidders;
  - D. Request that the apparent low bidder submit his schedule of values or costs for any item in the bid and discuss or negotiated a lesser price for this item.
  - E. Request that the apparent low bidder enter into a period of discussion with the intent to value engineer, or find items of work which can be reduced in cost to the county and lower the bid price.

SUBSTITUTION REQUEST

TO: CHRIS JENKINS  
JACKSON COUNTY PUBLIC WORKS  
ENGINEERING DIVISION  
303 W. WALNUT  
INDEPENDENCE, MO. 64050

PROJECT: BUCKNER TARSNEY ROAD BRIDGE REPLACEMENT NORTH OF RYAN ROAD  
COUNTY PROJECT NO. 3252

<u>Section Page</u>	<u>Paragraph</u>	<u>Description</u>
---------------------	------------------	--------------------

PROPOSED SUBSTITUTION: \_\_\_\_\_

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identifying applicable data portions. Included is highlighted information of comparative product elements from both specified and proposed substitution. Attached data also includes description of changes to Contract Documents and proposed substitution required for its proper installation.

Undersigned certifies following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on Drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by
3. proposed substitution.
4. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
5. Maintenance and service parts available locally or readily obtainable for proposed substitution.

Undersigned further certifies function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Submitted by:

Dale Klaasmeier WCI Inc  
Name (Print) \_\_\_\_\_  
DLK For use by JCPW  Approved  Approved as Noted  
Signature \_\_\_\_\_  Not Approved  Received too late  
WCI Inc \_\_\_\_\_  
Firm Name JCPW Representative Date  
2560601d KC Rd \_\_\_\_\_  
Firm Address \_\_\_\_\_  
Paula, KS (66071) \_\_\_\_\_  
Firm City, State, Zip Remarks \_\_\_\_\_  
913-783-4389 \_\_\_\_\_  
Telephone JCPW Remarks

**THIS SHEET LEFT BLANK INTENTIONALLY.**

PROPOSAL

**Jackson County, Missouri**

**TO THE JACKSON COUNTY LEGISLATURE  
KANSAS CITY, MISSOURI**

THE UNDERSIGNED BIDDER, having examined the Plans, Specifications, General and Special Conditions, Appendix, other proposed Contract documents, and all addenda thereto; and being acquainted with and fully understanding; (a) the extent and character of the work covered by this Proposal; (b) the location, arrangement, and specified requirements of the proposed work; (c) the location, character, and condition of existing streets, roads, highways, railroads, pavements, surfacing, walks, driveways, curbs, gutters, trees, sewers, utilities, drainage courses and structures, and other installations both surface and underground, which may affect or be affected by the proposed work; (d) the nature, extent and type of excavations to be made, character and general conditions of materials to be excavated; (e) the necessary handling and re-handling of excavated materials, including construction of fills and embankments; (f) the location and extent of necessary or probable de-watering requirements; (g) the difficulties and hazards to the work which might be caused by storm and flood-water; (h) local conditions relative to labor, transportation, hauling, and rail delivery facilities; and (i) all other factors and conditions affecting or which may be affected by the work.

HEREBY PROPOSED, furnish all required materials, supplies, equipment, tools, and plant, to perform all necessary labor and supervision; and to construct, install, erect, equip, and complete all work stipulated as required by, and in accordance with the contract documents and the plans, specifications, and other documents referred to herein (as altered, amended, or modified by all addenda thereto) for and in consideration of the prices included in this proposal.

The undersigned bidder agrees to furnish the required bond and to enter into a contract within ten (10) calendar days after acceptance of the Proposal, and further agrees to complete the entire work covered in the contract award within **Ninety (90) WORKING DAYS** from the Notice to Proceed, after the date designated in a written order from the County to begin work thereon unless otherwise indicated on their proposal form. **90 Workings Days for the overall project and the Work Zone Closure area 60 Calendar Days.**

Each Proposal submitted must be accompanied by a cashier's check or Proposal Guarantee bond in a minimum amount of five (5%) percent of the total amount of the bid. Checks shall be made in favor of Manager, Division of Finance, Jackson County, Missouri. Upon failure or refusal of the successful bidder to execute and deliver the contract and bond required within ten (10) days after they have been notified of the award of the Contract to them, as liquidated damages for such failure or refusal, the County may recover the full amount of the bond or in the event a cashier's check is furnished, an amount not-to-exceed five (5%) percent of the total amount of the bid.

In submitting this bid, it is understood that the right is reserved by the County to reject any and all bids, or to accept or reject any portion of any bid, and it is understood that this bid may not be withdrawn during a **period of ninety (90) days** after the scheduled time for the receipt of bids.

The undersigned bidder hereby certifies: (a) that this bid is genuine and is not made in the interest of, or in the behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; (b) that they have not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; (c) that they have not solicited or induced any person, firm or corporation to refrain from bidding; and (d) that they have not sought by collusion to obtain for themselves any advantage over any other bidder or over the County.

PROPOSAL (continued)

**ADDENDA CERTIFICATION**

The undersigned acknowledges receipt of addenda through and including numbers  
n/a, and that the bid submitted is in accordance with information,  
instructions and stipulations set forth thereby.

DLK  
Authorized Signature of Bidder

WCI Inc  
Company Name

4/20/2021  
Date

**BID FORM**



Jackson County, Missouri  
 Public Works Department – Engineering Division

**PROPOSAL FOR  
 BUCKNER TARSNEY ROAD BRIDGE  
 REPLACEMENT NORTH OF RYAN ROAD**  
 County Project No. 3252, Bid No. PW05-2021

Item No.	Description	Quantity	Units	Unit Price	Total Price
	<b>ROADWAY</b>				
1	Mobilization	1	LUMP SUM	7500.00	7,500.00
2	Removal of Improvements	1	LUMP SUM	23,580.00	23,580.00
3	Contractor Furnished Surveying & Staking	1	LUMP SUM	4,000.00	4,000.00
4	Clearing and Grubbing	0.8	ACRE	11,000.00	8,800.00
5	2" Milling	497	SQ. YD.	14.00	6,958.00
6	Asphaltic Concrete Mixture APWA Type 5-01 Surface	150	TON	118.00	17,700.00
7	Asphaltic Concrete Mixture APWA Type 5-01 Base	410	TON	112.00	45,920.00
8	Tack Coat	130	GALLON	5.50	715.00
9	Type 5 Aggregate for Subbase (6 in Thick)	800	SQ. YD.	6.25	5,000.00
10	Earthwork	1	LUMP SUM	16,400.00	16,400.00
11	Type 2 Rock Blanket (24" Thick) with Geotextile	261	CU. YD.	85.00	22,185.00
12	Guardrail	300	LIN. FT.	44.00	13,200.00



**JACKSON COUNTY PUBLIC WORKS  
BUCKNER TARSNEY RD BRIDGE REPLACEMENT N OF RYAN RD**

**COUNTY PROJECT 3252  
COUNTY BID NO. PW 05-2021**

13	MSKT TL-3 End Terminal	4	EACH	3,500.00	14,000.00
	<b>EROSION CONTROL</b>				
14	Silt Fence	645	LIN. FT.	3.75	2,418.75
15	Rock Ditch Check	133	LIN. FT.	29.00	3,857.00
16	Wattle Log	130	LIN. FT.	14.00	1,820.00
17	Biodegradable Log Inlet Protection	25	LIN. FT.	14.00	350.00
18	Concrete Washout	1	EACH	450.00	450.00
19	Hydro Seed & Mulch	0.8	ACRE	3,000.00	2,400.00
	<b>SIGNING AND STRIPING</b>				
20	4" Solid White Edge Line (Paint)	730	LIN. FT.	2.00	1,460.00
21	4" Solid Yellow Centerline (Paint)	730	LIN. FT.	2.00	1,460.00
	<b>STORM SEWER</b>				
22	Cleanout Existing 15" CPP	1	LUMP SUM	800.00	800.00
23	Precast Concrete Type S-2 Inlet, 3' x 5'	1	EACH	8800.00	8800.00
24	Precast Concrete Area Inlet, 6' x 6'	1	EACH	9,000.00	9,000.00
25	30" CMP Flared End Section	1	EACH	1,250.00	1,250.00
26	30" CMP	4.5	LIN. FT.	150.00	675.00 <sup>02</sup>
27	36" RCP (Class III)	170	LIN. FT.	215.00	36,550.00
28	Pipe Collar (30")	1	EACH	1500.00	1500.00

	BRIDGE AND RETAINING WALLS				
29	Removal of Structure	1	LUMP SUM	7,200.00	7,200.00
30	KCMMB 5K Concrete (Culverts)	198.5	CU. YD.	787.00	156,219.50
31	KCMMB 5K Concrete (Retaining Walls)	95.7	CU. YD.	787.00	75,315.90
32	Mechanical Bar Splice	108	EACH	15.00	1,620.00
33	Diversion Dam	1	LUMP SUM	1,000.00	1,000.00
34	Seal Course (3" Concrete Grade Slab)	1	LUMP SUM	9,000.00	9,000.00
35	Granular Bedding Material	250.0	CU. YD.	50.00	12,500.00
36	Traffic Control	1	LUMP SUM	42,000.00	42,000.00
37	Force Account	1	LUMP SUM	\$30,000.00	\$30,000.00
<b>Total Bid for Project =</b>					<b>593,604.15</b>

*five hundred ninety three thousand six hundred four and 15/100*  
 Total Amount of Bid for Project (Typed or Written)

*WCI Inc*  
 Firm Name

**Note: The County reserves the right to adjust the quantities up or down to any and all bid items to accommodate the available funds.**

PROPOSAL (continued)

The undersigned states that this Proposal is made in the character or capacity checked in this paragraph, that they are the agent of, and is duly authorized to sign for:

WCI Inc  
Legal Name of Firm

and that the Proposal is signed with the full understanding of the plans, provisions, specifications, and the foregoing terms of the Proposal.

- |                                     |   |                          |                     |
|-------------------------------------|---|--------------------------|---------------------|
| <input type="checkbox"/>            | Missouri Individual   | <input type="checkbox"/> | Foreign Individual  |
| <input type="checkbox"/>            | Missouri Partnership  | <input type="checkbox"/> | Foreign Partnership |
| <input type="checkbox"/>            | Missouri Corporation<br>Licensed in Missouri  | <input type="checkbox"/> | Foreign Corporation |
| <input checked="" type="checkbox"/> | Individual or Partnership, Missouri or Foreign, doing business in Missouri under fictitious name, registered in the office of Secretary of State. |                          |                     |

Dated at Paola, Kansas  
City, State

this 20 day of April, 2021

SIGNATURES

Name and Address of all Partners

<u>Kathy Kloosmayer</u>	<u>Pres</u>
<u>DK</u>	<u>Sec</u>
_____	_____
_____	_____
_____	_____

DK  
Authorized Signature

Sec  
Title of Person Signing

Attest (Seal)

**BID BOND**



Project Number County Project No. 3252 - County Bid No. PW 05-2021  
Project Title Buckner Tarsney Road Bridge Replacement North of Ryan Road  
Bond Number N/A

**KNOW ALL MEN BY THESE PRESENTS:** That WCI, Inc of Paola, KS 66071, as Principal, and Granite Re, Inc. as Surety, hereby bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents unto JACKSON COUNTY, MISSOURI, a constitutionally home rule chartered governmental organization, as Obligee, in the sum of

Five Percent of amount of bid Dollars (\$ 5% ), lawful money of the United States.

**WHEREAS**, Principal is herewith submitting its Bid to enter into a contract with Jackson County for the above referenced project,

**NOW, THEREFORE** the condition of this obligation is such that if the Principal is awarded the contract the Principal will, within the time required, enter into a contract and give a good and sufficient surety bonds to secure the performance of the terms and conditions of the contract and for the prompt payment of all labor and material furnished in the prosecution thereof as required by the contract documents, then this obligation shall be void; otherwise the Principal and Surety will immediately pay unto the Obligee the full amount of this bond as liquidated damages for failure to fulfill the conditions of this obligation, but in no event shall the Surety's liability exceed the penal sum hereof.


Signed, sealed and delivered this 20th day of April, 2021.

**BIDDER AND PRINCIPAL**

Name, address and facsimile number of Bidder and Principal

WCI, Inc.  
25606 Old KC Road, Suite B  
Paola, KS 66071  
Fax 913-783-4642

I hereby certify that I have authority to execute this document on behalf of Bidder and Principal.

By:   
Title: Sec

(Attach corporate seal if applicable)

**SURETY**

Name, address and facsimile number of Surety:

Granite Re, Inc.  
14001 Quallbrook Drive  
Oklahoma City, OK 73134  
Fax 405-769-6800

I hereby certify that (1) I have authority to execute this document on behalf of Surety; (2) Surety has an A.M. Best rating of A- or better; (3) Surety is named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (most current revision) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury; and (4) Surety is duly licensed to issue bonds in the State of Missouri and in the jurisdiction in which the Project is located.

By: Peggy Marrs Peggy Marrs  
Title: Attorney-in-fact  
Date: April 20, 2021

(Attach seal and Power of Attorney)



PROPOSAL (continued)

**ACKNOWLEDGEMENT**

STATE OF Kansas )  
COUNTY OF Miami ) ss.

Dale Haasvener  
Printed Name of Authorized Person with Bidding Entity

being duly sworn, deposes and says that they are

Sec, with  
(Title of Person Signing)

WCI Inc  
(Name of Bidding Organization)

and that the answers to the foregoing questions and all statements therein contained are true and correct.

[Signature] Date 4/20/2021  
(Signature of Authorized Person with Bidding Entity)

Sworn to before me this 20 day of April, 2021.

[Signature]  
Notary Public

My commission expires 3/3/2024



PROPOSAL (continued)

**ANTI-COLLUSION STATEMENT**

STATE OF Kansas )  
COUNTY OF Miami ) ss.

Dale Klaasmeier  
(Printed Name of Authorized Person with Bidding Entity)

being duly sworn, deposes and says that they are

Sec, with  
(Title of Person Signing)

WCI Inc  
(Name of Bidding Organization)

and that all statements made and facts set out in the proposal for the above project are true and correct, and that the bidder (the person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise competitive bidding in connection with such bid or any contract which may result from its acceptance.

Dale Klaasmeier Date 4/20/2021  
(Signature of Authorized Person with Bidding Entity)

Affiliate further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By \_\_\_\_\_  
By \_\_\_\_\_  
By \_\_\_\_\_

Sworn to before me this 20 day of April, 2021.

Jessica Oakvig  
Notary Public

My commission expires 3/3/2024





EQUIPMENT QUESTIONNAIRE

The undersigned hereby represents that they propose to perform the work in the following manner and with the following equipment:

a. The work, if awarded, will have the personal supervision of whom?

Dee Klaasmyer

b. List below the equipment that will be used or is available for use on this contract.

Quantity Item	Description, Size, Capacity, etc.	Condition	Years of Service	Present Location
3	Link-Belt excavators	new-201	2	Lees Summit
2	Takeuchi loaders	2018-19	2+3	Lees Summit
1	Hammer vibratory compactor	2017	4	Kearney
2	RD boom trucks	2016+17	3+4	Lees Summit

Attach additional sheets if required.

LIST OF CONTRACTS ON HAND

Location	Type of Work / Contracting Agency	Contract Price	Date	% Complete
Kearney M	RCB MoDot	772,000.-	2/21	20
NW Wilson	RCB Shawn Co.	234,000	2/21	90
McDonald Co	RFB MoDot	1,560,000	1/21	99
Osage Co	RFB + RCB KDot	790,000	3/21	15
Butter Co	RCB's Butte County	435,000	2/21	50

Attach additional sheets as required.

**AFFIDAVIT**

STATE OF Kansas )  
COUNTY OF Johnson ) SS.

Kathy Klaasmeyer of the City of Miffler

County of Lawrence State of Missouri being duly sworn on her or his oath, deposes and says;

1. That I am the President (Title of Affiant) of WCI, Inc. (Name of Bidder) and have authorized by said Bidder to make this Affidavit upon by best information and belief, after reasonable inquiry as to the representations herein.

2. No Officer, Agent or Employee of Jackson County, Missouri is financially interested directly or indirectly what Bidder is offering to sell to the County pursuant to this Invitation (though no representation is made regarding potential ownership of publicly traded stock of bidder).

3. If Bidder were awarded any contract, job, work or service for Jackson County, Missouri, no Officer, Agent or Employee of the County would be interested in or receive any benefit from the profit or emolument of such.

4. Either Bidder is duly listed and assessed on the tax rolls of Jackson County, Missouri and is not delinquent in the payment of any taxes due to the County or Bidder did not have on December 31, 2020 any property subject to taxation by the County and if bidder is duly listed and assessed on the tax rolls of Jackson County, Missouri, bidder agrees to permit an audit of its records, if requested by the Jackson County Director of Assessment, as they relate to the assessment of Business Personal Property.

5. Bidder has not participated in collusion or committed any act in restraint of trade, directly or indirectly, which bears upon anyone's response or lack of response to the Invitation.

6. Bidder certifies and warrants that Bidder or Bidder's firm/organization is not listed on the General Services Administration's Report of Debarred and/or Suspended Parties; or the State of Missouri and City of Kansas City, Missouri Debarment List.

7. Bidder certifies and affirms its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services.

8. Bidder certifies and affirms that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

WCI, Inc. (Name of Bidder)

By: Kathy Klaasmeyer (Signature of Affiant)

President (Title of Affiant)

Subscribed and sworn to before me this 6 day of May, 2021.

Jessica Oakvig (SEAL)  
NOTARY PUBLIC in and for the County of Johnson

State of Kansas My Commission Expires: March 3, 2024



**ANNUAL WORKER ELIGIBILITY VERIFICATION AFFIDAVIT**

(for joint ventures, a separate affidavit is require for each business entity)

STATE OF Kansas )  
COUNTY OF Miami ) ss

On the 20 day of April, 2021, before me appeared Dole Klaasmyer  
(Affiant name)

personally know to me or proved to me on the basis of satisfactory evidence to be a person whose name is subscribed to this affidavit, who being by me duly sworn, stated as follows:

• I, the Affiant, am of sound mind, capable of making this affidavit, and personally certify the facts herein stated as required by Section 285.530, RSMo, to enter into any contract agreement with the County to perform any job, task, employment, labor, personal services, or any other activity for which compensation is provided, expected, or due, including but not limited to all activities conducted by business entities.

• I, the Affiant, am the Sec of WCI Inc  
(Title) (Business Name)

and I am duly authorized, directed, and/or empowered to act officially and properly on behalf of this business entity.

• I, the Affiant, also hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security, and the aforementioned business entity shall participate in said program to verify the employment eligibility of newly hired employees working in connection with any services contracted by Jackson County, Missouri. I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo.

• I, the Affiant, also hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection with any services contracted by Jackson County, Missouri, any alien 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).

• I, the Affiant, am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.525, RSMo, the aforementioned business entity may be held liable under Sections 285.525 through 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the State of Missouri.

• I, the Affiant, acknowledge that I am signing this affidavit as a free act and deed of the aforementioned business entity and under duress.

Subscribed and sworn to before me, a Notary Public in and for Jackson County, Missouri, this

20 day of April, 2021.

My Commission Expires 3/3/2024

Jessica Oskvig  
Notary Public



**TAX CLEARANCE**

No person, firm, or corporation, resident in Jackson County, or otherwise legally within the taxing jurisdiction of the County, shall be eligible to provide any goods, contractual services or anything covered by the County Purchasing Ordinance, unless said person, firm, or corporation is duly listed and assessed on the County tax rolls and is in no way delinquent on any taxes payable to the County.

Where any individual, firm or corporation is a resident of Jackson County, or it otherwise appears that such firm is legally within the taxing jurisdiction of the County, and has made an offer, bid, or quotation for any County purchase, or has submitted an application to be given an opportunity to make quotations for County purchases, the Purchasing Manager shall cause a search to be made of the County tax rolls to determine the eligibility of that person, firm, or corporation under this section.

When the lowest responsible bidder is ineligible under this section, the Purchasing Manager may notify the bidder and allow three (3) days for the bidder to correct the deficiency or pay up any delinquency involved. If the bidder fails, after such notice, to comply within three (3) days, the Purchasing Manager shall proceed as though the lowest responsible bidder who is eligible under this section had entered the lowest bid.

Clerk of the Legislature  
Jackson County Courthouse  
306 West Kansas Avenue  
Independence, Missouri 64050

Gentlemen:

I do hereby certify that year 2020 Personal Property and/or Merchants and Manufacturers Tax for State, County, School and other purposes have been paid in the amount of

\$ 0.00. I further certify that assessment returns as required by law for year 2020 were filed on behalf of the undersigned, including therein a full, accurate and complete listing of all tangible personal property, subject to assessment in Jackson County, Missouri.

[Signature]  
Authorized Signature of Bidder

Sec  
Title

For: WCL, Inc  
Company Name

25600 Old KC Rd  
Street Address

Paola, KS 66071  
City, State & Zip

913-783-4389  
Telephone #

913-783-4642  
Fax #

Federal I.D. # 75-3085731

Subscribed and sworn to before me, a Notary Public in and for Jackson County, Missouri,

this 14 day of April, 2021.

[Signature]  
Notary Public

My commission expires 3/3/2024



**EQUAL EMPLOYMENT OPPORTUNITY**

The Contractor's attention is directed to Chapter 296, Section 296.010 to Section 296.070, inclusive, Revised Statutes of Missouri, "Discriminatory Employment Practices," including the latest amendments thereto, and to the Jackson County Ordinances, adopted by Ordinance Nos. 11, 479, and 1068, which provide in part, as follows:

"All contracts for labor services, supplies, and construction wherein Jackson County is a party, whether negotiated or formally advertised, shall contain a nondiscrimination in employment clause which shall provide that the contractor in the performance of the contract will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age or national origin. Actions of the contractor shall include but not be limited to the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship."

The Contractor agrees to comply in all respects with all statutory provisions and the County Ordinances.

LIST OF INTENDED SUBCONTRACTORS

Bidder Name: WCI Inc

Will subcontractors be used to complete the work?  Yes  No

If yes, complete this form and submit it with your bid.

Subcontractor No. \_\_\_\_\_

Name: Little Joe's Asphalt

Address: PO Box 516

City & Zip Code: Bonner Springs, KS 66012

Telephone No: 913 721-3261 Fax No: 913,721-3144

Description of work to be performed (include Bid Item Number, and Bid Item):

#5, #6, #7, #8 milling, asphalt, tack coat

Dollar Amount	\$ 67,438.25
---------------	--------------

Subcontractor No. \_\_\_\_\_

Name: Pine Valley Contracting

Address: 16540 Sun Valley Lane

City & Zip Code: Saxanna, Mo

Telephone No: 816 324-3772 Fax No: 816-324-0329

Description of work to be performed (include Bid Item Number, and Bid Item):

#14 - #19 silt fence, erosion control, seeding

Dollar Amount	\$ 15,274.70
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(List of Subcontractors Continued)

Subcontractor No. \_\_\_\_\_

Name: Morgan Contractors

Address: 929 Locust Hill Circle

City & Zip Code: Belton Mo

Telephone No: 816-313-5221 Fax No: \_\_\_\_\_

Description of work to be performed (include Bid Item Number, and Bid Item):

#20 \*21 \*36 pavement marking, traffic control

Dollar	\$
Amount	41,971.00

Subcontractor No. \_\_\_\_\_

Name: Three Feathers

Address: 10220 E 65th St A

City & Zip Code: Raytown Mo

Telephone No: 816-778-0767 Fax No: \_\_\_\_\_

Description of work to be performed (include Bid Item Number, and Bid Item):

Annual & install sign

Dollar	\$
Amount	52,500

**CERTIFICATE OF COMPLIANCE**



**OFFICE OF COUNTY AUDITOR  
COMPLIANCE REVIEW OFFICE**  
415 East 12th Street, 2nd Floor  
Kansas City, Missouri 64106  
(816) 881-3302

**CERTIFICATE OF COMPLIANCE NOTICE:**

Effective September 21, 2020 all vendors doing business with Jackson County are required to obtain a Certificate of Compliance Issued by Jackson County Compliance Review Office.

Certificates of Compliance will be required to be submitted with any bid response on September 21, 2020 or after. Failure to comply with this requirement may result in the REJECTION of a bid.

Vendors may complete a  
Certificate of Compliance Application by visiting  
[www.jacocompliance.com](http://www.jacocompliance.com)

**A Certificate of Compliance will certify that vendors meet the following requirements:**

1. Are duly listed and assessed on the tax rolls of Jackson County and are not delinquent in the payment of any taxes due to the County, or do not have on December 31st of the previous year any property subject to taxation by Jackson County.
2. Attest and agree to Chapter 6 of the Jackson County Code which prohibits discriminatory practices and promotes Equal Employment Opportunity by contractors doing business with Jackson County.

**Certificate of Compliance Application must be submitted five (5) business days prior to a bid response deadline to allow sufficient time to process. A Certificate of Compliance is not guaranteed if this timeline is not met.**

**QUESTIONS? Email [compliance@jacksongovorg](mailto:compliance@jacksongovorg)**

**CONTRACTOR UTILIZATION PLAN**

Bid Number: PW 05-2021  
Bid Title: Buckner Tarsney Road Bridge Replacement North of Ryan Road  
Contracting Department: Public Works Department (Engineering Division)

Bidder: WCI Inc

I, Dale Kloasmyer, of lawful age and upon my oath state as follows:

1. This Affidavit is made for the purpose of complying with the provisions of the MBE/WBE/VBE submittal requirements on the above Invitation to Bid and the MBE/WBE/VBE Program and is given on behalf of the Bidder listed above. It sets out the Bidder's plan to utilize MBE and/or WBE and/or VBE prime and subcontractors on the Bid.

**The goals set by Jackson County, Missouri are:**

9.5 %MBE                      11.7 %WBE                      9.5 %VBE

2. Bidder stipulates that it will utilize a minimum of the following percentages of MBE/WBE participation in the above bid:

10.8 %MBE                      73.3 %WBE                      0 %VBE

3. The following are the MBE/WBE/VBE Contractors to be utilized on the above-named Bid. **Bidder maintains that it either has a formal contract or a conditional contract contingent upon award.**

**Please note:**

- a. If Bidder is a certified MBE, WBE, or VBE firm, it may list itself in the appropriate area below.
- b. No contractor may be listed under multiple categories below regardless of certifications

<b>***INTERNAL USE ONLY***</b>		
CUP RECEIVED: _____	CUP APPROVED: _____	
GFW RECEIVED: _____	GFE APPROVED: _____	
CUP REVISED: _____	REVISION APPROVED: _____	
APPROVED GOALS: _____ MBE                      _____ WBE                      _____ VBE		
RES/ORD: _____	AMT AWARDED: _____	
NOTES:		

**MBE SUBCONTRACTORS**

A.	MBE Firm:	Three Feathers Const	<b>INTERNAL USE ONLY</b>  <b>Certifying Agency:</b> _____ KCMO _____ State of MO  <b>Approved: Y N</b>  <b>Contract Value:</b> \$
	Address line 1:	10220 E. 65th Ste A	
	Address line 2-including County:		
	Telephone Number:	816-778-0767	
	President/Owner:	Mike Hudson	
	Email Address:	mike@3feathers.com	
	Certifying Agency:	Mo DOT R DOT KCMO	
	Expiration Date of Certification:		
	Scopes of Work Utilized:	rebar finish + install	
	Percentage of Contract Awarded:	8.8	

B.	MBE Firm:	Wilson's Trucking, LLC	<b>INTERNAL USE ONLY</b>  <b>Certifying Agency:</b> _____ KCMO _____ State of MO  <b>Approved: Y N</b>  <b>Contract Value:</b> \$
	Address line 1:	6901 E 116th	
	Address line 2-including County:		
	Telephone Number:	816-379-1111	
	President/Owner:	Joseph Wilson	
	Email Address:	wilsonstrucking@icloud.com	
	Certifying Agency:	KCMO	
	Expiration Date of Certification:		
	Scopes of Work Utilized:	hauling	
	Percentage of Contract Awarded:	2.0	

C.	MBE Firm:		<b>INTERNAL USE ONLY</b>  <b>Certifying Agency:</b> _____ KCMO _____ State of MO  <b>Approved: Y N</b>  <b>Contract Value:</b> \$
	Address line 1:		
	Address line 2-including County:		
	Telephone Number:		
	President/Owner:		
	Email Address:		
	Certifying Agency:		
	Expiration Date of Certification:		
	Scopes of Work Utilized:		
	Percentage of Contract Awarded:		

<b>TOTAL MBE VALUE:</b>	<b>\$</b>
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\*\*\* Add Additional Pages as Necessary \*\*\*

WBE SUBCONTRACTORS

A.	WBE Firm:	WCI Inc	INTERNAL USE ONLY
	Address line 1:	25606 Old KC Rd	
	Address line 2-including County:		
	Telephone Number:	913-783-4389	
	President/Owner:	Kathleen Kleasmyer	
	Email Address:	office@WCIcompany.com	
	Certifying Agency:	K-Dot, MoDot	
	Expiration Date of Certification:		
	Scopes of Work Utilized:	concrete #30	
	Percentage of Contract Awarded:	62%	
			Certifying Agency: _____ KCMO _____ State of MO
			Approved: Y N
			Contract Value: \$

B.	WBE Firm:	Little Joe's Asphalt	INTERNAL USE ONLY
	Address line 1:	PO Box 516	
	Address line 2-including County:		
	Telephone Number:	913-721-3261	
	President/Owner:	Theresa Buckler	
	Email Address:	theresa@littlejoesasphalt.com	
	Certifying Agency:	MoDot KCMO	
	Expiration Date of Certification:		
	Scopes of Work Utilized:	asphalt	
	Percentage of Contract Awarded:	11.3%	
			Certifying Agency: _____ KCMO _____ State of MO
			Approved: Y N
			Contract Value: \$

C.	WBE Firm:		INTERNAL USE ONLY
	Address line 1:		
	Address line 2-including County:		
	Telephone Number:		
	President/Owner:		
	Email Address:		
	Certifying Agency:		
	Expiration Date of Certification:		
	Scopes of Work Utilized:		
	Percentage of Contract Awarded:		
			Certifying Agency: _____ KCMO _____ State of MO
			Approved: Y N
			Contract Value: \$

TOTAL WBE VALUE:			\$
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\*\*\* Add Additional Pages as Necessary \*\*\*

**VBE SUBCONTRACTORS**

A.	VBE Firm:		<b>INTERNAL USE ONLY</b>  <b>Certifying Agency:</b> _____ <b>KCMO</b> _____ <b>State of MO</b>  <b>Approved: Y N</b>  <b>Contract Value:</b> \$
	Address line 1:		
	Address line 2-including County:		
	Telephone Number:		
	President/Owner:		
	Email Address:		
	Certifying Agency:		
	Expiration Date of Certification:		
	Scopes of Work Utilized:		
	Percentage of Contract Awarded:		

B.	VBE Firm:		<b>INTERNAL USE ONLY</b>  <b>Certifying Agency:</b> _____ <b>KCMO</b> _____ <b>State of MO</b>  <b>Approved: Y N</b>  <b>Contract Value:</b> \$
	Address line 1:		
	Address line 2-including County:		
	Telephone Number:		
	President/Owner:		
	Email Address:		
	Certifying Agency:		
	Expiration Date of Certification:		
	Scopes of Work Utilized:		
	Percentage of Contract Awarded:		

C.	VBE Firm:		<b>INTERNAL USE ONLY</b>  <b>Certifying Agency:</b> _____ <b>KCMO</b> _____ <b>State of MO</b>  <b>Approved: Y N</b>  <b>Contract Value:</b> \$
	Address line 1:		
	Address line 2-including County:		
	Telephone Number:		
	President/Owner:		
	Email Address:		
	Certifying Agency:		
	Expiration Date of Certification:		
	Scopes of Work Utilized:		
	Percentage of Contract Awarded:		

<b>TOTAL VBE VALUE:</b>	<b>\$</b>
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\*\*\* Add Additional Pages as Necessary \*\*\*

### ACKNOWLEDGEMENT

Bidder acknowledges that it is responsible for considering the effect that any change order and/or amendments changing the total contract amount may have on its ability to meet or exceed the subcontractor participation goals.

**Good Faith Effort:** Bidder further acknowledges that it is responsible for submitting a Good Faith Effort Form if it will be unable to meet the participation goals. A **Good Faith Effort Form** documents the efforts a Bidder puts forth to achieve the MBE and/or WBE and/or VBE goals on a project. **Simply stating that goals cannot be met is not considered sufficient.**

**Contract Modification Form:** If, at any point during the life of the awarded contract, the contractor needs to substitute an approved subcontractor, a **Contract Modification Form** must be submitted to the Compliance Review Office.

**Any Good Faith Effort or Contractor Modification Form must be approved by the Compliance Review Office.**

**\*\*\* Contact the Compliance Review Office (816-881-3302) for assistance or to request forms. \*\*\***

I hereby certify that I am authorized to make this Affidavit on behalf of the Bidder named below and who shall abide by the terms set forth herein: I acknowledge that the assigned values determined by this Contractor Utilization Plan shall be enforceable under the contract terms and conditions.

Bidder Primary Contact: Dale Klaasmeyer

Title: Sec Email: cdalek@klaasmeyer@gmail.com

Date: 4/20/2021 Phone: 913-208-3696

Subscribed and sworn to before me this 20 day of April, 2021.

Jessica Oakvig  
Notary Public

My Commission Expires: 3/3/2024



(Attach corporate seal if applicable)

For questions on this form please contact:

Compliance Review Office  
816-881-3302  
[CRO@jacksongov.org](mailto:CRO@jacksongov.org)

## OSHA TEN HOUR TRAINING REQUIREMENTS

Missouri Law, Section 292.675, RSMo, requires any awarded contractor and its subcontractor(s) to provide a ten-hour Occupational Safety and Health Administration (OSHA) Construction Safety Program (or a similar program approved by the Missouri Department of Labor and Industrial Relations as a qualified substitute) for their on-site employees (laborers, workmen, drivers, equipment operators, and craftsmen) who have not previously completed such a program and are directly engaged in actual construction of the improvement (or working at a nearby or adjacent facility used for construction of the improvement). The awarded contractor and its subcontractor(s) shall require all such employees to complete this ten-hour program, pursuant to Section 292.675, RSMo, unless they hold documentation on their prior completion of said program. Penalties, for Non-Compliance include contractor forfeiture to the Contracting Authority in the amount of \$2,500, plus \$100 per contractor and subcontractor employee for each calendar day such employee is employed beyond the elapsed time period for required program completion under Section 292.675, RSMo.

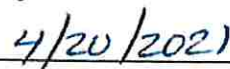
The undersigned bidder hereby certifies:

### OSHA 10 CARD CERTIFICATION

The undersigned bidder hereby certifies and acknowledges receipt of OSHA 10 Card(s) as the contractor and for the subcontractor(s) of this project. Copies of the card(s) shall be provided to Jackson County, MO. to be reviewed by the Compliance Review Office.

  
\_\_\_\_\_  
Authorized Signature of Bidder

  
\_\_\_\_\_  
Company Name

  
\_\_\_\_\_  
Date



# Jackson County Missouri Certificate of Compliance



In accordance with Jackson County Code Chapter(s) 6 and 10,  
this Certificate of Compliance is hereby issued to:

WCI, Inc.  
25606 Old KC Rd  
Paola, KS 66071  
2020 Certificate: 20210415VCC623

Issued: 2021-04-15  
Expires: 2021-12-31

The above named firm/agency has met the following requirements:

Is duly listed and assessed on the tax rolls of Jackson County, Missouri and is not delinquent in the payment of any taxes due to the County, or did not have on December 31st of the previous year any property subject to taxation by the County

Attests and agrees to Chapter 6 of the Jackson County Code which prohibits discriminatory employment practices and promotes equal employment opportunity by contractors doing business with Jackson County.

Chief Compliance Review Officer  
Jackson County Missouri  
816-881-3302  
compliance@jacksonsongov.org

<b>Company Name</b>	<b>CEO/President/Owner Name</b>	<b>VENDOR NUMBER</b>
Little Joe's Asphalt Inc.	THERESA BUEHLER	0027082

<b>Company Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
134 N. 130th St.	Bonner Springs	KS	66012

<b>Classification</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>ACDBE</b>
DBE	Female	CAUCASIAN FEMALE	N

<b>County</b>	<b>District</b>	<b>DBE Status</b>	<b>AGENCY</b>
Out Of State	Out Of State	Certified	City of Kansas City, MO Human Relations & KCI Airport

<b>EMAIL</b>	<b>PHONE</b>	<b>FAX</b>
theresa@littlejoesasphalt.com	(913)721-3261	(913)721-3144

<b>CODE</b>	<b>DESCRIPTION</b>	<b>REMARKS</b>
238990	All Other Specialty Trade Contractors	
237310	Highway, Street, and Bridge Construction	
238910	Site Preparation Contractors	
484220	Specialized Freight (except Used Goods) Trucking, Local	

<b>Company Name</b>	<b>CEO/President/Owner Name</b>	<b>VENDOR NUMBER</b>
WCI, Inc dba WCI I, Inc.	KLAASMEYER, KATHY	0026238

<b>Company Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
25606 Old KC Road	Paola	KS	66071

<b>Classification</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>ACDBE</b>
DBE	Female	CAUCASIAN FEMALE	N

<b>County</b>	<b>District</b>	<b>DBE Status</b>	<b>AGENCY</b>
Out Of State	Out Of State	Certified	Missouri Department of Transportation

<b>EMAIL</b>	<b>PHONE</b>	<b>FAX</b>
office@wclcompany.com	(913)783-4389	(913)783-4642

<b>CODE</b>	<b>DESCRIPTION</b>	<b>REMARKS</b>
237310	Highway, Street, and Bridge Construction	Highway, Street, and Bridge Construction



### Business & Contact Information

**BUSINESS NAME**                      **Wilson's Trucking, LLC**

**OWNER**                                      **JOSEPH WILSON**

**ADDRESS**                                  **6901 E. 116th St., Apt. 4**                      [Map This Address](#)  
**Kansas City, MO 64134**

**PHONE**                                      **816-379-1111**

**EMAIL**                                        **[wilsonstrucking@icloud.com](mailto:wilsonstrucking@icloud.com)**

### Certification Information

**CERTIFYING AGENCY**                      **City of Kansas City**

**CERTIFICATION TYPE**                      **MBE - Minority Business Enterprise**

**CERTIFIED BUSINESS DESCRIPTION**                      **This company provides Dump Trucking, Hauling - Dirt - Rocks - Gravel - Sand - Asphalt - Cold Millings**

### Commodity Codes

Code	Description
NAICS 484220	Dump trucking (e.g., gravel, sand, top-soil)
NAICS 484220	Gravel hauling, local
NAICS 484220	Sand hauling, local

### Additional Information

1301-  
-  
145-

## STATE WAGE RATES

## STATE OF MISSOURI WAGE RATES

### General Conditions

Except as provided in subparagraph A., below, this Contract shall be based upon payment by the Contractor and its subcontractors of wage rates not less than the prevailing hourly wage rate for each craft or classification of workman engaged on the work as determined by the Industrial Commission of Missouri on behalf of the Department of Labor and Industrial Relations.

A. Wage Law: Except as provided in this subparagraph, the contractor shall comply with all requirements of the Jackson County Missouri Chapter 19 Prevailing Wage Compliance Program, including the latest amendments there to. Pursuant to Section 1905.2a, the provisions of the prevailing wage law do not apply to the construction of public works for which the engineer's estimate or the awarded contract cost is \$75,000 or less. The "total project cost" is based upon the entire project and not individual jobs within a larger project. The "total project cost" includes the total value of work performed on the project by every person paid by a contractor or subcontractor for that person's work on the project and additionally includes all materials and supplies purchased for the project. The provisions of this paragraph do not apply to any contract that is excluded from the applicability of the Jackson County Missouri Chapter 19 Prevailing Wage Program.

B. Penalty: The Contractor shall forfeit as a penalty to the County, One Hundred Dollars (\$100) for each workman employed, for each calendar day, or portion thereof, that such workman is paid less than the said stipulated rate for any work done under this contract by the Contractor or by any of its subcontractors.

C. Withholding Payment: The County has a duty to withhold and retain from payment, which is due to the Contractor under this contract all sums and amounts due and owing as a result of any violation of said laws. The County reserves the right to withhold payments throughout the duration of any resulting contract if a contractor is found to be delinquent in any aspect relating to compliance with Chapters 6 and 19 of the Jackson County Code. Payments may be held until all said delinquencies have been rectified to the satisfaction of the Compliance Review Office.

D. Required Records: The Contractor and each subcontractor shall keep an accurate record showing the names and occupations of all workmen employed, together with the actual wages paid to each workman. At all reasonable hours, such records shall be open to inspection by the representatives of the Industrial Commission of Missouri and the County. Said records shall be kept for a minimum of one (1) year after the project has been accepted and the Required Affidavit, outlined in subsection G, is received.

E. No Adjustment for Changes In Rates: During the life of this contract, the prevailing hourly rate of wages is subject to change by the Department of Labor and Industrial Relations or by court decision, as provided by law. Any such change shall not be the basis of any claim by the Contractor against the County, nor will deductions be made by the County against sums due to the Contractor by reason of any such change.

F. Exceeding Rates and Hours: The prevailing wage law does not prohibit payment of more than the prevailing rate of wages nor does it limit the hours of work which may be performed by any workman in a particular period of time.

G. Required Affidavit: No final payment for work under this contract will be made by the County until it has received from each contractor and subcontractor an affidavit stating that each has fully complied with the provisions and the requirements of said law.

H. Prevailing Wages: The current prevailing wage rate determination made by the Industrial Commission of Missouri and applicable during the term of this contract is reproduced verbatim herein.

I. Posting: Throughout the life of this contract, a copy of the wage determination and the rules promulgated by the Industrial Commission of Missouri, shall be displayed in a conspicuous place on the project under a heading of NOTICE, with the heading in letters at least one inch high.

J. Contract Work Hours and Safety Standards Act (42 U.S.C. Sect. 329): The Contractor is required to comply with Section 103 of the above Act.

K. Certified Payroll Records: An original copy of certified payroll records shall be emailed weekly to the Compliance Review Office at CRO@jacksongov.org. A copy of certified payroll records indicating applicable invoice number(s) shall also be emailed to the Project Supervisor.

Payroll Records must meet the following minimum requirements:

Workers must be classified according to the State's Occupational Title Rule. Workers listed as Journey Worker for Local Union XX is not acceptable. The specific classification must be named. The specific Group must be named. It is impossible to compare wage rates paid to the proper prevailing wage rate if the Group is not listed.

For all apprentices on each payroll, the apprentice letter must be attached confirming registration in the program, level in the program (i.e. 3rd Level, or 3rd 6-Month Period) and the percentage of the base wage rate the apprentice is to be paid. If the same apprentice is used more than one week, only one letter for each apprentice needs to be submitted the first time the apprentice is shown on the payroll.

A one-to-one ratio of apprentices to journey workers must be followed. Any apprentice working out of ratio or without a journey worker present must be paid journey worker's level wages.

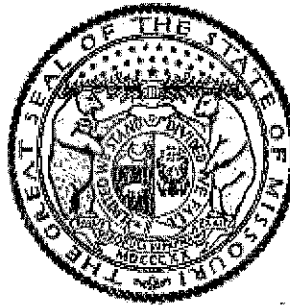
Fringe benefits must be indicated whether paid in cash or to a fund by checking the box on the certificate page of the payroll form. If fringe benefit contributions are not indicated by an hourly rate on the certificate payroll form, please submit a one-time letter with the next applicable payroll indicating the hourly breakdown of contributions made and to where.



# Missouri

## Division of Labor Standards

### WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

## Annual Wage Order No. 27

Section 048  
JACKSON COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by \_\_\_\_\_  
Taylor Burks, Director  
Division of Labor Standards

Filed With Secretary of State: \_\_\_\_\_ March 10, 2020

Last Date Objections May Be Filed: April 9, 2020

Prepared by Missouri Department of Labor and Industrial Relations

Building Construction Rates for  
 JACKSON County

REPLACEMENT PAGE

Section 048

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$83.82
Boilermaker	*\$33.53
Bricklayer	\$36.71
Carpenter	\$57.23
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$51.50
Plasterer	
Communications Technician	\$57.83
Electrician (Inside Wireman)	\$63.56
Electrician Outside Lineman	\$65.49
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	*\$33.53
Glazier	\$64.70
Ironworker	\$63.98
Laborer	\$45.82
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$51.48
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$57.14
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$49.72
Plumber	\$89.71
Pipe Fitter	
Roofer	\$53.67
Sheet Metal Worker	\$67.20
Sprinkler Fitter	\$59.86
Truck Driver	\$49.82
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

\*The Division of Labor Standards received less than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

Heavy Construction Rates for  
 JACKSON County

REPLACEMENT PAGE

Section 048

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$65.11
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$65.49
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$48.45
General Laborer	
Skilled Laborer	
Operating Engineer	\$63.12
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$46.50
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

\*The Division of Labor Standards received less than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

## OVERTIME and HOLIDAYS

### OVERTIME

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

### HOLIDAYS

January First;  
The last Monday in May;  
July Fourth;  
The first Monday in September;  
November Eleventh;  
The fourth Thursday in November; and  
December Twenty-Fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.



MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS  
 PREVAILING WAGE  
 PROJECT NOTIFICATION -  
 CONTRACTOR INFORMATION

New  Update

The information below is requested pursuant to Sections 290.210 through 290.340, RSMo.

1. Date of Notification		2. Annual Wage Order Number Included in Bid Specifications	
3. Popular or Descriptive Name of Project			
4. Estimated Project Cost of Completion (total construction contracts to be awarded) \$			
5. Exact Location of Project County		City	
6. Official Name of Public Body or Agency			
7. Name of Contact Person		8. Phone Number (include area code)	
9. Address			
10. Email Address		Website	
11. Contract Award Date	12. Estimated Date of Project Completion	13. Will There Be Any Federal Funds Used in this Contract? <input type="checkbox"/> Yes <input type="checkbox"/> No	

14. Contractor Information Notification

General Contractor:

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_

Type of Craftsman Needed by Project \_\_\_\_\_

Scope of Work \_\_\_\_\_

List all Subcontractors:

1. Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_

Type of Craftsman Needed by Project \_\_\_\_\_

Scope of Work \_\_\_\_\_

2. Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_

Type of Craftsman Needed by Project \_\_\_\_\_

Scope of Work \_\_\_\_\_

3. Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_

Type of Craftsman Needed by Project \_\_\_\_\_

Scope of Work \_\_\_\_\_

(Subcontractors continued)

4. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
Type of Craftsmen Needed by Project \_\_\_\_\_  
Scope of Work \_\_\_\_\_

5. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
Type of Craftsmen Needed by Project \_\_\_\_\_  
Scope of Work \_\_\_\_\_

6. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
Type of Craftsmen Needed by Project \_\_\_\_\_  
Scope of Work \_\_\_\_\_

7. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
Type of Craftsmen Needed by Project \_\_\_\_\_  
Scope of Work \_\_\_\_\_

8. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
Type of Craftsmen Needed by Project \_\_\_\_\_  
Scope of Work \_\_\_\_\_

9. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
Type of Craftsmen Needed by Project \_\_\_\_\_  
Scope of Work \_\_\_\_\_

The state of Missouri requires workers on public works projects be paid the prevailing wage. Public bodies have duties as required under Section 290.210 - 290.340, RSMo.

Mail, Fax, or Email completed form to: DIVISION OF LABOR STANDARDS  
Attn: Prevailing Wage Section  
P.O. Box 449, Jefferson City, MO 65102-0449  
Phone: 573-751-3403 Fax: 573-751-3721  
Email: [prevailingwage@labor.mo.gov](mailto:prevailingwage@labor.mo.gov)  
Website: [www.labor.mo.gov/DLS](http://www.labor.mo.gov/DLS)

**SUBMIT**

Missouri Department of Labor and Industrial Relations is an equal opportunity employer/program.  
TDD/TTY: 800-735-2966 Relay Missouri: 711

PW-2-2 (05-16) AI



MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS  
AFFIDAVIT  
COMPLIANCE WITH THE PREVAILING WAGE LAW

I, \_\_\_\_\_, upon being duly sworn upon my oath state that: (1) I am the  
*(Name)*  
\_\_\_\_\_ of \_\_\_\_\_; (2) all requirements of  
*(Title)* *(Name of Company)*  
§§ 290.210 to 290.340, RSMo, pertaining to the payment of wages to workers employed on public works projects  
have been fully satisfied with regard to this company's work on \_\_\_\_\_;  
*(Name of Project)*

(3) I have reviewed and am familiar with the prevailing wage rules 8 CSR 30-3.010 to 8 CSR 30-3.060; (4) based upon my knowledge of these rules, including the occupational titles set out in 8 CSR 30-3.060, I have completed full and accurate records clearly indicating (a) the names, occupations, and crafts of every worker employed by this company in connection with this project together with an accurate record of the number of hours worked by each worker and the actual wages paid for each class or type of work performed, (b) the payroll deductions that have been made for each worker, and (c) the amounts paid to provide fringe benefits, if any, for each worker; (5) the amounts paid to provide fringe benefits, if any, were irrevocably made to a fund, plan, or program on behalf of the workers; (6) these payroll records are kept and have been provided for inspection to the authorized representative of the contracting public body and will be available, as often as may be necessary, to such body and the Missouri Department of Labor and Industrial Relations; (7) such records shall not be destroyed or removed from the state for one year following the completion of this company's work on this project; and (8) there has been no exception to the full and complete compliance with the provisions and requirements of General Wage Order No. \_\_\_\_\_ issued by the Missouri Division of Labor Standards and applicable to this MoDOT project located in \_\_\_\_\_ County, Missouri, and completed on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The matters stated herein are true to the best of my information, knowledge, and belief. I acknowledge that the falsification of any information set out above may subject me to criminal prosecution pursuant to §§290.340, 570.090, 575.040, 575.050, or 575.060, RSMo.

\_\_\_\_\_  
Signature

Subscribed and sworn to me this \_\_\_\_\_ day of \_\_\_\_\_.

My commission expires \_\_\_\_\_.

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

\_\_\_\_\_  
Receipt by Authorized Public Representative

*Missouri Department of Labor and Industrial Relations is an equal opportunity employer/program.*

**SALES TAX EXEMPTION**

Jackson County, Missouri is an exempt entity under Section 144.062, RSMo, and the purchase of tangible personal property and materials to be incorporated into or consumed in the construction of this project, can be made on a tax-exempt basis as provided in that statute. Jackson County will issue an exemption certificate to the contractor along with the contract. Sales tax paid due to the contractor's or any subcontractor's failure to take advantage of the county's tax exempt status will not be included in the contractor's invoice to the Owner.

Page 47 is the current exemption from the State of Missouri, issued to Jackson County and is included for information only.

Page 48 is the "Missouri Project Exception Certificate" (Form 5060) that will be issued to the contractor and subcontractors working on the same project after the contract has been awarded.



## State of Missouri

### EXEMPTION FROM MISSOURI SALES AND USE TAX ON PURCHASES

ISSUED TO:

MISSOURI TAX I.D.  
NUMBER: 13643347

COUNTY OF JACKSON  
415 E 12TH ST RM G-1  
KANSAS CITY, MO 64106-2706

EFFECTIVE DATE: 07/11/2002  
EXPIRATION DATE: Non-Expiring

**YOUR APPLICATION FOR SALES/USE TAX EXEMPT STATUS HAS BEEN APPROVED PURSUANT TO CHAPTER 144.303.1, RSMo. THIS LETTER IS ISSUED AS DOCUMENTATION OF YOUR EXEMPT STATUS.**

**PURCHASES BY YOUR AGENCY ARE NOT SUBJECT TO SALES OR USE TAX IF WITHIN THE CONDUCT OF YOUR AGENCY'S EXEMPT FUNCTIONS & ACTIVITIES. WHEN PURCHASING WITH THIS EXEMPTION, FURNISH ALL SELLERS OR VENDORS A COPY OF THIS LETTER. THIS EXEMPTION MAY NOT BE USED BY INDIVIDUALS MAKING PERSONAL PURCHASES.**

**A CONTRACTOR MAY PURCHASE AND PAY FOR CONSTRUCTION MATERIALS EXEMPT FROM SALES TAX WHEN FURFILLING A CONTRACT WITH YOUR AGENCY ONLY IF YOU AGENCY ISSUES A PROJECT EXEMPTION CERTIFICATE AND THE CONTRACTOR MAKES PURCHASES IN COMPLIANCE WITH THE PROVISIONS OF SECTION 144.062, RSMo.**

**SALES BY YOUR AGENCY ARE SUBJECT TO ALL APPLICABLE STATE AND LOCAL SALES TAXES. IF YOU ENGAGE IN THE BUSINESS OF SELLING TANGIBLE PERSONAL PROPERTY OR TAXABLE SERVICES AT RETAIL, YOU MUST OBTAIN A MISSOURI RETAIL SALES LICENSE AND COLLECT AND REMIT SALES TAX.**

**A CONTRACTOR MAY PURCHASE AND PAY FOR CONSTRUCTION MATERIALS EXEMPT FROM SALES TAX WHEN FULFILLING A CONTRACT WITH YOUR GOVERNMENTAL AGENCY ONLY IF YOUR GOVERNMENTAL AGENCY ISSUES A PROJECT EXEMPTION CERTIFICATE AND THE CONTRACTOR MAKES PURCHASES IN COMPLIANCE WITH THE PROVISION OF SECTION 144.062, RSMO.**

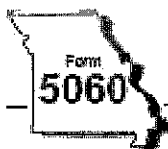
**THIS IS A CONTINUING EXEMPTION SUBJECT TO LEGISLATIVE CHANGES AND REVIEW BY THE DIRECTOR OF REVENUE. IF IT IS DETERMINED THAT YOUR AGENCY CEASES TO QUALIFY AS AN EXEMPT ENTITY, THIS EXEMPTION WILL CEASE TO BE VALID. THIS EXEMPTION IS NOT ASSIGNABLE OR TRANSFERRABLE. IT IS AN EXEMPTION FROM SALES AND USE TAXES ONLY AND IS NOT AN EXEMPTION FROM REAL OR PERSONAL PROPERTY TAX.**

**ANY ALTERATION TO THIS EXEMPTION LETTER RENDERS IT INVALID.**

**IF YOU HAVE ANY QUESTIONS REGARDING THE USE OF THIS LETTER, PLEASE CONTACT THE SALES/USE TAX SECTION, MISSOURI DEPARTMENT OF REVENUE, P.O. BOX 3300, EFFERSON CITY, MO 65105-0840, PHONE 573-751-2836.**

Reset Form

Print Form



Missouri Department of Revenue  
Project Exemption Certificate

This form is to be completed and given to your contractor.

Exempt Entity and Project Information	Name of Exempt Entity Issuing the Certificate		Missouri Tax Exemption Number		
	JACKSON COUNTY, MISSOURI		11   3   6   4   3   3   4   7		
	Address		City	State	ZIP Code
	415 EAST 12TH STREET, ROOM G-1		KANSAS CITY	MO	64106
	E-mail Address				
	Project Number	Project Begin Date (MMDD/YYYY)	Estimated Project End Date (MMDD/YYYY)		
	3252				
	Description of Project: BUCKNER TARSNEY ROAD BRIDGE REPLACEMENT NORTH OF RYAN ROAD The General Contractor shall furnish all materials, equipment, tools and labor required to perform the following on Buckner Tarsney Rd Bridge: 1. The demolition of the existing bridge & roadway as shown on the plans. 2. Construction of a new Double 12' x 9' Reinforced Concrete Box. 3. Install new Cast-In-Place retaining walls. 5. Install guardrail systems. 4. Approximately 365' of roadway work. 5) All other incidental work in the most substantial and workmanlike manner for the bridge, and do everything required by the Contract Documents as defined herein.				
	Project Location		Certificate Expiration Date (MMDD/YYYY)		
	415 E 12TH ST., KANSAS CITY, MISSOURI 64106				
Provide a signed copy of this certificate, along with a copy of the exempt entity's Missouri Sales and Use Tax Exemption Letter to each contractor or subcontractor who will be purchasing tangible personal property for use in this project. It is the responsibility of the exempt entity to ensure the validity of the information on the certificate. The exempt entity must issue a new certificate if any of the information changes.					
Signature of Authorized Exempt Entity	Printed Name of Authorized Exempt Entity	Date (MMDD/YYYY)			
	Chris Jenkins (Project Manager)				

Contractor	The Missouri exempt entity named above hereby authorizes the purchase, without sales tax, of tangible personal property to be incorporated or consumed in the construction project identified herein and no other, pursuant to Section 144.062, RSMo. Under penalties of perjury, I declare that the above information and any attached supplement is true, complete, and correct.				
	Name of Purchasing Contractor	Signature of Contractor		Date (MMDD/YYYY)	
	Address	City	State	ZIP Code	

Subcontractor	Contractors - Present this to your supplier in order to purchase the necessary materials tax exempt. Complete the Subcontractor portion if extending the certificate to your subcontractor. The contractor must sign the form in the space provided below.				
	Name of Purchasing Subcontractor				
	Address	City	State	ZIP Code	
	Signature of Contractor	Contractor's Printed Name	Date (MMDD/YYYY)		

Form 5060 (Revised 05-2015)

Taxation Division  
P.O. Box 358  
Jefferson City, MO 65105-0358

Phone: (573) 751-2838  
Fax: (573) 522-1271  
E-mail: [sales-tax-exemptions@dor.mo.gov](mailto:sales-tax-exemptions@dor.mo.gov)



Visit <http://dor.mo.gov/business/sales/sales-use-exemptions.php> for additional information.

# CONTRACT FORMS

## CONTRACT AGREEMENT

THIS AGREEMENT, is made and entered into by and between, Jackson County, Missouri, Party of the First Part and hereinafter called the County, and

WCI, Inc.

a Kansas Party of the Second Part and hereinafter called the Contractor,

### WITNESSETH

THAT WHEREAS, in accordance with law, the County has caused contract documents to be prepared and an Advertisement calling for bids to be published for and in connection with Jackson County Project: **Buckner Tarsney Road Bridge Replacement North of Ryan Road, County Project Number: 3252**, and

WHEREAS, the Contractor, in response to the Advertisement, has submitted to the County, in the manner and at the time specified, a sealed proposal in accordance with the terms of the Advertisement, and

WHEREAS, the County, in the manner prescribed by law, has opened, examined, and canvassed the Proposal submitted, and has determined the aforesaid Contractor to be the lowest and best bidder for the work and has duly awarded to the said Contractor, a contract therefor, for the sum or sums named in the Contractor's Proposal, a copy thereof being attached to and made a part of this contract.

NOW THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties to these presents have agreed and hereby agree, the County for itself and its successors, and the Contractor for itself, himself, or themselves, and its, his, or their successors and assigns, and its, his, or their executors and administrators, as follows:

ARTICLE I. That the Contractor shall: (a) furnish all tools, equipment, supplies, superintendence, transportation, and other construction accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good, substantial, and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the contract documents as defined in the attached General Conditions, Special Conditions, and Technical Specifications, said documents forming the contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the County's official award of this contract to the said Contractor, such award being based on the acceptance of the County of the Contractor's Proposal.

ARTICLE II. That the County shall pay to the Contractor for the performance of the work embraced in this contract, and the Contractor will accept as full compensation therefore, the sum (subject to adjustment as provided by the contract) of

Five Hundred Ninety-Three Thousand, Six Hundred Five Dollars and 00 Cents

(\$ 593,605.00) for all work covered by and included in the contract award and designated in the foregoing Article I; payment thereof to be made in cash or its equivalent, in the manner provided in the General Conditions.

ARTICLE III. That the Contractor shall start work within ten (10) days following the date stipulated in a written order from the County to proceed with the work to be performed hereunder, and that the Contractor shall complete the work within the number of days, after the authorized starting date, stipulated in the attached Proposal.

ARTICLE IV. That the Contractor expressly warrants that he has employed no third person to solicit or obtain this contract in his behalf, or to cause or produce the same to be obtained upon compensation in any way contingent, in whole or in part, upon such procurement; and that he has not paid, or promised or agreed to pay, to any third person, in consideration of such procurement, or in compensation for services in connection therewith any brokerage, commission, or percentage upon the amount receivable by him here-under; and that he has not, in estimating the contract price demanded by him, included any sum by reason of any such brokerage, commission, or percentage, and that all monies payable to him hereunder are free from obligation of any other person for services rendered, or supposed to have been rendered, in the procurement of this contract. He further agrees that any breach of this warranty shall constitute adequate cause for the annulment of this contract by the County and that the County may retain to its own use from any sums due or to become due hereunder an amount equal to any brokerage, commission, or percentage so paid, or agreed to be paid.

The County agrees to pay the Contractor in the manner and in the amount provided in the said specifications and proposal.

CONTRACT AGREEMENT (continued)

IN WITNESS WHEREOF, Jackson County, Missouri has caused by Resolution No. 20701  
of June 28, 2021, these presents to be executed in its behalf by its duly authorized  
agent, and the said Party of the Second Part (Contractor) has hereunto set its hand and seal.

Recommended by:


  
\_\_\_\_\_  
Brian D. Gaddie, P.E.  
Director of Public Works

8.3.21  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Frank White, Jr.  
County Executive

\_\_\_\_\_  
Date

Approved to form this 11<sup>th</sup> day of August, 2021.

  
\_\_\_\_\_  
County Counselor

Attest:   
\_\_\_\_\_  
Clerk of the Legislature



By:   
\_\_\_\_\_  
Second Party (Contractor)

Attest:   
\_\_\_\_\_



**PERFORMANCE BOND**

Bond #GRMO51702

Project Number 3252

Project Title Buckner Tarsney Road Bridge Replacement North of Ryan Road

KNOW ALL MEN BY THESE PRESENTS: That

WCI, Inc., as PRINCIPAL (CONTRACTOR), and

Granite Re, Inc., (SURETY), licensed to do business as such in the State of Missouri, hereby bind themselves and their respective heirs, executors, administrators, successors, and assigns unto Jackson County, Missouri, a constitutionally home rule chartered governmental organization, (COUNTY), as Obligee, in the penal sum

of Five Hundred Ninety-Three Thousand, Six Hundred Five Dollars and 00 Cents (\$ 593,605.00) for the payment whereof CONTRACTOR and SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

CONTRACTOR has entered a Contract with COUNTY

for Buckner Tarsney Road Bridge Replacement North of Ryan Road which Contract, including any present or future amendment thereto, is incorporated herein by reference and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly and faithfully perform said Contract including all duly authorized changes thereto, according to all the terms thereof, including those under which CONTRACTOR agrees to pay legally required wage rates including the prevailing hourly rate of wages in the locality, as determined by the Department of Labor and Industrial Relations or by final judicial determination, for each craft or type of workman required to execute the Contract and, further, shall defend, indemnify, and hold harmless COUNTY from all damages, including but not limited to liquidated damages, loss and expense occasioned by any failure whatsoever of said CONTRACTOR and SURETY to fully comply with and carry out each and every requirement of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect.

WAIVER. That SURETY, for value received, hereby expressly agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder, shall in any way affect the obligations of this Bond; and it does hereby waive notice of any such change, extension of time, or alteration or addition to the terms of the Contract or the Work to be performed thereunder.

IN WITNESS WHEREOF, the above parties have executed this instrument the \_\_\_\_ day of \_\_\_\_\_, 2021.

**CONTRACTOR**

Name, address and facsimile number of Contractor

WCI, Inc

25606 Old KC Road, Suite B

Paola, KS 66071

Fax 913-783-4642

I hereby certify that I have authority to execute this document on behalf of Contractor.

By: Kathy Klaasmeier  
Title: President

(Attach corporate seal if applicable)

**SURETY**

Name, address and facsimile number of Surety:

Granite Re, Inc.  
14001 Quailbrook Drive  
Oklahoma City, OK 73134  
1-405-749-6800

I hereby certify that (1) I have authority to execute this document on behalf of Surety; (2) Surety has an A.M. Best rating of A- or better; (3) Surety is named in the current list of "Companies Holding Certificates of Authority as Acceptable Reinsuring Companies: as published in Circular 570 (most current revision) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury; and (4) Surety is duly licensed to issue bonds in the State of Missouri and in the jurisdiction in which the Project is located.

By: Peggy Marrs  
Title: Attorney-in-fact Peggy Marrs  
Date: \_\_\_\_\_

(Attach seal and Power of Attorney)



**GRANITE RE, INC.**  
**GENERAL POWER OF ATTORNEY**

**Know all Men by these Presents:**

That GRANITE RE, INC., a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

TRAVIS BARKER; SHANE DAVOLT; PEGGY MARRS; KIMBERLY BECKMAN; CINDY WATERS; CYNTHIA M. WATERS; its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:


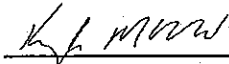
To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

TRAVIS BARKER; SHANE DAVOLT; PEGGY MARRS; KIMBERLY BECKMAN; CINDY WATERS; CYNTHIA M. WATERS may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said GRANITE RE, INC. has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Assistant Secretary, this 3<sup>rd</sup> day of January, 2020.

STATE OF OKLAHOMA )  
                                  ) SS:  
COUNTY OF OKLAHOMA )

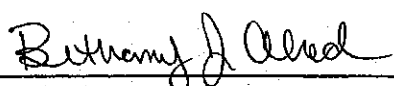


  
\_\_\_\_\_  
Kenneth D. Whittington, President  
  
\_\_\_\_\_  
Kyle P. McDonald, Assistant Secretary

On this 3<sup>rd</sup> day of January, 2020, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. Company and Kyle P. McDonald, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Assistant Secretary of GRANITE RE, INC., the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Assistant Secretary, respectively, of the Company.

My Commission Expires:  
April 21, 2023  
Commission #: 11003620



  
\_\_\_\_\_  
Bethany J. Alred  
Notary Public

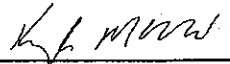
**GRANITE RE, INC.**  
**Certificate**

THE UNDERSIGNED, being the duly elected and acting Assistant Secretary of Granite Re, Inc., a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of Granite Re, Inc. and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Assistant Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.



  
\_\_\_\_\_  
Kyle P. McDonald, Assistant Secretary



**MAINTENANCE BOND**

Bond #GRMO51702

Project Number: 3252

Project Title: Buckner Tarsney Road Bridge Replacement North of Ryan Road

KNOW ALL MEN BY THESE PRESENTS, that we,

WCI, Inc.  
*Legal Name of Contracting Firm*

of Paola, KS 66071,  
*City and State*

hereinafter referred to as "Contractor," and

Granite Re, Inc.  
*Name of Surety*

a corporation organized under the laws of the State of Minnesota,  
and authorized to transact business in the State of Missouri, as "Surety," are held and firmly bound unto  
the **County of Jackson, Missouri**, hereinafter referred to as "Owner," in the penal sum of

Five Hundred Ninety Three Thousand, Six Hundred Five Dollars and 00 Cents (\$ 593,605.00)  
for the payment of which sum, well and truly to be made to the Owner, we bind ourselves and our heirs,  
executors, administrators, successors, and assigns, jointly and severally, by these presents.

WHEREAS, on the \_\_\_\_\_ day of \_\_\_\_\_, 2021, the Contractor  
entered into a written contract with the Owner for the conditions of this obligation are such that if, during  
a maintenance period of **one (1) year** from the date of acceptance of the contracted work, the Principal  
upon receiving written notice of a need for repairs which are directly attributable to defective materials or  
workmanship, shall diligently take the necessary steps to correct said defects within seven (7) days from  
the date of said notice, then this obligation shall be null and void; otherwise it shall remain in full force  
and effect.

As part of this obligation secured hereby and in addition to the face amount specified therefore, there  
shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred  
by the Owner in successfully enforcing such obligation, all to be taxed as costs and included in any  
judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the  
terms of this agreement or to the work to be performed there under or the specifications accompanying  
the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such  
change, extension of time, alteration or addition to the terms of the agreement or to the work or to the  
specifications.

IN TESTIMONY WHEREOF, the Contractor has hereunto set his hand, and the Surety has caused these presents to be executed in its name and its corporate seal, to be affixed by its attorney-in-fact at

Liberty, MO 64068

on the \_\_\_\_\_ day of \_\_\_\_\_, 2021.

WCI, Inc \_\_\_\_\_ (SEAL)  
Contractor

By: Kathy Klaasmeyer

Granite Re, Inc. \_\_\_\_\_  
Surety Company

By: Peggy Marrs  
Attorney-in-Fact Peggy Marrs

By: Logan Baird  
Missouri Agent Logan Baird

(Accompany this bond with attorney-in-fact's authority from the Surety Company certified to include the date of the bond.)

**GRANITE RE, INC.**  
**GENERAL POWER OF ATTORNEY**

**Know all Men by these Presents:**

That GRANITE RE, INC., a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

TRAVIS BARKER; SHANE DAVOLT; PEGGY MARRS; KIMBERLY BECKMAN; CINDY WATERS; CYNTHIA M. WATERS; its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

TRAVIS BARKER; SHANE DAVOLT; PEGGY MARRS; KIMBERLY BECKMAN; CINDY WATERS; CYNTHIA M. WATERS may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said GRANITE RE, INC. has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Assistant Secretary, this 3<sup>rd</sup> day of January, 2020.

STATE OF OKLAHOMA )  
 ) SS:  
 COUNTY OF OKLAHOMA )



*Kenneth D. Whittington*

Kenneth D. Whittington, President

*Kyle P. McDonald*

Kyle P. McDonald, Assistant Secretary

On this 3<sup>rd</sup> day of January, 2020, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. Company and Kyle P. McDonald, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Assistant Secretary of GRANITE RE, INC., the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Assistant Secretary, respectively, of the Company.

My Commission Expires:  
 April 21, 2023  
 Commission #: 11003620



*Brittany J. Alred*

Notary Public

**GRANITE RE, INC.**  
**Certificate**

THE UNDERSIGNED, being the duly elected and acting Assistant Secretary of Granite Re, Inc., a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of Granite Re, Inc. and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Assistant Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.



*Kyle P. McDonald*

Kyle P. McDonald, Assistant Secretary

## REVENUE CERTIFICATE

I hereby certify that there is a balance otherwise unencumbered to the credit of the appropriation to which this contract is chargeable, and a cash balance otherwise unencumbered in the treasury from which payment is to be made, each sufficient to meet the obligation of \$ 593,605.00, which is hereby authorized.

*8-10-2021*

  
\_\_\_\_\_  
Manager, Division of Finance  
*Director of Finance*

ACCOUNT NUMBER(S) TO BE CHARGED:

Department	Account Number	Amount
1507	58040	593605

FMS CONTRACT NUMBER ASSIGNED TO THIS CONTRACT: 150721003

### NOTICE TO CONTRACTORS

Under the laws of the State of Missouri, any changes made in this contract must be made in writing, approved of record by the County Legislature, Certified by the Manager, Division of Finance, and all made a matter of record before the County is liable therefore.

Manager, Division of Finance  
Jackson County, Missouri

THIS SHEET LEFT BLANK INTENTIONALLY.

# GENERAL CONDITIONS

## **GENERAL CONDITIONS**

### **GC-1 SCOPE**

The contract stipulations which follow are general in scope and may refer to conditions which will not be encountered in the performance of the work included in this contract, and which are not applicable thereto. Any requirement, provision, or other stipulation of these general conditions which pertains to a nonexistent condition, and is not applicable to the work to be performed hereunder, shall have no meaning in the contract.

### **GC-2 CONTRACT DOCUMENTS**

It is understood and agreed that the advertisement, instruction to bidders, proposal, bond form(s), contract agreement, special conditions, general conditions, specifications, plans, addenda thereto, and duly authorized change orders, together with any and all supplementary drawings furnished by the Engineer-Architect as and when required to make clear, and to define in greater detail, the intent of the contract plans and specifications, other drawings, specifications, and engineering data furnished by the Contractor (when and as approved by the Owner or Engineer-Architect), and instructions furnished by the manufacturers of equipment for the installation thereof are each and all included in this contract, and the work shall be done in full compliance and accord therewith.

### **GC-3 DEFINITIONS**

Any word, phrase, or other expression defined in this paragraph GC-3 and used in these contract documents shall have the meaning herein given:

- a. "Contract" or "contract documents" shall include all of the documents and drawings enumerated above in paragraph GC-2.
- b. "Owner" shall mean the corporation (municipal or otherwise), board, district, or other political subdivision, company, or firm, who is named and designated as the "Party of the First Part" in the contract agreement hereto attached and for whom the work covered by this contract is to be performed, acting through its duly authorized officers or agents."
- c. "Contractor" shall mean the corporation, company, partnership, firm, or individual, named and designated in the contract agreement as the "Party of the Second Part" and who has entered into this contract for the performance of the work covered thereby, and its, his, or their duly authorized agents and other legal representatives.
- d. "Engineer-Architect" or "A-E" shall mean the Director of the Jackson County Public Works Department, or his authorized agent.
- e. "Inspector" shall mean the engineering, architectural or technical inspector or inspectors duly authorized by the Owner or Engineer-Architect, limited in each case to the particular duties entrusted to him or them.
- f. "Date of Contract" or words equivalent thereto shall mean the date written in the first paragraph of the contract agreement.
- g. "Day" or "days" unless herein otherwise expressly defined shall mean a calendar day or days of 24-hours each.
- h. "The work" shall mean the work to be done and the equipment, supplies, and materials to be furnished under this contract, unless some other meaning is indicated by the context.
- i. "Plans" or "the plans" or "the contract plans" shall mean and include all:
  - (1) Drawings caused by the Owner to be prepared as a basis for proposals.
  - (2) All drawings submitted by the successful bidder with his proposal and by the Contractor to the Owner, when and as approved by the Engineer-Architect and



- (3) All drawings submitted by the Owner or Engineer-Architect to the Contractor during the progress of the work as provided for herein.
- j. Whenever in these contract documents the words "as ordered," "as directed," "as required," "as permitted," "as allowed," or words or phrases of like import are used, it shall be understood that the order, direction, requirement, permission or allowance of the Owner and Engineer-Architect is intended.
- k. Similarly, the words "approved," "reasonable," "suitable," "acceptable," "properly," "satisfactory," or words of like effect and import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgment of the Owner and Engineer-Architect.

Whenever any statement is made in the contract documents concerning the expression "it is understood and agreed," or an expression of like import, such expression means the mutual understanding agreement of the parties executing the contract agreement of which these general conditions are a part.

#### **GC-4 VERBAL STATEMENTS NOT BINDING**

It is understood and agreed that the written terms and provisions of this agreement shall supersede all prior verbal statements of any and every official and/or other representative of the Owner, and such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any way whatsoever, the written agreement.

#### **GC-5 TITLES AND SUBHEADINGS**

The titles or subheadings used in this contract and on the contract plans and drawings and in the specifications, are understood to be for convenience of reference only, and shall not be taken or considered as being a part thereof, or as having any bearing on the interpretation thereof.

#### **GC-6 COPIES OF CONTRACT**

Five (5) copies of the Contractor's proposal as submitted, bond form(s), a statutory bond where required, and the contract agreement shall be prepared. Five of these copies, each containing the bond (or bonds) properly executed and the contract agreement signed by the Contractor, shall be submitted to and signed by the Owner; two of the copies so signed shall be delivered to the Contractor—one for his surety company and one to the Engineer-Architect. Two copies shall remain with the Owner.

#### **GC-7 SCOPE, NATURE, AND INTENT OF SPECIFICATIONS AND PLANS**

The said specifications and plans are intended to supplement, but not necessarily duplicate each other, and together constitute one complete set of specifications and plans, so that any work exhibited in the one and not in the other, shall be executed just as if it had been set forth in both, in order that the work shall be completed according to the complete design or designs as decided and determined by the Engineer-Architect. Should anything be omitted from the specifications and plans which is necessary to clear understanding of the work, or should it appear various instructions are in conflict, then the Contractor shall secure written instructions from the Engineer-Architect before proceeding with the construction affected by such omissions or discrepancies. It is understood and agreed that the work shall be performed and completed according to the true spirit, meaning, and intent of the contract, specifications and plans. The Contractor's responsibility for construction covered by conflicting requirements, not provided for by addendum prior to the time of opening bids for the work represented thereby, shall not extend beyond the construction in conformity with the cheaper of the said conflicting requirements. Any increase in cost of work required to be done in excess of the cheaper of the conflicting requirements will be paid for as extra work as provided for herein.

**GC-8 FIGURED DIMENSIONS TO GOVERN**

Dimensions and elevations shown on the plans shall be accurately followed, even though they differ from scaled measurements. No work shown on the plans, the dimensions of which are not indicated, shall be executed until the required dimensions have been obtained from the Engineer-Architect.

**GC-9 CONTRACTOR TO CHECK PLANS AND SCHEDULES**

The Contractor shall check all dimensions, elevations, and quantities shown on the plans, and schedules given to him by the Engineer-Architect and shall notify the Engineer-Architect of any discrepancy between the plans and the conditions on the ground, or any error or omission in plans, or in the layout as given by stakes, points, or instructions, which he may discover in the course of the work. The Contractor will not be allowed to take advantage of any error or omission in the plans or contract documents, as full instructions will be furnished by the Engineer-Architect should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

**GC-10 DRAWINGS TO BE FURNISHED BY CONTRACTOR**

The Contractor shall check and verify all field measurements and shall furnish/ all shop, fabrication, assembly, and other drawings required by the specifications; drawings of equipment and devices, offered by the Contractor for approval of the Engineer-Architect, in sufficient detail to adequately show the construction and operation thereof; drawings showing essential details of any changes in design of construction proposed, for consideration of the Owner, by the Contractor in lieu of the design or arrangement required by the contract or any item of extra work thereunder; and all required special wiring and piping layouts. Not less than three (3) preliminary copies of each such drawing shall be submitted to the Engineer-Architect for his check and approval, together with the same number of copies of each drawing required by the Engineer-Architect to be revised. On final approval, the Engineer-Architect shall be furnished with a total of not less than two (2) copies, and more when required, of each drawing as finally approved; such number to include any copies of preliminary or revised drawings which are approved as submitted. After due approval by the Engineer-Architect, all such drawings shall become a part of the contract documents and the work or equipment shown thereby shall be in conformity therewith unless required by the Owner. No work shall be performed in connection with the fabrication or manufacture of material or equipment shown by any drawing thereof, nor shall any accessory, appurtenance, or device not fabricated or manufactured by the Contractor or his subcontractor, be purchased until the drawing or drawings therefor have been approved as stipulated, except at the Contractor's own risk and responsibility. The Engineer-Architect's check and approval of drawings submitted by the Contractor will be for, and will cover, only general conformity to the plans and specifications and will not constitute a blanket approval of all dimensions, quantities, and details of the material or equipment shown nor shall such approval relieve the Contractor of his responsibility for errors contained in such drawings.

**GC-11 APPROVED EQUAL**

If the Contractor desires to substitute materials, appliances, equipment, etc., specified in the specifications, the Contractor shall request, in writing, an approval from the Engineer-Architect. Said materials; appliances, equipment, etc. can only be used as approved equal after receipt from the Engineer-Architect of written approval thereof. If the Engineer-Architect is not familiar with the products for which the Contractor desires approval as an equal, he will reserve the right to have the products submitted to an independent testing laboratory of his choosing, to determine if the substitute product is an equal. The costs of such tests shall be borne by the Contractor or the parties offering the product as an approved equal.

**GC-12 OWNERSHIP OF DRAWINGS**

All drawings, specifications and copies thereof furnished by the Engineer-Architect are his property. They are not to be used on other work, and, with the exception of the signed contract set, are to be returned to him on request, at the completion of the work.

**GC-13 SAMPLES**

The Contractor shall furnish for approval, with such promptness as to cause no delay in his own work or in that of any other Contractor, all samples as directed by the Engineer-Architect. The Engineer-Architect shall check and approve such samples, with reasonable promptness, only for conformance with the design concept of the project and for compliance with the information given in the contract documents. The work shall be in accordance with approved samples.

**GC-14 CONTRACTOR TO FURNISH STAKES AND HELP**

When the documents or specifications require that the Engineer-Architect perform staking, the Contractor shall furnish without charge, competent men from his force and such tools, stakes, and other materials as the Engineer-Architect may require for the proper staking out of the work, and in making measurements and surveys, and in establishing temporary or permanent reference marks in connection with said work the Contractor shall perform all work necessary to locate all construction on the site for building projects. A registered land surveyor employed by the Contractor shall locate the building corners.

**GC-15 LINES AND GRADES**

All work done under this contract shall be done to the lines, grades, and elevations shown on the plans. The Contractor shall keep the Engineer-Architect informed, a reasonable time in advance, of the times and places at which he wishes to do work, in order that lines and grades may be furnished and necessary measurements for record and payment may be made with the minimum of inconvenience to the Engineer-Architect and of delay to the Contractor. This paragraph applies to projects for which the Engineer-Architect is to make staking surveys and payment is on a unit price basis.

**GC-16 WORK DONE WITHOUT LINES OR GRADES**

Any work done without being properly located and established by base lines, offset stakes, benchmarks, or other basic reference points located, established, or checked by the Engineer-Architect, may be ordered removed and replaced at the Contractor's cost and expense.

**GC-17 PRESERVATION OF MONUMENTS AND STAKES**

The Contractor shall carefully preserve all monuments, bench marks, reference points, and stakes, and in case of willful or careless destruction of the same will be charged with the resulting expense of replacement. The Contractor shall have no claim for damages or extension of time due to such destruction. In case of any permanent monuments, bench marks, section corner and quarter-section corner monuments which must be removed or disturbed during construction, the Contractor shall carefully protect and preserve the same until he has properly referenced for relocation and replacement. The Contractor shall furnish at his own expenses a duly qualified and licensed (Missouri) land surveyor to reference and reestablish, after completion of construction, with permanent markers as is normally used in these locations. The Contractor shall also furnish a certificate sealed by the land surveyor with a statement that the monument recovered was reset in the same location prior to final acceptance of the project by the Owner.

**GC-18 LEGAL ADDRESS OF CONTRACTOR**

Both the business address of the Contractor given in the bid or proposal upon which this contract is founded, and the Contractor's office in the vicinity of the work, are hereby designated as the places to which all notices, letters, and other communications to the Contractor may be mailed or delivered. The delivering at either of the above named addresses, or depositing in any mail box regularly maintained by the post office of any notice, letter, or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor, and the date of said service shall be the date of such delivery or mailing. Such addresses may be changed at any time by an instrument in writing, executed by the Contractor and presented and delivered to the Engineer-Architect and to the Owner. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter, or communication upon the Contractor personally.

**GC-19 CONTRACTOR'S OFFICE AT SITE OF WORK**

During the performance of this contract, the Contractor shall maintain a suitable office at or near the site of the work which shall be the headquarters of a representative authorized to receive drawings, instructions, or other communications or articles from the Owner or the Owner's agents; and any such communications given to the said representative, or delivered at the Contractor's office at the site of the work in his absence, shall be deemed to have been given to the Contractor.

**GC-20 RESPONSIBILITY OF CONTRACTOR**

The Contractor shall furnish all transportation, tools, equipment, machinery, and plant, and all suitable appliances, requisite for the execution of this contract and shall be solely answerable for the same and for the safe, proper, and lawful construction, maintenance, and use thereof. He shall cover and protect his work from damage, and all injury to the same (before the completion and acceptance of this contract) shall be made good by him. The Contractor shall be solely answerable for all damage to the Owner or the property of the Owner, to other contractors or other employees of the Owner, to the neighboring premises, or to any private or personal property, due to improper, illegal, or negligent conduct of himself or his subcontractors, employees, or agents in and about said work, or in the execution of the work covered by this contract, or any extra work undertaken as herein provided, or to any defect in, or the improper use of, any scaffolding, shoring, apparatus, ways, works, machinery, or plant.

**GC-21 PATENTS**

It is mutually agreed by and between the parties to this contract that all royalties and fees for and in connection with patents or patent infringement claims for materials, articles, apparatus, devices or equipment (as distinguished from processes) used in or furnished for the work, shall be included in the contract amount and the Contractor shall satisfy all demands that may be made at any time for such, and he shall be liable for any damage or claims for patent infringements. The Contractor shall at his own cost and expense defend any and all suits or proceeding that may be instituted at any time against the Owner for infringement or alleged infringement of any such patents involved in the work, and, in case of an award of damages, the said Contractor shall pay such award. Final payment to the Contractor by the Owner will not be made while any such suit or claim remains unsettled. The Contractor, however, shall not be liable for the defense of any suit or other proceedings, nor for the payment of any damages or other costs in connection therewith, for the infringement or alleged infringement of any patented process required by the owner in the design of the work to be done under this contract or by the contract specifications therefor.

**GC-22 INDEPENDENT CONTRACTOR**

The right of general inspection of the Owner shall not make the Contractor an agent of the Owner, and the liability of the Contractor for all damages to persons, firms and corporations, arising from the Contractor's execution of the work, shall not be lessened because of such general supervision, but as to all such persons, firms, and corporations, and the damages, if any, to them or their property, the Contractor herein is an independent Contractor in respect to the work.

**GC-23 RELATIONS WITH OTHER CONTRACTORS**

The Contractor shall cooperate with all other contractors who may be performing work in behalf of the Owner, and workmen who may be employed by the Owner, on any work in the vicinity of the work to be done under this contract, and he shall so conduct his operations as to interfere to the least possible extent with the work of such contractors or workmen. He shall promptly make good, at his own expense, any injury or damage that may be sustained by other contractors or employees of the owner at his hands. Any difference or conflict which may arise between the Contractor and other contractors or between the Contractor and the workmen of the Owner, in regard to their work shall be adjusted and determined by the Engineer-Architect. If the work of the Contractor is delayed because of any acts or omissions of any other contractor or contractors, the Contractor shall have no claim against the Owner on that account other than for an extension of time. When two or more contracts are being executed at one time in such a manner that work on one contract may interfere with that of another, the Engineer-Architect shall decide which contractor shall cease work and which shall continue, or whether the work on both contracts shall progress at the same time, and in what manner. When the territory of one contract is the necessary or convenient means of access for the transportation or movement of men, materials, or appliances required for the execution of another contract, such privileges of access or any other reasonable privilege may be granted by the Engineer-Architect to the contractor so desiring, to the extent and amount, in the manner, and at the time, which may be reasonably necessary.

**GC-24 DEFENSE OF SUITS**

In case any action at law or suit in equity is brought against the Owner or any of its officers or agents for or on account of the failure, omission, or neglect of the contractor to do and perform any of the covenants, acts, matters, or things by this contract undertaken to be done or performed, or for any injury or damage caused by the negligence or alleged negligence, of the Contractor or his subcontractors, or his or their employees or agents, the Contractor shall indemnify and save harmless the Owner, and officers and agents of the Owner, of and from all losses, costs, damages, expenses, judgments, or decrees whatever arising out of such actions or suits as may be brought as aforesaid.

**GC-25 METHODS OF OPERATION**

The Contractor shall give to the Engineer-Architect full information in advance as to his plans for carrying on any part of the work. If at any time before the beginning or during the progress of the work, any part of the Contractor's plant or equipment or any of his methods of executing the work, appear to the Engineer-Architect to be unsafe, inefficient, or inadequate to ensure the required quality, or rate of progress, of the work, he may order the Contractor to increase or improve his facilities or methods, and the Contractor shall promptly comply with such orders, but neither compliance with such orders nor failure of the Engineer-Architect to issue such orders shall relieve the Contractor from his obligations to secure the degree of safety, the quality of work, and the rate of progress required by this contract. The Contractor alone shall be responsible for the safety, adequacy, and efficiency of his plant, equipment, and methods. The approval by the Engineer-Architect of any plan or method of work proposed by the Contractor shall not relieve the Contractor of any responsibility therefor, and such approval shall not be considered as an assumption by the Owner, or any officer, agent, or employee thereof, of any risk or liability, and the Contractor shall have no claim under this contract on account of the failure or inefficiency of any plan or method so approved. Such approval shall be considered, and shall mean that the Engineer-Architect has no objection to the Contractor's use or adoption, at his risk and responsibility, of the plan or method so proposed by the Contractor.

**GC-26 SUGGESTION TO CONTRACTOR ADOPTED AT HIS OWN RISK**

Any plan or method of work suggested by the Engineer-Architect, or other representative of the Owner, to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor, and the Engineer-Architect and the Owner will assume no responsibility therefor.

**GC-27 AUTHORITY AND DUTY OF THE ENGINEER-ARCHITECT**

It is mutually agreed by and between the parties to this contract, that the Engineer-Architect shall inspect all work included herein. In order to prevent delays and disputes and to discourage litigation, it is further agreed by and between the parties to this contract that the Engineer-Architect shall in all cases determine the amounts and quantities of the several kinds of work which are to be paid for under this contract; that he shall determine all questions in relation to said work and the construction thereof; that he shall in all cases decide every question which may arise relative to the execution of this contract on the part of said contractor; that his decisions and findings shall be the conditions precedent to the right, of the parties hereto, to any action on the contract, and to any rights of the Contractor to receive any money under this contract provided, however, that should the Engineer-Architect render any decision or give any directions which, in the opinion of the Contractor, is not in accordance with the meaning and intent of this contract, the Contractor may file with the Engineer-Architect within thirty (30) days, his written objection to the decision or direction so rendered. It is the intent of this agreement that there shall be no delay in the execution of the work, and the decision or directions of the Engineer-Architect as rendered shall be promptly carried out.

**GC-28 INSPECTION**

It is agreed by the Contractor that the Owner shall be and is hereby authorized to appoint or employ (either directly or through the Engineer-Architect) such architects, engineers, and inspectors as the Owner may deem proper, to inspect the materials furnished and the work performed under this contract, and to see that the said materials are furnished, and the said work performed, in accordance with the plans and specifications therefore. The Contractor shall furnish all reasonable aid and assistance required by the Engineer-Architect, or by the inspectors, for the proper inspection and examination of the work and all parts thereof. The Contractor shall regard and obey the directions and instructions of the Engineer-Architect, or any inspector so appointed, when the same are consistent with the obligations of this contract and the specifications therefore, provided, however, that should the Contractor object to any order given by any subordinate architect, engineer, or inspector, the contractor may make written appeal to the Engineer-Architect for his decision. Architects, engineers, inspectors and other properly authorized representatives of the Owner or Engineer-Architect shall be free at all times to perform their duties, and intimidation or attempted intimidation of any one of them by the Contractor or by any of his employees shall be sufficient reason, if the Owner so decides, to annul the contract. Such inspection shall not relieve the Contractor from any obligation to perform said work strictly in accordance with the plans and specifications or any modifications thereof as herein provided, and work not so constructed shall be removed and made good by the Contractor at his own expense, and free of all expenses to the Owner, whenever so ordered by the Engineer-Architect, without reference to any previous oversight or error in inspection. The Engineer-Architect does not assume any responsibility for work or action of the Contractor.

If work on any project is subject to the approval of the Federal Highway Administration, representatives of the Missouri Highways and Transportation Commission and the Federal Highway Administration shall have access to the project for the purpose of inspecting and reviewing work being performed by any contractor or subcontractor on the project. Contractors and subcontractors shall maintain books, account, ledgers, invoices, drafts, documents, pages, and other business records pertaining to the performance of this project and shall require that such materials be available at the contractors field or permanent business offices at all reasonable times during the performance of the contract and for three years from date of final FHWA voucher acceptance under the contract, for inspection by authorized representatives of the Commission and/or the Federal Highway Administration.

**GC-29 NO WAIVER OF RIGHTS**

Neither the inspection by the Owner or any of the owner's officials, employees, or agents, nor any order by the owner for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the Owner or Engineer-Architect, nor any extension of time, nor any possession taken by the

Owner or its employees, shall operate as a waiver of any provision of this contract, or of any power herein reserved to the Owner, or any right to damages herein provided, or shall any waiver of any breach in this contract be held to be a waiver of any other or subsequent breach.

**GC-30 SUPERINTENDENCE OF WORK**

The Contractor shall provide and maintain, continually on the site of the work during its progress, adequate and competent superintendent of all operations for and in connection with the work being performed under this contract, either personal or by a duly authorized superintendent or other representative. The superintendent or other representative of the Contractor on the work, and who has charge thereof, shall be fully authorized to act for the Contractor and to receive whatever orders as may be given for the proper prosecution of the work, or notices in connection therewith.

**GC-31 ORDERS TO CONTRACTOR'S AGENT**

Whenever the Contractor is not present on any part of work where it may be desired to give directions, orders may be given by the Engineer-Architect or his representative, to, and shall be received and obeyed by, the superintendent or foreman who may have charge of the particular part of the work in reference to which such orders are given.

**GC-32 PROTECTION OF PROPERTY AND PUBLIC LIABILITY**

The Contractor shall assume full responsibility for the protection of all public and private property, structures, sewers, and utilities, both above and below ground, along, beneath, above, across, or near the site or sites of the work being performed under this contract, or which are in any manner affected by the prosecution of the work or the transportation of men or materials in connection therewith. Barriers shall be kept placed at all times to protect persons other than those engaged on or about the work from accident, and the Contractor will be held responsible for all accidents to persons or property through any negligence of himself or his employees. The Contractor shall indemnify, defend, and save harmless the Owner against all damages to such property, structures, and utilities, together with all claims for damages for personal injury, including accidental death, arising out of his operations in connection with this contract. All property so damaged shall be repaired or replaced to a condition equal to its condition immediately prior to the time of damage, and to the satisfaction of the owner thereof. The Contractor shall give reasonable notice to the owner or owners of public or private property and utilities when such property is liable to injury or damage through the performance of the work, and shall make all necessary arrangements with such owner or owners relative to the removal and replacement or protection of such property or utilities. All permits and licenses required in the prosecution of any and all parts of the work shall be obtained and paid for by the Contractor. The Contractor shall satisfactorily shore, support, and protect any and all structures, and all pipes, sewers, drains, conduits, and other facilities, and shall be responsible for any damage resulting thereto. The Contractor shall not be entitled to any damages or extra pay on account of any postponement, interference, or delay caused by any such structures and facilities being on the line of the work, whether they are shown on the plans or not.

**GC-33 INSURANCE**

The Contractor shall procure and maintain in effect throughout this duration of the contract insurance coverage not less than the types and amounts specified in this section. If the nature of the goods and/or services provided by the contractor is such that they may be excluded from the coverage listed below, an addendum shall be made to the contract requesting the coverage and limits required.

All subcontractors are required to carry the same coverage and limits as the prime contractor. All required Liability policies are to be written on an "occurrence" basis unless an agreement, in writing, has been made with Jackson County.

**COMMERCIAL GENERAL LIABILITY**

Commercial General Liability Insurance with limits of not less than \$1,000,000 per occurrence and \$2,000,000 Annual Aggregate (both General and Products-Completed Operations). Aggregate shall be on a per project basis where more than one project is to be performed by the contractor under this contract. Policy shall include Severability of Interests coverage applying to Additional Insureds and also include Contractual Liability with no limitation endorsements. Policy shall include \$100,000 limit each occurrence for Damage to Rented Premise, \$1,000,000 limit each occurrence for Personal & Advertising injury liability, \$5,000 Medical Expense (any one person), and Employee Benefits Liability coverage with a \$1,000,000 limit.

**COMMERCIAL AUTOMOBILE LIABILITY**

Commercial Automobile Liability Insurance with a limit not less than \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage Limit (each accident), covering owned, hired, borrowed, and non-owned vehicles. Coverage shall be provided on a "any auto" basis and be on a Commercial Business Auto form, or acceptable equivalent, and will protect against claims arising out of the operation of motor vehicles in connection with this contract.

**WORKERS COMPENSATION AND EMPLOYERS LIABILITY COVERAGE**

Contractor shall provide coverage for Workers Compensation and Employers Liability for all claims by employees of the contractor or by anyone for whose acts it may be liable under the statutes of the State of Missouri with limits of:

Workers Compensation	Statutory
Employers Liability	\$500,000 each accident
	\$500,000 Disease – each employee
	\$500,000 Disease – Policy Limit

**EXCESS/UMBRELLA LIABILITY COVERAGE**

Contractor shall provide Excess/Umbrella liability on a n occurrence basis, with \$10,000 Retention, to provide coverage limits over all liability coverage listed above, at a limit not less than \$1,000,000 each occurrence and \$1,000,000 Aggregate.

**ADDITIONAL INSURED & CERTIFICATE OF INSURANCE**

The Commercial General and Automobile Liability Insurance specified above shall provide Jackson County Missouri and its agencies, officials, officers and employees, while acting within the scope of their authority, will be named as additional insureds for the services performed under this contract.

A Certificate of Insurance shall be filed with the County's Director of Purchasing for review and approval before commencement of work. The Certificate shall contain a provision that the policies may not be cancelled by the insurance carrier without 30 days written notice of cancellation, 10 days for non-payment of premium, to Jackson County. In the case of multi-year, renewable, or extended term on the contract, Contractor must supply the Director with current Certificate(s) on any coverage mentioned above within thirty (30) days prior to the expiration date of coverage. The Director of Purchasing may request copies of the Contractor's insurance policies for verification of coverage.

**QUALIFICATIONS INSURANCE CARRIERS**



All insurance coverage must be written by companies that have an A.M. Best's rating of "B+ V" or better or Lloyds of London, and are licensed and approved by the State to do business in Missouri.

#### **FAILURE TO MAINTAIN INSURANCE COVERAGE**

Regardless of any approval by Jackson County, it is the responsibility of the contractor to maintain the required insurance coverage in force at all times; its failure to do so will not relieve the contractor of any contractual obligation of responsibility. In the event of the Contractor's failure to maintain the required insurance, Jackson County may order work to stop immediately and, upon 10 days written notice and an opportunity to cure, may pursue its remedies for breach of this contract as provided for herein and by law.

#### **GC-34 MODIFICATIONS AND ALTERATIONS**

In executing the contract agreement, the Contractor agrees that the Owner shall have the right to make such modifications, changes, and alterations, as the Owner may see fit, in the line, grade, form, arrangements, dimensions, extent, or plan, of the work agreed to be done or any part thereof, or in the materials to be used therein, either before or after the beginning of construction thereof, without affecting the validity of the contract and the performance, payment, and maintenance bond contained therein. Where any modification, change, or alteration increases the quantity of work to be performed and is within the scope of a fair interpretation thereof, such increase shall be paid for according to the quantity of the work actually done, either at unit prices included in the contract, or, in the absence of such unit prices, as extra work. Modifications and alterations, which reduce the quantity of work to be done, shall not constitute a claim for damages or for anticipated profits on work involved in such reduction. The Engineer-Architect shall determine, on an equitable basis, the amount of:

- a. Credit due the Owner for contract work not performed, as a result of modifications or alterations authorized hereunder, where the value of the omitted work is not fixed by unit prices in the contract.
- b. Allowance to the Contractor for any actual loss incurred in connection with the purchase, delivery, and subsequent disposal of materials and equipment required for use on the work as originally planned but which could not be used in any part of the work as actually built.
- c. Any other adjustment of the contract amount where the method to be used in making such adjustment is not clearly defined in the contract documents. All orders for modifications, changes, or alterations in the work as herein provided shall be in writing, either by the Engineer-Architect under the authority of the Owner or by the Owner directly.

#### **GC-35 EXTRA WORK**

The term "extra work" as used in this contract, shall be understood to mean and to include all work that may be required by the Engineer-Architect or Owner to be performed by the Contractor to accomplish any change or alterations in, or addition to, the work shown by the contract plans, or required or reasonably implied by the specifications, which is not covered by the proposal and not otherwise provided under "Modifications and Alterations" herein. It is agreed that the Contractor shall perform all extra work under the direction of the Engineer-Architect, when and as so ordered in writing by the Engineer-Architect or Owner. When such extra work is ordered, it shall be paid for either by a lump sum or by unit prices mutually agreed upon by the Owner and Contractor in writing, or if such agreement cannot be made, on a force account basis, to be compensated in the following manner:

- (1) Labor. For all labor and foreman in direct charge of the specific operations, the Contractor shall receive the rate of wage (or scale) agreed upon in writing before beginning work for each and every hour that said labor and foreman are actually engaged in such work.

The Contractor shall receive the actual costs paid to, or in behalf of, workmen by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

An amount equal to 20 percent of the sum of the above items will also be paid the Contractor.

- (2) Bond Insurance and Tax. For property damage, liability, and workmen's compensation insurance premiums, unemployment insurance contributions and social security taxes on the force account work, the Contractor shall receive the actual cost, to which cost six percent will be added. The Contractor shall furnish satisfactory evidence of the rates paid for such bond, insurance, and tax.
- (3) Materials. For materials accepted by the Engineer-Architect and used, the Contractor shall receive the actual cost of such materials delivered on the work, including transportation charges paid by him (exclusive of machinery rentals as hereinafter set forth), to which cost 15 percent will be added.
- (4) Equipment. For any machinery or special equipment (other than small tools) including fuel and lubricants, plus transportation costs, the use of which has been authorized by the Engineer-Architect, the Contractor shall receive the rental rates agreed upon in writing before such work is begun for the actual time that such equipment is in operation on the work, to which rental sum 15 percent will be added.
- (5) Miscellaneous. No additional allowance will be made for general superintendent, the use of small tools, or other costs for which no specific allowance is herein provided.
- (6) Compensation. The Contractor's representative and the Engineer-Architect shall compare records of the cost of work done as ordered on a force account basis.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer-Architect with duplicate itemized statements of the cost of such force account work detailed as follows:
  - (a) Name, classification, date, daily hours, total hours rate, and extension for each laborer and foreman.
  - (b) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - (c) Quantities of materials, prices, and extensions.
  - (d) Transportation of materials.
  - (e) Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
  - (f) Statements shall be accompanied and supported by received invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

The Contractor shall not begin any work for which price payments under classifications are not provided in the contract without first bringing the matter to the attention of the Engineer-Architect and no bills or charges for "Extra Work" will be allowed except for that ordered in writing before its execution.

#### **GC-36 PROVISION FOR EMERGENCIES**

Whenever, in the opinion of the Engineer-Architect, the Contractor has not taken sufficient precaution for the safety of the public or the protection of the work to be constructed under this contract, or of adjacent structures or property which may be injured by processes of construction on account of such neglect, and whenever, in the opinion of the Engineer-Architect, an emergency shall arise and immediate action shall be considered necessary in order to protect public or private, personal or property interests, then the Engineer-Architect, with or without notice to the Contractor, may provide suitable protection to the said interests by causing such work to be done and material to be furnished and placed as the Engineer-Architect may consider necessary and adequate. The cost and expense of such work and materials so

furnished shall be borne by the Contractor, and, if the same shall not be paid on presentation of the bills therefore, such costs shall be deducted from any amounts due (or to become due) the Contractor. The performance of such emergency work under the direction of the Engineer-Architect shall in no way relieve the Contractor of responsibility for damages which may occur during or after such precaution has been duly taken by the Engineer-Architect.

**GC-37 ASSIGNMENT AND SUBLETTING OF CONTRACT**

Except for the furnishing and transportation of materials, the Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of any portion of his contract to any individual firm or corporation without written consent of the Owner. This consent of the Owner, will not be given unless, and until, the Contractor has submitted satisfactory evidence that the proposed subcontractor is qualified to execute the work and has an Affirmative Action Plan acceptable to the County, together with a complete copy of the subcontract if so requested by the Engineer. The subcontract shall bind the subcontractor to comply with all requirements of this contract, for example, wage rates, equal employment opportunity regulations, submittal of payrolls, etc. Assignment of the entire contract may be made only upon written consent of the Owner. The Contractor's own forces and equipment shall perform not less than 50 percent of the contract work.

No assigning, transferring or subletting, even though consented to, shall relieve the Contractor of his liabilities under his contract.

The Contractor shall give his personal attention of any portion of his contract, which has been sublet, and he shall be responsible for its proper construction.

The prime Contractor, as a condition of this contract, is responsible for assuring submission of proof or documentation regarding Affirmative Action compliance by his subcontractors and for the subsequent Affirmative Action performance by such subcontractors.

**GC-38 RIGHT OF OWNER TO TERMINATE CONTRACT**

If the work to be done under this contract shall be abandoned by the Contractor; or if this contract shall be assigned by him otherwise than as herein provided; or if the Contractor should be adjudged a bankrupt, or if a general assignment of his assets be made for the benefit of his creditors, or if a receiver should be appointed for the Contractor or any of his property; or if at any time the Engineer-Architect shall certify in writing to the Owner that the performance of the work under this contract is being unnecessarily delayed, or that the Contractor is willfully violating any of the conditions or covenants of this contract or the specifications therefore, or that he is executing the same in bad faith or otherwise not in accordance with the terms of said contract, or if the work be not substantially completed within the time to which such completion date may be extended; then the Owner may serve written notice upon the Contractor and his surety of said Owner's intention to terminate this contract, and, unless within five (5) days after the serving of such notice upon the Contractor, a satisfactory arrangement be made for the continuance thereof, this contract shall cease and terminate. In the event of such termination, the Owner shall immediately serve notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and complete the work, provided, however, that if the surety does not commence performance thereof within thirty (30) days from the date of said notice of termination, the Owner may take over the work and prosecute same to completion, by contract or otherwise, for the account of the Contractor. The Contractor and his surety shall be liable to the Owner for any and all excess cost sustained by the Owner by reason of such prosecution and completion including compensation for additional architectural, engineering, managerial and administrative expense; and in such event the Owner may take possession of, and utilize in completing the work, all such materials, equipment, tools, and plant as may be on the site of the work and necessary therefore.

**GC-39 SUSPENSION OF WORK ON NOTICE**

The Contractor shall delay or suspend the progress of the work or any part thereof, whenever he shall be so required by verbal order of the Owner or Engineer-Architect at the moment it is issued. Said verbal

order will be confirmed by written order at the request of the Contractor which shall note the time the verbal order was issued. The Contractor shall delay or suspend the progress for such periods of time as required to comply with directions issued by Owner or Engineer-Architect, provided that, in the event such delay or suspension of the progress of the work, or any part thereof, the time for completion of the work so suspended or delayed by such suspensions shall be extended for a period equivalent to the time lost; however, such order of the Owner or Engineer-Architect shall not otherwise modify or invalidate any of the provisions of this contract. In the event that the work shall be stopped by order of the Owner or Engineer-Architect, any expense which, in the opinion and judgment of the Engineer-Architect, is caused thereby shall be paid by the Owner to the Contractor.

**GC-40 LOSSES FROM NATURAL CAUSES**

All loss or damage arising out of the nature of the work to be done, or from the action of the elements, or from floods or overflows, or from ground water, or from unusual obstructions or difficulties, or any other natural or existing circumstance either known or unforeseen, which may be encountered in the prosecution of the said work shall be sustained and borne by the Contractor at his own cost and expense.

**GC-41 LAWS AND ORDINANCES**

The Contractor shall keep himself fully informed of all existing and current regulations of the Owner and County, State and National laws which in any way limit or control the actions or operations of those engaged upon the work or affecting the materials supplied to or by them. He shall at all times observe and comply with all ordinances, laws, and regulations, and shall protect and indemnify the Owner and the Owner's officers and agents against any claims or liability arising from or based on any violation of the same.

**GC-42 SANITARY REGULATIONS**

In general, the operations of the Contractor shall be in full conformity with all of the rules and regulations of boards and bodies having jurisdiction with respect to sanitation. The Contractor shall supply safe and sufficient drinking water to all of his employees. The Contractor shall obey and enforce all sanitary regulations and orders, and shall take precautions against infectious diseases and the spread of same.

**GC-43 CHARACTER OF WORKMEN**

The Contractor shall employ only workmen, who are competent to perform the work assigned to them and (in the case of skilled labor), who are adequately trained and experienced in their respective trades and who do satisfactory work. In all cases, local labor shall be given preference when available. Whenever the Engineer-Architect shall notify the Contractor that any man on the work is, in his opinion, incompetent, unfaithful, or disorderly, or who uses threatening or abusive language when on the work to any person representing the Owner, such man shall be immediately discharged from the work and shall not be reemploy thereon except with the consent of the Engineer-Architect.

**GC-44 SATURDAY, SUNDAY, HOLIDAY, AND NIGHT WORK**

No work shall be done between the hours of 6:00 p.m. and 8:00 a.m., nor on Saturdays, Sundays, or legal holidays, without the written approval or permission of the Engineer-Architect in each case, except such work as may be necessary for proper care, maintenance, and protection of work already done or equipment, or in the case of an emergency. The Contractor may establish night work as a regular procedure, with the written permission of the Engineer-Architect. The Engineer-Architect, however, may revoke such permission, at any time if the Contractor fails to maintain at night, adequate equipment for the proper prosecution and control of the work, and all operations performed thereunder.

**GC-45 UNFAVORABLE CONSTRUCTION CONDITIONS**

During unfavorable weather, wet ground, or other unsuitable construction condition, the Contractor shall confine his operations to work, which will not be affected adversely thereby. No portion of the work shall be constructed under conditions, which would affect adversely the quality of efficiency thereof unless, by

special means or precautions approved by the Engineer-Architect, the Contractor shall be able to perform the work in a proper and satisfactory manner.

**GC-46 BEGINNING, PROGRESS, AND TIME OF COMPLETION OF WORK**

The Contractor shall, within ten (10) days after being instructed to do so in a written notice from the Owner, commence the work to be done under this contract; and the rate of progress shall be such that the work shall have been completed in accordance with the terms of the contract on or before the termination of the construction period named in the proposal, subject to any extension or extensions of such time made as hereinafter provided. The Contractor may be required to furnish the Engineer-Architect with a tentative schedule setting forth in detail the procedure he proposes to follow, and giving the dates on which he expects to start and to complete separate portions of the work. If at any time, in the opinion of the Engineer-Architect, proper progress is not being maintained, such changes shall be made in the schedule of operations as the Engineer-Architect shall direct or approve.

**GC-47 HINDRANCES AND DELAYS**

In executing the contract agreement, the Contractor expressly covenants and agrees that, in undertaking to complete the work within the time therein fixed, he has taken into consideration and made allowances for all hindrances and delays incident to such work, whether growing out of delays in securing materials or workmen or otherwise. The Contractor shall make no charge for hindrances or delays from any cause during the progress of the work, or any portion thereof, embraced in this contract, except as provided in the paragraph on "Suspension of Work on Notice" of these GENERAL CONDITIONS.

**GC-48 EXTENSION OF TIME**

Should the Contractor be delayed in the final completion of the work by any act or neglect of the Owner or Engineer-Architect, or of any employee of either, or by any other contractor employed by the Owner, or by strikes, fire, or other cause or causes outside of and beyond the control of the Contractor and which could have been neither anticipated nor avoided, then an extension of time sufficient to compensate for the delay shall be granted by the Owner provided, however, that the Contractor shall give the Owner, and the Engineer-Architect, within ten (10) consecutive days from the start of such delay, notice in writing of the cause of delay in each case. Extensions of time will not be granted for delays caused by unfavorable weather, unsuitable ground conditions, inadequate construction force, or the failure of the Contractor to place orders for equipment or materials a sufficient time in advance to ensure delivery when needed.

**GC-49 LIQUIDATED DAMAGES**

It is mutually understood and agreed by and between the parties to this contract, in signing the agreement thereof, that time is of the essence of this contract, and that in the event that the said Contractor shall fail in the performance of the work specified and required to be performed within the period of time stipulated therefor in the contract agreement binding said parties, after due allowance for any extension or extensions of time which may be granted under the provisions of the preceding paragraph, the said Contractor shall pay unto the said Owner, as stipulated liquidated damages and not as a penalty, the sum indicated in the Special Conditions for each and every calendar day that the Contractor shall be in default. In case of joint responsibility for any delay in the final completion of the work covered by this contract, where two or more separate contracts are in force at the same time and cover work on the same project and at the same site, the total amount of liquidated damages assessed against all contractors under such contracts, for any one (1) day of delay in the final completion of the work, will not be greater than the amount listed in SPECIAL PROVISIONS, and the amount assessed against any one Contractor for one (1) day of delay will be based upon the individual responsibility of such Contractor for the aforesaid delay as determined by, and in judgment of the Owner. The Owner shall have the right to deduct said liquidated damages from any moneys in its hands, otherwise due, or to become due, to said Contractor, or to sue for and recover compensation for damage for nonperformance of this contract at the time stipulated herein and provided for.

**GC-50 TESTS OF MATERIALS OFFERED BY CONTRACTOR**

All specified and required tests for approval of source of materials shall be made at the expense of the Contractor by a properly equipped laboratory of established reputation, whose work and testing facilities shall be approved by the Owner. Approval of materials based on acceptable tests will apply only while such materials as furnished equal or exceed the tested samples or test specimens in quality and minimum requirements. Any change in origin, method of preparation, or manufacture of such materials will require new tests and approval thereof. Reports of all tests shall be furnished to the Owner in as many certified counterparts as may be required by the said owner.

**GC-51 TESTING OF COMPLETED WORK**

Before final acceptance, all parts of the work shall be tested and each part shall be in good condition and working order and shall be placed in such condition and order, at the expense of the Contractor. All tests of completed work required under this contract shall be made under the direction of the Engineer-Architect by and at the expense of the Contractor, whom shall repair at his own expense all damage resulting from the testing.

**GC-52 REMOVAL OF CONDEMNED MATERIALS AND STRUCTURES**

The Contractor shall remove from the site of the work, without delay, all rejected and condemned materials or structures of any kind brought to or incorporated in the work, and upon his failure to do so, or to make satisfactory progress in so doing, within forty-eight (48) hours after the serving of a written notice from the Engineer-Architect ordering such removal, the condemned material or structures may be removed by the owner and the cost of such removal be taken out of the money that may be due or may become due the Contractor on account of or by virtue of this contract. No such rejected or condemned material shall again be offered for use by the Contractor under this or any other contract under this project.

**GC-53 PLACING WORK IN SERVICE**

If desired by the Owner, portions of the work may be placed in service when completed and the Contractor shall give proper access to the work for this purpose, but such use and operation shall not constitute an acceptance of the work, and the Contractor shall be liable for defects due to faulty construction until the entire work under this contract is finally accepted and for a year thereafter as stipulated in paragraph GC-55.

**GC-54 DISPOSAL OF TRASH AND DEBRIS**

The Contractor shall not allow the site of the work to become littered with trash and waste materials but shall maintain the same in a neat and orderly condition throughout the construction period. The Engineer-Architect shall have the right to determine what is or is not waste material or rubbish and manner and place of disposal. On or before the completion of the work the Contractor shall (without charge) carefully clean out all pits, pipes, chambers, or conduits, and shall tear down and remove all temporary structures built by him and shall remove all rubbish of every kind from the tracts or grounds which he has occupied and shall leave them in a first class condition.

**GC-55 DEFECTIVE WORKMANSHIP AND MATERIALS**

During a period of one (1) year from and after the date the final acceptance by the Owner of the work embraced by this contract, the Contractor shall make all needed repairs arising out of defective workmanship or materials, or both, which, in the judgment of the Owner, shall become necessary during such period. If within ten (10) days after the mailing of a notice in writing to the Contractor, or his agent, the said Contractor shall neglect to make, or undertake with due diligence to make, the aforesaid repairs, the Owner is hereby authorized to make such repairs at the Contractor's expense providing, however, that in case of an emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and the Contractor shall pay the cost thereof.

**GC-56 EQUIPMENT GUARANTY**

All mechanical and electrical equipment and devices, and every part thereof, which are furnished by the Contractor under the terms of this contract shall be guaranteed by the Contractor and his surety against defective workmanship, faulty design, mechanical and physical defects, leakage, breakage, and other damage or failure, under normal operation of the equipment and devices under specified conditions, for a period of one (1) year, unless specified in the Specifications for a longer period from and after the date of acceptance thereof by the Owner, and each item of equipment or part thereof thus proving to be defective within the specified period of the guaranty shall be replaced (without cost to the Owner) by the manufacturer of the defective item of equipment, by the Contractor, or by his surety under the terms of the performance, payment and maintenance bond. This equipment guaranty shall also apply to, and shall include, any and all replacements of defective equipment or parts made thereunder, and the period of the guaranty of each such replacement shall be from and after the date of installation thereof.

**GC-57 CLAIMS FOR LABOR AND MATERIALS**

The Contractor shall indemnify and save harmless the Owner from all claims for labor and materials furnished under this contract, or any alterations or modifications thereof, and shall furnish the owner with satisfactory evidence, when called for by it, and that all persons, firms, or corporations, who have done work or furnished materials under this contract, for which the Owner may become liable under the laws of the State, have been fully paid or satisfactorily secured, and in case such evidence is not furnished, an amount necessary or sufficient, within the discretion of the Owner, to meet the claims of the persons, firms and corporations, aforesaid, in addition to any other moneys that are to be retained, as herein specified, from the money due the Contractor under this contract, shall be retained until the liabilities aforesaid shall be fully discharged or satisfactorily secured.

**GC-58 PERFORMANCE, PAYMENT, AND MAINTENANCE BOND**

The performance, payment, and maintenance bond shall be executed by the Contractor with a surety company which: (1) meets the minimum standard for an insurance carrier which currently is in effect for all coverages purchased by Jackson County; and (2) is on the most current United States Treasury list as a surety whose bonds are acceptable to the United States Government.

- a. For the faithful performance and completion of the work in strict accordance with the terms of the contract, and each and every covenant, condition, and part thereof, according to the true intent and meaning of contract documents and herein defined;
- b. For payment of all just claims for labor performed and material furnished; and
- c. For the repair, or replacement where required, or the cost thereof, of all work performed under the terms of the contract, where such repair or replacement is required because of defective workmanship or materials, or both, and for the replacement of defective equipment or parts thereof, within a period of one (1) year after the date of acceptance as herein provided. The Owner agrees to mail a notice to the Contractor, calling his attention to any failure to comply with the requirements of the bond, not less than ten (10) days before notifying his surety of such failure.

**GC-59 ESTIMATED QUANTITIES**

(Where total bid is the sum of unit price extensions.) The Contractor agrees that the quantities of work as stated in his proposal and bid, or indicated on the plans, are accurate for the construction shown, and that during the progress of the work the Owner may find it advisable, and it shall have the right, to omit portions of the work and to increase or decrease the quantities, and that the Owner reserves the right to add to or take from any items as may be deemed necessary or desirable. Under no circumstances or conditions will the Contractor be paid anything on account of anticipated profits upon the work or any portion thereof covered by this contract, which has not actually entered into the construction of said improvements.

**GC-60 MONTHLY ESTIMATES AND PAYMENTS**

- a. Unit Price Contracts: On or about the first day of each month, the Engineer-Architect will make an approximate estimate of the value of the work done and unused materials delivered for, and stored on, the site of the work during the previous calendar month. The Contractor shall furnish to the Engineer-Architect such detailed information as requested to aid him as a guide in the preparation of monthly estimates.
- b. Lump Sum Contracts: On or about the first day of each month the Contractor shall submit to the Engineer - Architect an itemized application for payment, supported to the extent required by the Engineer-Architect by receipts or other vouchers, showing payments for materials and labor, payments to subcontractors and such other evidence of the Contractor's right to payment as the Engineer-Architect may direct. If payments are made on valuation of work done, the Contractor shall, before the first application, submit to the Engineer-Architect a schedule of values of the various parts of the work, including quantities, aggregating the total sum of the contract, divided so as to facilitate payments to subcontractors in accordance with such forms as the Engineer-Architect and the Contractor may agree upon, and, if required, supported by such evidence as to its correctness as the Engineer-Architect may direct. This schedule, when approved by the Engineer-Architect shall be used as a basis for Certificates for Payment, unless it is found to be in error. In applying for payments, the Contractor shall submit a statement based upon this schedule. If payments are made on account of materials not incorporated in the work but delivered and suitably stored at the site, or at some other location agreed upon in writing, such payments shall be conditioned upon submission by the Contractor of bills of sale or such other procedure as will establish the Owner's title to such material or otherwise adequately protect the Owner's interest including applicable insurance.
- c. Certification for Payments: On or about the 10th day of the month the Engineer-Architect shall submit payment estimates or certificates of payment to the Owner. After the Owner shall have approved each such estimate, the Owner shall pay to the Contractor ninety-five (95) percent of the amount of such estimated sum within thirty (30) days after receipt of payment certificate. If the Owner shall at any time fail to make the Contractor a monthly estimate at the time herein specified, such failure shall not be held to vitiate or void this contract.

**GC-61 LIENS**

Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner a complete release of all liens arising out of the Contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as he has knowledge or information the releases and receipts include all the labor and material for which a lien could be filed, but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Owner, to indemnify him against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

**GC-62 COMPLETION AND ACCEPTANCE OF WORK**

The Contractor shall make final corrections promptly as instructed and/or listed in writing by the Engineer-Architect. Upon completion of the work the Engineer-Architect shall satisfy himself, by examination and test, that the work has been finally and fully completed in accordance with the Plans, Specifications, and contract and report such completion to the Owner.

**GC-63 FINAL ESTIMATE AND PAYMENT**

After official approval and acceptance of the work by the Owner, the Engineer-Architect shall be authorized to prepare a final estimate of the work done under this contract and the value thereof. Such final estimate shall be submitted to the Owner within ten (10) days after its preparation has been authorized as aforesaid, and the Owner shall within thirty (30) days after said final estimate is made and



certified, pay the entire sum found to be due hereunder, after deducting all amounts to be kept and retained under any provision of this contract. All prior estimates and payments shall be subject to correction in the final estimate and payment, but in the absence of error or manifest mistake, it is agreed that all estimates, when approved by the Owner, shall be conclusive evidence of the work done and materials furnished.

**GC-64 RELEASE OF LIABILITY**

The acceptance by the Contractor of the last payment shall operate as, and shall be, a release to the Owner and every officer and agent thereof, from all claims and liability to the Contractor for anything done or furnished for, or relating to the work, or for any act or neglect of the Owner or any person relating to or affecting the work, and following such acceptance, no persons, firm, or corporation, other than the signer of this contract as Contractor, will have any interest hereunder, and no claim shall be made or be valid, and neither the Owner nor any employee or agent thereof shall be liable or be held to pay any money, except as herein provided.

**GC-65 CLAIMS FOR ADJUSTMENT AND DISPUTES**

If for any reason the Contractor deems that additional compensation is due him for work or materials not clearly provided for in the contract, plans, or specifications, or previously authorized as extra work, he shall notify the Engineer in writing of his intention to claim such additional compensation before he begins the work on which he bases the claim. If such notification is not given or the Engineer is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation.

Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim.

When the work, on which the claim for additional compensation is based, is work that has been completed, the Contractor shall, within fifteen (15) calendar days after completion of the work in question, submit his written claim to the Engineer who will present it to the Owner for consideration. Claims submitted at times other than those herein specified will not be considered. Each notice of claim shall contain an itemized statement showing completely and fully the items and amounts forming the basis of the claim.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

**GC-66 SAFETY TRAINING REQUIREMENT FOR ALL ON-SITE EMPLOYEES**

The contractor to whom the contract is awarded and any subcontractor under such contractor shall require all on-site employees to complete 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 department which is at least as stringent as an approved OSHA program. All employees are required to complete the program within sixty days of beginning work on such construction project. The contractor shall provide certification of compliance with this condition following the award of the contract and before work commences on the project.

**GC-67 HOMELAND SECURITY AFFIDAVIT**

As a condition for the award of any contract or grant in excess of five thousand dollars by the County to a business entity, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. Any entity contracting with the County shall only be required to provide the affidavits required in this subsection to the County on an annual basis.

**END OF SECTION**

# **SPECIAL CONDITIONS**

## **SPECIAL CONDITIONS**

These Special Conditions constitute modifications, deletions and additions to the General Conditions (GC). Where any part of the General Conditions is so modified by these Special Conditions the unaltered provision shall remain in effect.

### **SC-1 SCOPE OF WORK (GC-1)**

The work provided for in these specifications shall consist of furnishing all labor, materials, equipment, and other services necessary to construct the Buckner Tarsney Road Bridge Replacement North of Ryan Road as described herein. Said work shall include but not be limited to: the General Contractor shall furnish all materials, equipment, tools and labor required to perform the following on Buckner Tarsney Rd Bridge: 1. The demolition of the existing bridge & roadway as shown on the plans. 2. Construction of a new Double 12' x 9' Reinforced Concrete Box. 3. Install new Cast-In-Place retaining walls. 4. Install guardrail systems. 5. Approximately 365' of roadway work. 6. All other incidental work in the most substantial and workmanlike manner for the bridge, and do everything required by the Contract Documents as defined herein.

### **SC-6 COPIES OF CONTRACT (GC-6)**

Six (6) copies of the contract documents will be prepared by the County. All copies will be submitted to the Contractor and the Contractor shall execute the Contract Agreements, insert executed copies of the required Performance Bonds, Certificate of Liability Insurances, Power of Attorney, and submit all copies to the County. THE DATE OF THE CONTRACT AGREEMENT AND BOND FORMS SHALL BE LEFT BLANK FOR FILLING IN BY THE COUNTY. The County will execute all copies, insert the date of contract on the Performance Bonds and Power of Attorney, retain four (4) copies, and forward two (2) copies to the Contractor, one of which should be forwarded to the surety company.

### **SC-7 SCOPE, NATURE AND INTENT OF SPECIFICATIONS AND PLANS (GC-7)**

- A. All work on this project shall conform to the project drawings County Project No. 3252 and to the Contract Documents.
- B. The work shall also conform to referenced standard drawings and to other drawings or information thereto as may be furnished by the Owner prior to the opening of the proposals or during construction.
- C. The "Missouri Standard Specifications for Highway Construction", 2020 edition plus quarterly supplements as published by the Missouri Department of Transportation (MoDOT) are hereby incorporated into the Contract Documents:
- D. All work shall be in accordance with the Technical Specifications incorporated into this Project Manual except where a conflict occurs. Should any conflict arise in the Contract Documents, Standard Specifications or Plans the following order of precedence shall be used:
  - 1. Plans – or Appendix sheets
  - 2. Technical Specifications
  - 3. Special Conditions
  - 4. General Conditions
- E. The Contractor, Subcontractors, and fabricators shall be in compliance with all Local, State and Federal regulations.

**SC-9 CONTRACTOR TO CHECK PLANS AND SCHEDULE (GC-9)**

Modify GC-9 as follows:

- A. The Contractor shall submit a proposed progress schedule for all work in the Contract. Scheduling shall provide for the least practical inconvenience to the traveling public and to the residents along the project.
- B. The construction schedule shall be in a form approved by the Owner and shall include at least the following information for each significant work item:
  - 1. Beginning date.
  - 2. Scheduled percentage of completion at the end of each calendar month.
  - 3. Ending date.

The schedule shall also show the scheduled percentage complete for the entire contract at monthly intervals.
- C. The Owner will review the proposed progress schedule and may require the Contractor to revise it if, in the Owner's judgment, changes are required to accurately reflect the scheduled progress of the work or provide for completion of the project within the contract time. The revised schedule shall be submitted to the Owner for his approval within fourteen (14) days of notification to the Contractor that a revised schedule is required.
- D. The Contractor will be required to revise his original approved progress schedules any time actual progress of the Work on the Contract lags the schedule progress by fifteen percent or more. A revised schedule shall be submitted to the Owner for his approval within fourteen (14) days of written notification to the Contractor that a revised schedule is required.
- E. Prior to the beginning or during the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and the affected work is performed.
- F. Upon written notification the County will investigate the conditions and if they determine that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment will be made and the contract modified in writing accordingly. The County will notify the Contractor of their determination whether or not an adjustment of the Contract is warranted.
- G. No contract adjustment, which results in a benefit to the Contractor, will be allowed unless the Contractor has provided the required written notice.

**SC-12 OWNERSHIP OF DRAWINGS (GC-12)**

General Conditions GC-12 is modified as follows:

All drawings, specifications, calculations, electronic files and copies developed by the Contractor and/or their subcontractors for components of the project are the property of the County. They are not to be used on work unrelated to this project, and, with exception of the Contractor's signed contract sets, are to be returned to the County on request, upon completion of the work.

**SC-14 CONTRACTOR TO FURNISH STAKES AND HELP (GC-14)**

The Contractor shall provide all construction staking and shall supply all equipment, materials and competent manpower necessary to accurately complete the work. No construction shall commence without the approval of the County construction staking. The contractor shall notify the County in writing of any and all discrepancies with the staking. Any modifications shall be approved by the County. **Direct payment will be made for construction staking.** See Technical Specifications of this contract for "Contractor Furnished Surveying & Staking" of the Right-of-Way and Easements as Lump Sum.

**SC-15 WORK DONE WITHOUT LINES OR GRADES (GC-15)**

Add the following to GC-15

- A. The Engineer has established control points and benchmarks in a preliminary survey, which are shown on the construction plans for reference in layouts and staking of the work.
- B. The Contractor shall furnish competent surveyors to lay out and stake all of the work from control points and benchmarks shown on the plans, and make all measurements and elevation determinations required for construction of all work in this contract. The detailed staking shall be to the satisfaction of the Engineer.
- C. The Contractor shall be responsible for the cost of re-establishing control points and benchmarks, which may have been placed by the Engineer and are damaged or in any way disturbed by the Contractor's operations.
- D. At the locations indicated on the drawings, the Contractor, by using a Missouri Registered Land Surveyor, shall establish suitable reference points from which these control points may be accurately re-established following construction. These reference points shall be carefully preserved during construction.
- E. Direct payment will be made for construction staking. See Technical Specifications of this contract for "Contractor Furnished Surveying & Staking" of the Right-of-Way and Easements as Lump Sum.

**SC-19 CONTRACTOR'S OFFICE AT SITE OF WORK (GC-19)**

General Conditions GC-19 is modified by adding the following:

- A. **The Contractor is not required to have a field office at the project site** and no provisions have been made by the County for the field office, shops, or storage areas to be used by the Contractor. However, if desired, the Contractor may, on his own initiative, provide for any or all of the above items. The Contractor may store a limited amount of material and equipment in the ROW area.
- B. **No direct payment will be made for the Contractor's office, shops or storage areas.**
- C. Common-Use Field Office: Of sufficient size to accommodate needs of County, Engineer and construction personnel office activities and to accommodate Project meetings. Keep office clean and orderly.
- D. Storage and Fabrication Sheds: None allowed on site. Use interior space as approved by the County only as necessary.

**SC-20 RESPONSIBILITY OF CONTRACTOR (GC-20)**

General Conditions GC-20 is modified by adding the following:

Modify GC-20, Responsibility of Contractor, by adding the following:

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire prevention program.
- C. The Contractor shall take the necessary precautions to keep loose aggregate, mud and debris from being deposited onto open lanes of the existing, or offsite, paving during construction operations. Should aggregate mud and debris become deposited upon such open lanes of existing paving, the Contractor shall promptly remove it at no additional cost to the County.
- D. Before the work will be accepted by the County, the Contractor shall be required to remove all aggregate and debris resulting from his operation, which also includes cleaning of streets, ditches, creeks, and driveways of earth, sod or other objectionable material and shall dispose of such debris off the project. This cleanup shall be limited to the project limits.
- E. It is the responsibility of the Contractor to coordinate all removal and construction activities with Utility Owners.
- F. The Contractor at his sole cost and expense will provide all potable and non-potable water, power, and telephone service required along the project route in connection with the work to be performed.
- G. All power for lighting, operation of the Contractor's equipment, or for any other use by the Contractor, shall be provided by the Contractor at his sole cost and expenses.
- H. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary and permanent utility before use. Obtain required certifications and permits.
- I. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.
- J. Locate facilities within the building where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- K. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.
  - a. Provide additional telephone lines for the following:
    - i. Provide a dedicated telephone line for each facsimile machine in each field office.

- b. At each telephone, post a list of important telephone numbers.
  - i. Police and fire departments.
  - ii. Ambulance service.
  - iii. Contractor's home office.
  - iv. Contractor's emergency after-hours telephone number.
  - v. Engineers' offices.
  - vi. Owner's office.
  - vii. Principal subcontractors' field and home offices.
- c. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.
- L. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
  - a. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  - b. Remove snow and ice as required to minimize accumulations.
- M. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.
- N. SECURITY AND PROTECTION FACILITIES INSTALLATION
  - a. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
  - b. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - c. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
  - d. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
  - e. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather-tight enclosure for building exterior.
    - i. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
  - f. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire prevention program.



- i. Prohibit smoking at Project site.
- ii. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
- iii. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

O. MOISTURE AND MOLD CONTROL

- a. Contractor's Moisture Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- b. Controlled Construction Phase of Construction: After completing and sealing of the building enclosure but prior to the full operation of permanent Heating systems, maintain as follows:
  - i. Control moisture and humidity inside building by maintaining effective dry-in conditions.
  - ii. Remove materials that cannot be completely restored to their manufactured moisture level within 48 hours.

P. OPERATION, TERMINATION, AND REMOVAL

- a. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- b. Maintenance: Maintain facilities in good operating condition until removal.
  - i. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
  - ii. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
  - iii. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
    1. Materials and facilities that constitute temporary facilities are property of Contractor.
    2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

Q. Temporary Traffic Control:

1. Flagging and traffic control signing shall be in accordance with the contract documents and the MUTCD. It shall be the contractor's responsibility to check the traffic control devices each evening to make sure they are in place before leaving the jobsite.
2. As an obligation of the contract, the Contractor shall sign all road closures and establish such detours as needed and as approved by the County.
3. **Direct payment will be made for Traffic Control. See Technical Specifications of this contract for "Traffic Control" as Lump Sum.**

3. Additionally the Contractor shall install proper signage to warn motorists of loose gravel and oil.
4. All personnel utilized in traffic control shall be fluent in English. Fluency shall be as determined by the Engineer in the Field Personnel not meeting this requirement shall not be utilized in the work.
5. Additionally drivers operating vehicles or equipment on public roads shall possess valid driver's licenses issued in the United States. The driver's license must be appropriate to the vehicle they are operating.

R. Water, Power and Sanitation:

- a. Arrange with utility company and Owner for time when service can be interrupted, if necessary, to make connections for temporary services. Contractor must secure all necessary permits to cut and/or cap all utilities including water, gas, electricity, and sewer; contact Missouri One Call System (1-800-344-7483 (DIG-RITE) and coordinate identification of all underground utilities; and consult with Evergy to coordinate the protection of power lines adjacent to the building.
- b. Water: All water required for the project in connection with the work to be performed will be provided by the Contractor at his sole cost and expense. If the project is performed during the Winter, the Contractor at his or her expense will provide all water required along the project route in connection with the work to be performed. **Contractor shall coordinate with Public Water Supply District No. 15 and No. 17 prior to start of construction.**
- c. Power: All power for lighting, operation of the Contractor's equipment, or for any other use by the Contractor, shall be provided by the Contractor at his sole cost and expense.
- d. Sanitation: The Contractor and subcontractor shall provide sanitary facilities at the job site.
- e. The Contractor is to note that there is utilities on the project site, see Construction Plan sheets.

S. RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- a. General: Recycle paper and beverage containers used by on-site workers.
- b. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall be shared equally by Owner and Contractor.
- c. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
  - i. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
  - ii. Inspect containers and bins for contamination and remove contaminated materials if found.
  - iii. Stockpile processed materials on-site without intermixing with other materials.
  - iv. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

T. RECYCLING DEMOLITION WASTE

- a. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.
- b. Metals: Separate metals by type.
  - i. Structural Steel: Stack members according to size, type of member, and length.
  - ii. Remove and dispose of bolts, nuts, washers, and other rough hardware.
  - iii. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
  - iv. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
  - v. Conduit: Reduce conduit to straight lengths and store by type and size.

**U. DISPOSAL OF WASTE**

- a. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - i. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
  - ii. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- b. Burning: Do not burn waste materials.

V. Disposal: Remove waste materials from Owner's property and legally dispose of them.

W. Storage: Offsite Storage of materials and equipment shall conform to manufacturer's recommendations. Offsite storage arrangements shall be approved by the County. Such offsite storage arrangements shall be presented in writing and shall afford adequate and satisfactory security and protection by the contractor. Offsite storage facilities shall be bonded and accessible to the County. Onsite storage of materials and equipment shall conform to manufacturer's recommendations. Onsite Storage shall not interfere with public access and/or safety.

**X. Smoking is NOT permitted any time by the General Contractor and their Sub-contractor(s) at the construction site on Jackson County, MO. property before or during the duration of the construction.**

**SC-25 METHODS OF OPERATION (GC-25)**

General Conditions GC-25 is modified by adding the following:

- A. In accordance with generally accepted construction practices, the Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property.
- B. Provide temporary barricades, as required to protect the public from harm due to construction activities.

**SC-27 AUTHORITY AND DUTY OF THE ENGINEER-ARCHITECT (GC-27)**

The progression of the project will be observed by the County personnel and will provide the inspection.

**SC-28 INSPECTION (GC-28)**

- A. This project will be observed by the County personnel and will provide the inspection.
- B. This project will use MODOT standard inspections protocol. Also, the contractor shall follow the MODOT Standards for Traffic Safety.
- C. All workers within Jackson County, MO. Right-of-Way, Jackson County Parking Lots, Jackson County Sites (Demolition areas or new work) who are exposed to traffic or construction activities or construction equipment shall wear at all times High-Visibility Safety Apparel meeting Class 2 or Class 3 requirements of ANSI/ISEA 107-2004 Publication Entitled, "American National Standard for High-Visibility Safety Apparel and Headwear".
- D. Contractor shall follow all Occupational Safety and Health Administration (OSHA) construction safety standards and requirements.
- E. Contractor shall notify his subcontractors, Owner and all Contractors and subcontractors under the Owner, when he is ready for them to install their portions of their work and see that they comply within a reasonable amount of time. Neither enclose nor cover any piping, wiring, ducts, equipment or other items until proper tests, observations and/or inspections have been made by the Owner and/or proper authorities.
- F. Contractor or subcontractor may not put in place any work which will prevent observation and approval of previous work without first notifying the Owner, and/or proper authorities.

**SC-29 NO WAIVER OF RIGHT (GC-29)**

Neither the inspection or evaluations by the County or any of the County's officials, employees, or agents, nor any order by the County for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the County or Engineer-Architect, nor any extension of time, nor any possession taken by the County or its employees, shall operate as a waiver of any provision of this contract, or of any power herein reserved to the County, or any right to damages herein provided, or shall any waiver of any breach in this contract be held to be a waiver of any other or subsequent breach.

**SC-32 PROTECTION OF PROPERTY AND PUBLIC LIABILITY (GC-32)**

General Condition GC-32 is modified by adding the following:

- A. The Contractor shall be liable for any and all damage caused by him to County's premises. The Contractor shall hold and save the County, his agents and representatives, free and harmless from liability of any nature or any kind arising from any use, trespass or damage occasioned by his operations on premises or third persons.
- B. The Contractor shall confine all work, equipment and personnel within the limits of the existing project Right-of-Ways, Easements, and Construction Limits noted on the Construction Plans. The Contractor shall make no claim for additional payment for confining his operations within these areas.

- C. The Contractor shall take all precautions required to preserve and protect all existing trees, shrubs, and other improvements located within the project right-of-way and easements designated to be saved by this contract.
- D. The Contractor shall protect and preserve the Control Point survey pins as shown on the Construction Plans. If disturbed it is the contractor's responsibility to reset the pin by a licensed surveyor at the Contractor expense.
- E. The Contractor shall be responsible for the restoration of any paved, graveled, or grassed areas disturbed by construction. Any areas so affected shall be restored to a condition as nearly as possible to that existing prior to construction. Paved and graveled areas shall be resurfaced with materials meeting the requirements of the technical specifications, and grassed areas shall be seeded and mulched. No direct measurement or payment will be made for restoration of areas disturbed by activities outside of the limits designated on the Drawings.

**SC-34 MODIFICATIONS AND ALTERATIONS (GC-34)**

General Conditions GC-34 is modified by adding the following:

The Contractor may submit to the County, in writing, proposals for modifying the plans, specifications or other requirements of this contract for the sole purpose of reducing the total cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, and ease of maintenance, desired appearance, or design and safety standards. Cost reduction proposals shall contain the following information:

- A. A description of both the existing contract requirements for performing the work and the proposed changes.
- B. An itemization of the contract requirements that must be changed if the proposal is adopted.
- C. A detailed estimate of the cost of performing the work under the existing contract and under the proposed change.
- D. A statement of the time within which the County must make a decision thereon.
- E. The contract items of work affected by the proposed changes, including any quantity variation attributable thereto.
- F. This Special Condition shall not be construed to require the County to consider any cost reduction proposal which may be submitted hereunder; proposed change in basic design of a bridge or of a pavement type will not be considered as an acceptable cost reduction proposal; the Owner will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted pursuant to this section nor for any delays to the work attributable to any such proposal. If a cost reduction proposal is similar to a change in the plans or specifications for the project under consideration by the Owner at the time said proposal is submitted, the County will not accept such proposal and the Owner reserves the right to make such changes without compensation to the Contractor under the provisions of this article.

- G. The Contractor shall continue to perform the work in accordance with the requirements of the contract until an executed change order incorporating the cost reduction proposal has been issued. If an executed change order has not been issued by the date upon which the Contractor's cost reduction proposal specified that a decision thereon should be made, or such other date as the Contractor may subsequently have specified in writing, such cost reduction proposal shall be deemed rejected.
- H. The County shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings in construction costs from the adoption of all or any part of such proposal. In determining the estimated net savings, the right is reserved to disregard the contract bid prices if, in the judgment of the County, such prices do not represent a fair measure of the value of work to be performed or to be deleted.
- I. The Owner reserves the right where he deems such action appropriate to require the Contractor to share in the Owner's cost of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall indicate his acceptance thereof in writing, and such acceptance shall constitute full authority for the Owner to deduct amounts payable to the Owner from any moneys due or that may become due to the Contractor under the contract.
- J. If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a contract change order, which shall specifically state that it is executed pursuant to this Article. Such change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted to be put into effect, and shall include any conditions upon which the Owner's approval thereof is based if the approval of the Owner is conditional. The change order shall also set forth the estimated net savings in the cost of performing the work attributable to the cost reduction proposal effectuated by the change order and shall further provide the Contractor be paid fifty (50) percent of said estimated net savings amount.
- K. Acceptance of the cost reduction proposal and performance of the work there under shall not extend the time of completion of the contract unless specifically provided for in the contract change order authorizing the use of the cost reduction proposal.
- L. The amount specified to be paid to the Contractor in the change order which effectuates a cost reduction proposal shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work thereof pursuant to the said change orders.
- M. The Owner expressly reserves the right to adopt a cost reduction proposal for general use on contracts administered by the Owner when it determines that said proposal is suitable for application to other contracts. When an accepted cost reduction proposal is adopted for general use, only the Contractor who first submitted such proposal will be eligible for compensation pursuant to this section, and, in that case, only as to those contracts awarded to him prior to submission of the accepted cost reduction proposal. Cost reduction proposals identical or similar to previously submitted proposals will be eligible for consideration and compensation under the provisions of this article if the identical or similar previously submitted proposals were not adopted for general application to other contracts administered by the Owner. Subject to the provisions contained herein, the Owner shall have the right to use all or

any part of any submitted cost reduction proposal without obligation or compensation of any kind to the Contractor.

- N. This article of the specifications shall apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.
- a. The County reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the Contract nor release the surety, and the Contractor agrees to perform the work as altered.
  - b. If the alterations or changes in quantities significantly change the character of the work under the Contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the Contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contract in such an amount as the County may determine to be fair and equitable.
  - c. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the Contract, the altered work will be paid for as provided elsewhere in the Contract.
- O. The term "significant change" shall be construed to apply only to the following circumstances:
- a. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or;
  - b. When a major item of work, as defined elsewhere in the Contract is increased in excess of 125 percent or decrease below 75 percent of the original Contract quantity. Any allowance for an increase in quantity shall apply only to the portion of the work in excess of 125 percent of original Contract item quantity, or in the case of decrease below 75 percent, to the actual amount of work performed.
  - c. The Contractor's attention is called to the **BID FORM** and/or bid proposal which allows the County to adjust the quantities upward or downward to be based upon the available funding. This may be in excess of the percentages noted above.

**SC-35 EXTRA WORK (GC-35)**

General Conditions GC-35 is modified as follows for numbers 2, 3 and 4 of GC-35 as follows:

- A. An amount equal to 20% percent will be added to the bond, insurance and taxes and not the 6% noted in the General Condition.
- B. An amount equal to 20% percent will be added to the materials and not the 15% noted in the General Condition.

- C. An amount equal to 20% percent will be added to all rental costs and not the 15% noted in the General Condition.

**SC-37 ASSIGNMENT AND SUBLETTING OF CONTRACT (GC-37)**

Add to GC-37 the following requirement.

- A. "No Second-Tier subcontracting will be permitted. It shall be the responsibility of the Contractor to ensure that his/her subcontractors do not in turn subcontract any portion of the work."
- B. **The 50% of the contract work, noted in the General Conditions, shall not be reduced for this project.**
- C. Assigning, transferring or subletting, even though consented to, shall not relieve the Contractor of his liabilities under his contract. The Contractor shall give his personal attention to any and all portions of the contract which has been sublet and he shall be responsible for its proper construction.
- D. The prime Contractor, as a condition of this contract, is responsible for assuring submission of proof or documentation regarding Affirmative Action compliance by his subcontractors and for the subsequent Affirmative Action performance by such subcontractors.

**SC-39 SUSPENSION OF WORK ON NOTICE (GC-39)**

General Conditions GC-39 is modified by adding the following:

- A. If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable length of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to Engineer, in writing, a request for adjustment within seven (7) calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
- B. Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and notify the contractor of his/her determination whether or not an adjustment of the contract is warranted.
- C. No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
- D. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract. No contract adjustment will be made for utility delays.

**SC-41 LAWS AND ORDINANCES (GC-41)**

The following is added to GC-41:

No burning will be allowed.



**SC-43 CHARACTER OF WORKMEN (GC-43)**

Add the following to GC-43:

Workman who may have occasion to speak with the general public (i.e. flaggers) must be able to communicate in clear English.

**SC-45 UNFAVORABLE CONSTRUCTION CONDITIONS (GC-45)**

Modify GC-45, Unfavorable construction conditions, by adding the following:

Contractor shall take precautions by watering or other means to ensure that excessive dust or lime does not become airborne during construction.

**SC-46 BEGINNING, PROGRESS, AND TIME OF COMPLETION OF WORK (GC-46)**

Modify GC-46 by adding the following:

- A. The time for completion of the work is an essential part of the Contract. It shall begin on the date stated in the Notice to Proceed, and shall be the number of working days as stated in the Proposal and in accordance with MoDOT Standard Specification Section 108, except as follows: "No working days will be counted from December 15 to March 15, both days inclusive unless work may proceed on a continuous basis beyond December 15 or may start or restart on a continuous basis before March 15. Working days will not be counted within this time frame after continuous work stops or before continuous work begins. Saturdays, Sundays, national holidays and holidays established by the laws of the state will not be counted as working days any time during the year."
- B. Contractor's attention is directed to conditions of GC-44 and GC-46. Holidays: Saturdays, Sundays, and holidays established by the laws of the County will not be counted as working days.

**2021 List of Jackson County, Missouri Holidays**

New Year's Day	Friday, January 1 <sup>st</sup>
Martin Luther King, Jr Day	Monday, January 18 <sup>th</sup>
Presidents' Day	Monday, February 15 <sup>th</sup>
Truman's Birthday	Friday, May 7 <sup>th</sup>
Memorial Day	Monday, May 31 <sup>st</sup>
Independence Day	Monday, July 5 <sup>th</sup>
Labor Day	Monday, September 6 <sup>th</sup>
Veterans' Day	Thursday, November 11 <sup>th</sup>
Thanksgiving Day	Thursday, November 25 <sup>th</sup>
Thanksgiving Friday	Friday, November 26 <sup>th</sup>
Christmas Day	Friday, December 24 <sup>th</sup>

- C. The Contractor will need to coordinate with the County and/or their designated representative on the after-work week hours and weekend schedules. The standard work week hours that the Contractor can work are from 7:30 A.M. to 6:00 P.M.
- D. Weekend work schedule(s) shall be coordinated and approved with the County prior to any

construction.

- E. The Contractor shall take, at no additional cost to the County, whatever means are necessary including, but not necessarily limited to, working nights and weekends and double shifts, and providing temporary weather enclosures and temporary heat/ventilation during inclement weather to assure substantial completion of all work during the Contract Time.
- F. Prior to starting work, a pre-construction conference will be held to discuss the project, its scheduling, and its coordination with the work of others. It is expected that this conference will be attended by representatives of the County, the Engineer, the Contractor and his subcontractors, and the will attend this conference, and the striping contractor that is to accomplish the permanent striping, if applicable, as well as representatives of any other affected agencies which the County may wish to invite.
- G. Substantial Completion shall be the stage in the progress of the Work where the Work is sufficiently complete in accordance with the Contract Documents so that the County can occupy or utilize the Work for its intended user.
- H. Substantial Completion shall be the stage in the progress of the Work where the Work is sufficiently complete in accordance with the Contract Documents so that the County can occupy or utilize the Work for its intended user.

**SC-48 EXTENSION OF TIME (GC-48)**

Add to GC-48 by adding the following:

- A. The County has shown on the Plans, from the information available, existing aboveground and underground installations and structures which may be affected by the work but there is no guarantee that all such facilities are shown. The location, depth and size of each facility shown on the Plans are approximate only and are not guaranteed correct. If utilities are damaged through carelessness or neglectful action by the Contractor, they will be repaired by the Contractor or authorities having control of the same, but the cost of such repairs shall be paid by the Contractor.
- B. Delays due to utility conflicts will not be cause for extension of time or adjustments in contract amount.
- C. The Contractor shall contact each utility agency or other owner of public or private property in advance of any operations which may affect any of the agencies' or property owners' facilities and shall enlist their assistance in the location of their existing or relocated utilities.
- D. The Contractor shall make every effort to locate all existing facilities, which may be affected by the work, including prospecting or excavating beneath the surface. No payment will be made to the Contractor in connection with location of existing facilities.
- E. All fire hydrants and water control valves shall be kept free from obstructions and available for use at all times, except as herein allowed.
- F. In the event of interruption to utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. If utility service is interrupted, continuous cooperation will be required until the service is restored.

**SC-49 LIQUIDATED DAMAGES (GC-49)**

- A. In accordance with GC-49, Liquidated Damages (also referred to as "Schedule of Deductions"), the Contractor will be assessed liquidated damages for each calendar day of delay in completion of work.

See the following schedule:

<u>Contract Amount</u>		<u>Calendar Day Assessment</u>
\$ 25,001	\$ 50,000	\$ 475
\$ 50,001	\$ 100,000	\$ 500
\$ 100,001	\$ 500,000	\$ 700
\$ 500,001	\$ 1,000,000	\$ 950
\$ 1,000,001	\$ 2,000,000	\$ 1,100

**B. The entire project has 90 Working Days. Within the 90 Working Days the Work Zone Closure area for the RCB and Roadway Improvements shall be closed for 60 Calendar Days. The 60 Calendar Days is to minimize the closure of the Work Zone to the public. Liquidated Damages will be in effect for both the 90 Workings Days for the overall project and the Work Zone Closure area 60 Calendar Days.**

**SC-50 TEST OF MATERIALS OFFERED BY CONTRACTOR (GC-50)**

Modify GC-50, Tests of Materials offered by Contractor, by adding the following:

- A. Submission of all Compliance Submittals shall be scheduled to permit review, fabrication, and delivery in time to cause no delay in the Work of Contractor or his subcontractors or any other contractors as described herein. Contractor shall allow fifteen (15) days in County's office for reviewing original submittals and fifteen (15) days in County's office for reviewing re-submittals.
- B. Compliance submittals of materials furnished by subcontractors, manufacturers, and suppliers shall be submitted by the Prime Contractor.
- C. In general, the Specifications identify required materials and equipment by naming one or more manufacturer's brand, model, catalog number and/or other identification; first-named manufacturer's product used as the basis for design; other named brands considered equivalent. Equivalent brand manufacturers named must furnish products consistent with Specifications for first-named product, as determined by County. Base Bid shall include only those brands named, except as hereinafter provided.
- D. Where materials or equipment are described but not named, Contractor shall provide required first quality items, adequate in every respect for intended use, such items subject to County's approval prior to procurement.
- E. Submit certificates for the following materials:
  - 1) Aggregates for Portland Cement Concrete
  - 2) Portland cement
  - 3) Hydrated Lime
  - 4) Geogrid, **if applicable within project**
  - 5) Geotextile
  - 6) Hydro Seeding, Mulch, and Fertilizer
  - 7) Permanent Erosion Control Blanket (C-350), **if applicable within project**
  - 8) Reinforcing steel
  - 9) 2 Inch Type 5-01 Asphaltic Concrete Surface (Virgin Mix)
  - 10) 7 Inch Type 5-01 Asphaltic Concrete Base (Virgin Mix)
  - 11) Aggregates for MODOT Type 5 Aggregate Base (6" Thick)

- 12) Prime Coat (MC-30)
- 13) Seal Coat
- 14) Erosion Control Materials
- 15) Silt Fence
- 16) Permanent Erosion Control Fabric
- 17) Rock Ditch Check
- 18) Rock Blanket (Type 2)
- 19) 2" Red Sunset Maple Tree Calipers
- 20) Concrete for RCB and Retaining Wall
- 21) Rock Sub-grade Stabilization Aggregate for RCB and Retaining Walls
- 22) Guardrail
- 23) Guardrail End Terminal Section
- 24) Paint Striping pavement marking material
- 25) Steel Sign Posts
- 26) Reflective Sheeting for Signs
- 27) Flexible Delineators
- 28) Aggregate Backfill for RCB and Retaining Walls
- 29) Granular bedding material for RCB and Retaining Walls
- 30) CLSM Backfill for RCB
- 31) Portland cement concrete and admixtures

- F. Submit gradation for the following materials:
- a. Aggregates
  - b. CLSM Backfill for RCB
  - c. Reinforcing for Reinforced Concrete Box and Concrete Retaining Walls
  - d. Falsework/Formwork for Concrete Structures
- G. Submit shop drawings, specification sheet, certificates, warranties, and manufacturing installation recommendations for all products.
- H. Engineer's Selection and Approval of Materials
- a. Where approval of Engineer for material or equipment is required, secure such approval before procurement.
  - b. The esthetic values of every material and installation, such as shape, proportion, texture, finish and color, will be an important consideration to Engineer and his/her decisions concerning same shall be final.
- I. County's Selection and Approval of Materials: Where approval of County for material or equipment is required, secure such approval before procurement.
- J. Laboratory tests of materials and equipment, which are normally conducted by the manufacturer or material supplier, and tests shall be furnished by the Contractor and approved by the County.
- K. All quality control testing not specified to be performed by the Contractor will be performed by an independent testing laboratory, selected by the Owner, or by the Owner's designee. All such tests performed by the independent testing laboratory shall be paid by the Owner.
- L. Assigning, transferring or subletting, even though consented to, shall not relieve the Contractor of his liabilities under his contract. The Contractor shall give his personal attention to any and all portions of the contract which have been sublet and he shall be responsible for its proper construction.

- M. Receiving and Storing Materials: Remove from premises materials showing deterioration or damage and replace with new.
- a. On receipt of materials, check for in-transit damage in ample time to replace any damaged materials prior to installation time.
  - b. Where possible, deliver materials and equipment to project site in manufacturer's original packages, keeping labels intact until final cleaning. Where items are to be job assembled label, tag, mark or otherwise properly identify each component part until incorporated in building.
  - c. Store materials in manner to prevent deterioration, staining, soiling and intrusion of foreign materials. Provide waterproof well-ventilated enclosures for material subject to deterioration by dampness. Protect materials subject to damage by freezing and frost.
  - d. Remove from premises materials showing deterioration or damage and replace with new.
- N. Equipment Verification
- a. Contractor shall check physical sizes of all equipment furnished under this contract or furnished by Owner and require other contractors to verify sizes of their equipment, in time to allow ample room for transporting equipment to and installing in its final location before enclosing spaces for it. Notify Engineer in writing of any required openings or ceiling heights; such notice in ample time for Engineer to direct necessary adjustments before such openings, ceilings or enclosures are placed.
  - b. Before construction proceeds to point that would prevent necessary modifications, Contractor shall check Drawings, Specifications, shop drawings and change orders and notify Engineer in writing of any mechanical/electrical services and/or connections required but not indicated, or incorrectly indicated, for equipment furnished. Failing to do so, Contractor furnishing equipment provide required services and/or connections at his own expense.
- O. Unless Owner grants permission to repair any defective work, remove defective work from project and replace with new work in accordance with contract documents. Permission to repair such work shall not constitute a waiver of Contractor's right to require complete replacement of defective work if repair operation does not restore quality and appearance of member or surface to Owner's satisfaction. If permission is granted, repair according to Owner's directions.
- P. The prime Contractor, as a condition of this contract, is responsible for assuring submission of proof or documentation regarding Affirmative Action compliance by his Subcontractors and for the subsequent Affirmative Action performance by such Subcontractors

**SC-54 DISPOSAL OF TRASH AND DEBRIS (GC-54)**

The following is added to GC-54:

- A. The Contractor shall take the necessary precautions to keep aggregate, mud, debris from being deposited onto roadway and private entrances during construction operations. Should debris become deposited on such areas, the Contractor shall promptly remove it at no additional cost to the Owner. Debris shall be disposed of in accordance with all local codes.
- B. Keep covered materials, cavities and holes subject to damage by falling materials or deposits of water, snow or ice.

- C. Transport, handle, store and erect materials in a manner to keep from injury.
- D. Protect previously placed work by suitable coverings or other protection during installation of subsequent work. Clean off foreign materials accidentally deposited on finish surfaces and, where such would stain, corrode or otherwise disfigure, clean same immediately with material that will not damage finished work.
- E. Before the work will be accepted by the Owner, the Contractor shall be required to remove all aggregate and debris resulting from his operation, which also includes cleaning of earth, sod or other objectionable material and shall dispose of such debris off the project. This cleanup shall be limited to the project limits.
- F. **Final Cleanup shall be at no additional cost to the Owner.**

**SC-58 PERFORMANCE, PAYMENT, AND MAINTENANCE BOND (GC-58)**

Delete the first paragraph of GC-58 and replace it with the following:

- A. **PERFORMANCE AND PAYMENT BOND:** The performance and payment bond shall be executed by the Contractor with a surety company which: (1) meets the minimum standard for an insurance carrier which currently is in effect for all coverage's purchased by Jackson County; and (2) is on the most current United States Treasury list as a surety whose bonds are acceptable to the United States Government.
- B. **MAINTENANCE BOND:** The Contractor's attention is called to paragraph "c" of GC-58, which requires a one-year (1-year) maintenance bond. Contractor shall submit a Maintenance Bond to Jackson County Public Works (JCPW) upon the Final Acceptance by the County. The Final Acceptance Letter from JCPW Engineering staff member will be certified mailed to the Contractor. The Final Completion Date stated on the Final Acceptance Letter will be the start date of the Maintenance Bond. The Contractor is required to use this date on the Maintenance Bond.

**SC-59 ESTIMATED QUANTITIES (GC-59)**

Add the following to bottom of GC-59:

It is the intent of the contract documents that the total bid, as submitted, shall cover all work required by the contract documents. All costs in connection with the work, including furnishing of all materials, equipment, supplies and appurtenances; providing all necessary labor to fully complete the work shall be included in the unit and lump sum prices named in the proposal. No item of work that is required by the contract documents for the proper and successful completion of the contract will be paid for outside of, or in addition to, the prices submitted in the proposal. All such work not specifically set forth in the proposal as a pay item shall be considered a **SUBSIDIARY** obligation of the Contractor and all costs in connection therewith shall be included in the prices named in the proposal. On the plans, or in the specifications, certain quantities may be given which do not appear in the proposal. These quantities are given for the convenience of the contractor only and are considered **SUBSIDIARY** for payment purposes as given above.

**SC-60 MONTHLY ESTIMATES AND PAYMENTS (GC-60)**

Modify GC-60, Monthly Estimates and Payments, by adding the following:

- A. **There shall be 5% Retainage percentage for this project.**
- B. The method of measurement and basis of payment for each item as listed in the Proposal will be as

stipulated in the sections of the Technical Specifications and on the Plans and in this article.

- C. There shall be no measurement or separate payment for any item of work which is not specifically identified and listed in the Proposal and all costs pertaining thereto shall be included in the contract unit prices for related items which are listed in the proposal.
- D. Pay limits given in the Specifications and Plans are maximum. Where actual quantities are less than as computed by said pay limits, the Contractor will be paid only for the actual quantities.
- E. All work completed under the Contract will be measured according to United States Imperial system. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the Contract will be those methods generally recognized as conforming to good engineering practices.
- F. All materials, which are measured or proportioned by weight, shall be weighed on platform scales furnished by the Contractor, or on public scales at the Contractor's expense. The scales shall comply with all state laws governing the use of scales and shall be tested and sealed by an authorized public official, at the expense of the Contractor, as often as the Engineer may deem it necessary to ensure their accuracy. The Contractor shall furnish the Engineer a waybill for each truckload, signed by the weigh master and truck driver.
- G. The Contractor shall maintain a running balance of weights of materials versus areas covered, furnishing this data to the County, in order that corrections for overrun or under run may be made when desired.
- H. The County will not pay for, or be responsible for, unused materials, which may have been ordered by the Contractor in accordance with the quantities listed in the proposal.
- I. The Contractor shall make an approximate estimate of the value of the work done and unused materials delivered for, and stored on, the site of the work during the previous calendar month. The Contractor shall furnish to the Engineer such detailed information as requested to aid him as a guide in the review of the payment application.
- J. The Contractor shall submit payment estimates or certificates of payment to the County.

**SC-62 COMPLETION AND ACCEPTANCE OF WORK (GC-62)**

- A. "Substantial Completion" shall be the stage in the progress of the Work where the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended user.
- B. The Contractor shall be responsible for the restoration of any paved, graveled, or grassed areas disturbed by construction. Any areas so affected shall be restored to a condition as nearly as possible to that existing prior to construction. Paved and graveled areas shall be resurfaced with materials meeting the requirements of the technical specifications, and grassed areas shall be seeded and mulched. No direct measurement or payment will be made for restoration of areas disturbed by the construction which are outside of the limits designated on the Drawings.

**SC-63 FINAL ESTIMATE AND PAYMENT (GC-63)**

General Conditions GC-63 is modified by adding the following:

- A. Contractor shall notify the County when he has completed all work in accordance with the Drawings and Specifications. He shall avail himself for an on-site inspection of the project with the Owner and the County. Any items found to be incomplete or improperly constructed shall be listed, and the Contractor shall take prompt action to correct such items. Upon completion of all such work, a final inspection will be scheduled to include the Contractor's representative, the Owner's representative,

and the County. Should the Contractor fail to complete the items listed (thereby causing final inspection to be repeated), the cost of engineering or any other costs incurred by the Owner, due to such repeated inspections, shall be at the expense of the Contractor and will be deducted from the final contract amount.

- B. **Prior to the Final Inspection, the Contractor shall provide to Jackson County Public Works the AS-BUILTS drawings based on any and all redlines, modifications, addition or deletions, and changes to the project.**

**SC-65 CLAIMS FOR ADJUSTMENT AND DISPUTES (GC-65)**

General Conditions GC-65 is modified by adding the following:

- A. Each Contractor must form their own opinion of the character and condition of materials to be encountered from an inspection of the site and from other such investigations as they may desire to undertake.
- B. The Contractor is solely responsible for determination of existing conditions. All claims for adjustments in contract price or quantity of removals shall be denied.

**SC-67 HOMELAND SECURITY AFFIDAVIT (GC-67)**

The following is added to GC-67:

The Contractor must return the Affidavit of Compliance within this Contract, with their memorandum of understanding (MOU) with homeland security, with their Bids.

**SC-68 DIFFERING SITE CONDITIONS (GC-68)**

The following requirement is hereby added to the contract:

- A. Prior to the beginning or during the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and the affected work is performed.
- B. Upon written notification the County will investigate the conditions and if he/she determines that the conditions of the pavement materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment will be made and the contract modified in writing accordingly. The County will notify the Contractor of his/her determination whether or not an adjustment of the contract is warranted.
- C. No contract adjustment, which results in a benefit to he/she Contractor, will be allowed unless the Contractor has provided the required written notice.



**SC-69 CLEAN UP**

- A. Final Cleanup of roadway right-of-way shall be in accordance with Missouri Standard Specifications for Highway Construction 2020 Edition, Section 104 Scope of Work, Subsection 104.11 Final Clean-Up except as herein modified:

Before the work will be accepted by the Owner, the Contractor shall be required to remove all aggregate and debris resulting from his operation, which also includes cleaning streets, ditches creeks, and driveways of earth, sod or other objectionable material and shall dispose of such debris off the project. This cleanup shall be limited to the project limits.

- B. Final Cleanup shall be at no additional cost to the Owner.

**SC-70 SURFACE RESTORATION**

Re-establishment of any disturbed areas on public right's of way will be accomplished by the Contractor. Should the Contractor elect to use private property to stockpile materials, restoration shall be by the Contractor with no direct payment being made.

**SC-71 SUBSTANTIAL COMPLETION**

Substantial Completion shall be the stage in the progress of the Work where the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended user.

**SC-72 SAFETY TRAINING REQUIREMENTS FOR ALL ON-SITE EMPLOYEES**

The Contractor to whom the contract is awarded and any subcontractor under such contractor shall require all on-site employees to complete 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 department which is at least as stringent as an approved OSHA program. All employees are required to complete the program within sixty days of beginning work on such construction project. The Contractor shall provide certification of compliance with this condition following the award of the contract and before work commences on the project.

**SC-73 CHAPTER 10 PURCHASING SECTION 1072 CONSTRUCTION PROJECTS – REQUIREMENTS TO BID – WAGES AND BENEFITS – CERTAIN EMPLOYERS**

- A. This contract has a requirement related to paying wage rates for certain delivery truck drivers. Bidders are advised to read Jackson County, MO. Ordinance #4465 repealing Section 1072 enacted by the Jackson County Legislature on October 15, 2012 relating to Jackson County Code Chapter 10 Purchasing. See the below Section 1072 requirements.
- B. Section 1072. Construction Projects – Requirements To Bid – Wages and Benefits– Certain Employers. Jackson County reaffirms its long-standing policy that no less than the prevailing hourly rate of wages shall be paid to all workers performing work on construction projects on behalf of Jackson County. As a condition of eligibility to bid for or perform work on any Jackson County construction project funded in whole or in part by the County, producers or suppliers of dirt, sand, rock, asphalt, fly ash and/or concrete must pay their delivery employees no less than the prevailing rate of wages for work associated with the county construction project, as defined by section 290.210(5), RSMo, and the occupational titles listed in 8 CSR 30-3.060(Z). Wage rates for delivery employees shall be derived from the Missouri Annual Wage Order incorporated into the bid for the construction work. Delivery employees are covered under this section when delivering from an off-site location or a designated site location to the work site as outlined under 8 CSR-30—3.020(1) and (2). This section shall not apply to owners/operators of truck hauling millings or delivering asphalt on a County construction project. (Ord. 3839, Eff. 11/28/06; Ord. 4297, Eff. 03/01/11; Ord. 4465, Eff. 10/15/12)
- C. 1072.1 Compliance Review Officer. In addition to the duties set forth in Chapter 6 of this code, it shall be the duty of the Compliance Review Officer to monitor the producers or suppliers of the commodities enumerated in this section awarded County contracts to insure compliance with the prevailing rate of wages. (Ord. 3839, Eff. 11/28/06).

**END OF SECTION**

THIS SHEET LEFT BLANK INTENTIONALLY.

# TECHNICAL SPECIFICATIONS

**TS-1 EMERGENCY PROVISIONS AND INCIDENT MANAGEMENT**

- A. The Contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow, the Contractor shall notify the Sheriff's Department or other emergency agencies immediately as needed. The County shall also be notified when the Contractor requests emergency assistance.
- a. Design Engineer: Grant Luckenbill, Olsson (Office: 913-748-2506 Cell: 816-284-9204)
  - b. County PM: Earl Newill, PE (Office: 816-881-4538; Cell: 816-401-6401)
  - c. Construction Manager: Ric Johnson, PE (Office: 816-881-4499; Cell: 913-912-0933)
  - d. Construction Inspector: Ben Allen (Cell: 816-769-4910)
  - e. Road & Bridge Supervisor: Jim Evans (Office: 816-847-7053; Cell: 816-401-6393)
- B. In addition to the 911 emergency telephone number for ambulance, fire, or police services, the following agencies may also be notified for accident or emergency situation with the project limits.
- a. Sheriff's Department: 816-541-8017
  - b. City of Grain Valley Police Department: 816-847-6250
  - c. Missouri Highway Patrol, Troop A (Lee's Summit): 816-622-0800
  - d. Central Jackson County Fire Protection District Sta. 4: 816-229-2522

This list is not inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate police agency. The Contractor shall notify enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the Contractor completes this notification with enforcement and emergency agencies, a report shall be furnished to the County on the status of incident management.

- C. No direct pay will be made to the Contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

**TS-2 GENERAL**

- A. Contract Specifications: The detailed specifications, which follow shall govern the materials furnished and work performed in the construction of the work covered by this contract. No attempt has been made in the foregoing designated specifications to segregate work to be performed by any trade, subcontract, or proposal item, under any one section of the specifications.
- B. Any segregation between trade or craft jurisdiction limits, and the establishment of subcontract limits, will be solely a matter of agreement between the Contractor and his employees and his Subcontractors. The specifications will govern the construction of the entire work, and the provisions thereof shall govern each item and unit of work to which such provisions apply.
- C. The latest editions of the following specifications are incorporated into the Contract Documents by reference:
- Missouri Standard Specifications for Highway Construction, 2020 Third Edition January 2021, Missouri Highways and Transportation Commission.
  - American Public Works Association (APWA) Kansas City Metropolitan Chapter Standard Specifications, Sections 2000 through 2900, current edition.

- Federal Highway Administration, Manual on Uniform Traffic Control Devices (MUTCD), current edition.
- D. Technical Specifications for the work shall consist of the above referenced specifications with such revisions, amendments, and supplements as are contained herein. The work shall be constructed in accordance with these technical specifications and any attached plans or drawings. Any omission found in these Technical Specifications, and/or the appropriate Standard Specification, shall govern the plans where applicable sections in the Standard Specifications are found.

Missouri Standard Specifications for Highway Construction, 2020 Edition

Section 0106	Control of Material
Section 0203	Roadway and Drainage Excavation
Section 0204	Embankment Monitoring
Section 0206	Excavation for Structures
Section 0210	Subgrade Compaction
Section 0304	Aggregate Base Course
Section 0310	Aggregate Surface
Section 0407	Tack Coat
Section 0408	Prime Coat
Section 0604	Miscellaneous Drainage
Section 0606	Guardrail, Crashworthy End Terminals, One-Strand...
Section 0611	Embankment Protection
Section 0616	Temporary Traffic Control
Section 0620	Pavement Marking
Section 0703	Concrete Masonry Construction
Section 0706	Reinforcing Steel for Concrete Structures
Section 0710	Epoxy Coated Reinforcing Steel
Section 0725	Metal Pipe and Pipe Arch Bridges
Section 0732	Flared End Sections
Section 1001	General Requirements for Materials
Section 1005	Aggregate for Concrete
Section 1006	Aggregate for Surfacing
Section 1007	Aggregate for Subbase
Section 1010	Select Granular Backfill for Structural
Section 1011	Geotextile
Section 1019	Cement
Section 1036	Reinforcing Steel for Concrete
Section 1040	Guardrail, End Terminals, One-Strand Access Restraint...
Section 1053	Concrete Sealer
Section 1054	Concrete Admixtures
Section 1055	Concrete Curing Material
Section 1057	Material for Joints
Section 1058	Polyethylene Sheeting
Section 1066	Mortars and Grout
Section 1070	Water
Section 1073	Joint Material for Structures

APWA's Technical Specifications

Section 2100	Grading and Site Preparation
Section 2150	Erosion and Sediment Control
Section 2200	Paving
Section 2300	Incidental Construction

Section 2400	Seeding and Sodding
Section 2600	Storm Sewers
Section 2700	Structures

- E. Applicable Codes and Standards: Where referred to in the technical specifications or plans, portions of organizations' specifications are incorporated into the Contract. Wherever a part of any standard specification (ASTM, AASHTO, etc.) is referred to in the technical specifications or plans, the following conditions shall apply unless otherwise provided in the technical specifications or plans:

Only the specifically referred to part of the standard specification shall apply to this Contract. Whenever any provision of a standard specification conflicts with any of the Contract Documents, said Contract Documents shall govern.

- F. Construction Testing: All sampling and testing deemed necessary by the County to determine if materials or methods are in compliance with the specifications shall be performed by a testing laboratory selected by the County. The cost of all such tests showing compliance with the specifications shall be paid by the County unless otherwise noted in the technical specifications. In the event that any test indicates non-compliance with specifications, at least one (1) additional test will be paid for by the Contractor to determine acceptability of material or methods. All documentation verifying compliance shall be submitted to the County for compliance review.
- G. Construction Schedule: Before work is started, the Contractor shall prepare a detailed schedule of all construction operations that shall indicate the sequence of the work and also the time of starting and completing each part. The schedule shall be submitted to the County for their approval.
- H. Losses From Natural Causes: All loss or damage arising out of the nature of the work to be done, or from the action of the elements, or from floods or overflows, or from ground water, or from unusual obstructions or difficulties, or any other natural or existing circumstances either known or unforeseen, which may be encountered in the prosecution of the said work shall be sustained and borne by the Contractor at his own cost and expense.
- I. Unfavorable Construction Conditions: During unfavorable weather, or other unfavorable conditions for construction operations, the Contractor shall pursue only such portions of the work as will not be damaged thereby. No portions of the work, the satisfactory quality or efficiency of which will be affected by any unfavorable conditions, shall be constructed while these conditions exist, unless by special means or precautions approved by County, the Contractor shall be able to perform the work in a proper and satisfactory manner.
- J. Protection and Maintenance of Public and Private Property: All existing underground utilities shown in the Plans were provided by each utility company. Before starting work, the Contractor shall notify all utilities involved, and shall request them for cooperation in locating lines in advance of the work. The Contractor shall make reasonable effort to avoid breaking utility lines. The utility shall be notified immediately should a break occur in a line during construction under this Contract.
- K. Any lines that are broken by the Contractor shall be repaired according to the utility company's standards at the expense of the Contractor. Wherever the work is along existing pavement which is to be retained, traction equipment with lugs will not be permitted. The Contractor shall use utmost care not to damage or destroy any existing pavement. Any pavement damaged or destroyed due to the operations of the Contractor, which is not within the construction limits shall be replaced in accordance with these specifications.
- L. The Contractor shall be held responsible for all damage to roads, highways, shoulders, ditches, bridges,

, and other property, caused by them or their subcontractors in transporting materials to or from the site of work, regardless of location of such damage, and shall pay for or place such damaged property to the satisfaction of the owner of such property.

- M. Clearing and Cleaning Up: The Contractor shall do all necessary clearing and demolition work prior to excavation for the proposed construction. The Contractor shall not allow the site of the work to become littered with trash and waste material but shall maintain same in a neat and orderly condition during the process of the work to completion. The Contractor shall clean up all dirt from paved surfaces, not allow same to pack on the roadway or create a traffic nuisance.

**TS-3 UTILITIES**

- A. Description: For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area for the construction work for this project.

<b><u>Utility Name</u></b>	<b><u>Known Required Adjustment</u></b>
Evergy 1105 E 40 Highway Blue Springs, MO 64014 Janet Waddell (816) 729-5128 Michelle Arps (816) 769-4765	Protect Lines, if required, No Adjustment. Evergy is raising their conductor to provide room for two cables below to move up for more clearance below for construction. Evergy will shield their bottom line for added protection.
AT&T 2121 E. 63 <sup>rd</sup> Street Kansas City, MO 64130 Ron Gipfert (816) 772-0318	Moving overhead aerial line on west side to be directionally drilled west of proposed inlet and junction box. Moving two buried lines in east shldr further east and burying below creek. Work to be completed by AT&T prior to start of JCPW RCB construction project.
Comcast 4700 Little Blue Parkway Independence, MO 64057 Andrew Bell (816) 795-2255	No Adjustment
Centurylink 210 East Market Street Warrensburg, MO 64093 Jeff Wallace (660) 429-7199	No Adjustment
Unite Private Networks 7200 NW 86 <sup>th</sup> St. Ste M Kansas City, MO 64153 Brandon Myers (816) 206-4257	Protect & lift overhead line on west side, if required.
Spire Energy 3025 SE Clover Drive Lee's Summit, MO 64082 Katelynn Liberty (816) 260-6581	No Adjustment
PWSD No. 15 13213 E Lone Jack Ls Rd Lee's Summit, MO 64086 Howard Pritchett (816) 697-5472	No Adjustment



PWSD No. 17  
PO Box 256  
Grain Valley, MO 64082  
Jason Herman (816) 229-3838

No Adjustment

- B. The existence and approximate location of the utility facilities known to exist, as shown on the Plans, are based upon the best information available to the County at this time. This information is provided by the County and the County expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the County shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the Contractor to verify the list below indicating existence, location, and status of any facility. Such verification includes direct contact with the listed utilities.
- C. The Contractor agrees that any effects of the presence of the utilities, their relocation, Contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The Contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay provided Contractor notifies the County in writing of the delay at the time it occurs. The Contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the Contractor, its subcontractors and suppliers in any claim or action arising out of or in relation to the work under the Contract.
- D. The Contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The Contractor shall hold and save harmless the County from damages to any utility facilities interruption of service by it or its subcontractors operation.
- E. The Contractor shall coordinate their operations with the work of utility owners making necessary adjustments, removals, or construction of new fixtures, and shall permit free access to the site for such work.
- F. It is understood and agreed that the Contractor has considered in their bid all of the permanent and temporary utility appurtenances in their present or relocated positions whether or not shown on the Plans and that no additional compensation will be allowed for any delays, inconvenience, or damage sustained by them due to any interference from the said utility appurtenances or the operation of moving them.
- G. The general location of railroad facilities, of principal water mains, sewer pipes, telephone conduits, gas mains, pipe lines, pole lines, and other public and private utility facilities which will affect construction operations are indicated on the Plans based on One-Call utility locates. Some of these utilities may remain in place; others may be removed entirely or in part by the facility owners for relocation elsewhere.
- H. When the failure of the facility owners to cooperate and coordinate their work with that of the Contractor results in actual delay to the Contractor in the over-all completion of their work, such delay will be considered in the count of construction days or date specified for completion, provided the Contractor notifies the County's Representative in writing of the delay at the time it occurs.
- I. Should there be located within the right-of-way any public or private utility facilities which are to remain

in place and which will interfere with the Contractor's proposed operation, the Contractor shall make all necessary arrangements with the facility owners for any temporary or permanent removal or relocation of such facilities desired for their convenience. Any cost involved shall be borne by the Contractor.

- J. The Contractor shall use every precaution necessary to prevent damage to all public and private utility wires, lines, pipes, poles, cables, and conduits within the right-of-way. The Contractor shall be responsible for all damage to any utility facility due directly to their operations regardless of location and they shall repair and replace as necessary any such damaged facility or make payment to the facility owner for repair or replacement. See cover sheet of Plans for list of utility companies and contact information.
- K. No direct pay will be made to the Contractor to recover the cost of coordination with the utility companies. All costs pertaining to this item shall be included in the contract prices of other items.
- L. Care should be taken when removing trees that intertwine with the overhead lines. DO NOT DAMAGE.

#### **TS-4 PROTECTION OF PROPERTY**

- A. The Contractor shall protect existing public and private property from damage by construction operations.
  - a. Confine all work, equipment, and personnel within the limits of the project right-of-way and easements shown on the Plans.
  - b. Take all precautions required to preserve and protect all existing trees, shrubs, and other improvements located within the project right-of-way and easements, except those items designated to be removed.
  - c. Where fences are to be breached on private property, the property owners shall be contacted and arrangements made to ensure proper protection of any property and livestock exposed to the open condition.
  - d. Before acceptance of the Work by County, Contractor shall replace or repair all existing improvements damaged by their operations. This shall include, but not be limited to; damage to existing pavement beyond the immediate project limits, side roads, curbs, and entrances.
  - e. All property pins removed or displaced shall be reset to its original location by a licensed Surveyor registered in the State of Missouri.
- B. No separate payment will be made for the protection of property. All costs pertaining to this item shall be included in the contract prices of other items

#### **TS-5 JOB SITE ADMINISTRATION**

- A. The Contractor shall give the Work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the County and other contractors in every way possible.
- B. The Contractor shall have on the work site at all times, as his agent, a competent superintendent capable of reading and thoroughly understanding the plans and Specifications and thoroughly experienced in the type of work being performed, who shall receive instructions from the County. The superintendent shall have full authority to execute orders or directions of the County without delay, and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. Such superintendence shall be furnished regardless of the quantity of work sublet.
- C. No separate payment will be made for job site administration. All costs pertaining thereto shall be

included in the contract prices for other items.

**TS-6 PRECONSTRUCTION MEETING**

- A. Prior to starting work, a preconstruction conference will be held to discuss the project, its scheduling and its coordination with the work of others. It is expected that this conference will be attended by representatives of the County, the Contractor, and his subcontractors, utility representatives, as well as representatives of any other affected agencies that the County may wish to invite. The Contractor shall bring to the conference a tentative schedule of construction progress, shop drawing submittals and other required submittals and certifications. Discussion items of significance that could affect project progress may include the following:
- a. Tentative construction schedule.
  - b. Critical work sequencing.
  - c. Coordination with the County.
  - d. Designation of responsible personnel.
  - e. Procedures for processing field decisions and change orders.
  - f. Procedures for processing Applications for Payment.
  - g. Distribution of contract documents.
  - h. Submittal of shop drawings and product data.
  - i. Preparation of record documents.
  - j. Use of the premises.
  - k. Working hours.
- B. The County will schedule a Preconstruction Conference at location to be determined, no later than 20 days after the effective date of the Agreement and prior to commencement of construction activities. The County will conduct the meeting to review responsibilities and personnel assignments.
- C. Attendees will include representative from the County, the Contractor, subcontractors, manufacturers, suppliers, utility companies, and other concerned parties shall be represented at the conference by persons familiar with and authorized to conclude matters relating to the Work.
- D. The agenda will review items of significance that could affect progress, including topics such as the following:
- a. Introduction of attendees.
  - b. Distribution of Contract Documents.
  - c. Designation of responsible personnel.
  - d. Tentative construction schedule, including critical work sequencing.
  - e. Critical work sequencing.
  - f. Designation of responsible personnel.
  - g. Coordination with County.
  - h. Submittal of certified payrolls, wage interviews, and compliance with minority participation.
  - i. Procedures for processing field decisions and change orders.
  - j. Submittal of shop drawings and product data.
  - k. Procedures for processing Applications for Payment.
  - l. Distribution of contract documents.
  - m. Preparation of record documents by the Contractor.
  - n. Use of the premises (right-of-way and easements)ay and easements).
  - o. Working hours and holidays.
- E. No separate payment will be made for the preparation, attendance of the preconstruction meeting,

maintenance of the construction schedule. All costs pertaining to this item shall be included in the contract prices of other items.

**TS-7 BUY AMERICA REQUIREMENT**

- A. On all County, state, and federal-aid projects, the Contractor's attention is directed to Title 23 CFR 635.410 Buy America Requirements. Where steel or iron products are to be permanently incorporated into the contract work, steel and iron material shall be manufactured in the USA except for "minor usage" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. The use of pig iron and processed, pelletized and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.
- B. Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.
- C. "Minor usage" of foreign steel, iron or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent of the total contract cost or \$2,500.00, whichever is greater. If foreign steel, iron or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer's written approval obtained prior to placing the material in any work.
- D. Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per MoDOT Specification Section 1000.
- E. Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.
- F. Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form ([https://epg.modot.org/forms/CM/CERTIFICATE\\_OF\\_MATERIALS\\_ORIGIN.pdf](https://epg.modot.org/forms/CM/CERTIFICATE_OF_MATERIALS_ORIGIN.pdf)) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The Engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the Engineer and retained for a period of 3 years after the last reimbursement of the material.
- G. Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including

coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and processed domestically in accordance with CFR Title 23 Section 635.410 Buy America Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

- H. When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

### **TS-8 SUBMITTALS**

- A. General: The Contractor is required to provide documentation for the performance of the Work. These submittals are divided into administrative and procedural categories. They include, but are limited to the following:

- a. Administrative Submittals
  - 1. Permits
  - 2. Applications for payment
  - 3. Performance and maintenance bonds
  - 4. Insurance certificates
  - 5. List of approved subcontractors
  - 6. M/W/VBE compliance
  - 7. Certified payrolls (Contractor and subcontractors)
- b. Procedural Submittals
  - 1. Contractor's project schedule
  - 2. Shop drawings
  - 3. Product data certifications

- B. Submittal Procedures:

- a. Coordinate preparation and processing of submittals with performance or construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

Coordinate each submittal with fabrication, purchasing, testing of submittals for related activities that require sequential activity.

Coordinate transmittal of difference types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

The County reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- b. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.

- 1. Allow two (2) weeks for initial review. Allow additional time if processing must be delayed to

permit coordination with subsequent submittals. The County will promptly advise the Contractor when a submittal being processed must be delayed for coordination.

2. If an intermediate submittal is necessary, process the same as the initial submittal.
  3. Allow two (2) weeks for reprocessing each submittal.
  4. No extension of Contract Time will be authorized because of failure to transmit submittals to the County sufficiently in advance of the Work to permit processing.
- c. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. The transmittal form should have the following information. Submittals received from sources other than the Contractor will be returned without action.
1. Project name
  2. Project number
  3. Date
  4. Name and address of contractor
  5. Name and address of subcontractor (if needed)
  6. Name and address of supplier/manufacturer
  7. Number and title of appropriate specification section
  8. Drawing number and detail reference
- C. Shop Drawings: Submit newly prepared information drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered a Shop Drawing. The Contractor shall not use any Shop Drawing without an appropriate final stamp indicating action taken in connection with construction.
- a. Shop Drawings include fabrication and installation drawings, layout drawings for reinforcing steel, falsework/forms, schedules, patterns, templates, and similar drawings. Include the following information:
    1. Dimensions
    2. Identification of products and materials included
    3. Compliance with specified standards
    4. Notation of coordination requirements
    5. Notation of dimensions established by field measurement
  - b. Sheet Size: except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 22" x 34".
  - c. Quantity Requirements: Except as otherwise specified, transmit six (6) copies all manufacturer's or fabricator's Shop Drawings to the County. Three (3) copies will be returned to Contractor.
  - d. Construction Record Drawings: The Contractor shall supply one full size (34" x 22") and one half size (17" x 11") AS-Built Construction Plans that includes AS-Built Surveyed drawings and electronic PDF (Portable Document Format) and AutoCadd drawings, current version, to the County. The AS-Built Construction Plans shall be provide to the County upon the completion of the construction project.
- D. Product Data: Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams,

and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

- a. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
    1. Manufacturer's printed recommendations
    2. Compliance with recognized testing agency standards
    3. Application of testing agency labels and seals
    4. Notation of dimensions verified by field measurement
    5. Notation of coordination requirements
  - b. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
  - c. Quantity Requirements: Except as otherwise specified, transmit six (6) copies all submittals of product data to the County. Three (3) copies will be returned to Contractor.
  - d. Distribution: Furnish copies of final submittal to installers, Subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
    1. Do not proceed with installation until an approved copy of the applicable Product Data is in the installer's possession.
    2. Do not permit use of unmarked copies of Product Data in connection with construction.
- E. County's Action: Except for submittals for record, information, or similar purposes where action and return is required or requested, the County will review each submittal, mark to indicate action taken, and return promptly. Compliance with specified characteristics is the Contractor's responsibility.
- a. Action Stamp: The County will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
    1. Approved: Where submittals are marked "Approved", that part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.
    2. Approved As Noted: When submittals are marked "Approved as Noted", that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
    3. Revise and Resubmit: When submittals are marked "Revise and Resubmit", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat, if necessary, to obtain a different action mark. Do not permit submittals marked "Revise and Resubmit" to be used at the Project site, or elsewhere where Work is in progress.
    4. Rejected: When submittals are marked "Rejected", do not proceed with that part of the Work covered by the submittal. The information provided does not comply with the parameters noted in the Plans. The submittal shall be revised to meet the design requirements and resubmitted to the County for review.
    5. Not Subject To Review: When submittals are marked "Not Subject To Review", the information provided is accepted as additional data for the files. No further action is required.

- b. Regardless of how the submittal is stamped, the review and approval neither extends nor alters any contractual obligations of the County of the Contractor.
- F. No separate payment will be made for any of the submittals associated with the completion of the Work. All costs pertaining to these items shall be included in the other contract prices.

**TS-9 QUALITY REQUIREMENTS**

- A. General: The Contractor will be fully responsible for complying with the Technical Specifications, Plans and other Contract Documents and shall obtain such certificates of compliance and have such tests made as will assure full compliance. Copies of such certificates and test reports shall be furnished to the County, prior to payment of pay items.
- a. Related Sections:
    - 1. General Conditions: responsibilities of inspection, correction, removal and acceptance
    - 2. Supplemental Conditions: responsibilities of testing
    - 3. Technical Specifications: submittal procedures
  - b. References:
    - 1. American Society for Testing and Materials (ASTM): technical standards for the various materials used on the project, including testing procedures
    - 2. Federal Highway Administration (FHWA): specifications and details for traffic control and safety
    - 3. American Association of State Highway and Transportation Officials (AASHTO): guidelines, specifications, and details for roadway safety
    - 4. Missouri Department of Transportation (MoDOT): standard details, specifications, guidelines, and procedures for roadway and structures
    - 5. Kansas City Chapter of American Public Works Association (KCAPWA): standard details, specifications, guidelines, and procedures for roadway and structures
  - c. Testing Agency: Prior to start of the Work, the County will identify the testing agency that will be used on the project from their Term & Supply Contract.
  - d. Test Reports: After each test inspection two (2) copies of the report to the County to share with the Contractor. The report shall include:
    - 1. Date issued
    - 2. Project title and number
    - 3. Name of inspector
    - 4. Date and time of sampling or inspection
    - 5. Identification of product and specifications section
    - 6. Location in the Project
    - 7. Type of test/inspection
    - 8. Date of test/inspection
    - 9. Results of test/inspection
    - 10. Conformance with Contract Documents
  - e. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor to the County, in quantities specified for Product Data.
  - f. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the County's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
  - g. Manufacturer's Field Reports: Submit reports for the County's benefit as contract administrator. Submit for information for the limited purpose of assessing conformance with information given



and the design concept expressed in the contract documents.

B. Control of Installation:

- a. The Contractor shall notify the County a minimum of 48 hours prior to expected time for operations requiring inspection and laboratory testing services. Such testing, or failure to test, on the part of the County shall in no way relieve the Contractor of complete responsibility for furnishing materials and constructing the Project in accordance with all of the Contract Documents. Testing services arranged and paid by the County.
- b. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- c. Comply with manufacturers' instructions, including each step in sequence. If manufacturer's instructions conflict with Contract Documents, request clarification from the County before proceeding.
- d. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- e. Have Work performed by persons qualified to produce required and specified quality.
- f. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer. Once installed, secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

C. Certificates of Compliance:

- a. The Contractor, prior to payment for the pay items, shall submit, in triplicate, certificate of compliance from manufacturers, producers, fabricators and suppliers of items to be incorporated in the work attesting that all items and materials supplied in connection with the work conform to the requirements of the Specifications, as provided in the various sections of these Contract Documents.
- b. Whenever the items so certified deviate from the requirements of the Technical Specifications, Plans and other Contract Documents, then the Contractor shall point out such deviation in the letter of transmittal. Unless this procedure is followed and such deviations are specifically approved by the County in writing, then the County's approval of such certifications will not constitute approval of the deviations.
- c. Said certificates may be accepted by the County as adequate evidence of compliance with the Contract Documents. However, at its option, the County may test any or all of said items for compliance. If found to be in compliance with the Contract Documents, the cost of testing will be borne by the County. If found to be not in compliance, the Contractor shall pay for such testing.

- D. Payment for testing shall be paid by the County in conformance with the Special Conditions. Retesting required because of non-conformance to specified requirements shall be performed by the same testing firm on instructions by the County. The Contractor shall bear all costs from such retesting at no additional cost to the County.

**TS-10 TEMPORARY FACILITIES**

- A. Water: Any water required to prepare concrete, mortar, for the project, or other construction products shall be from a potable source. Water from a stream, pond, etc. is unacceptable.
- B. Power: All power for lighting, operations of the Contractor's equipment, or for any other use which may be required for proper completion of the Work shall be provided by the Contractor.
- C. Sanitary Facilities: Contractor shall furnish temporary sanitary facilities at the site, as provided herein, for the needs of all construction workers and others performing work or furnishing services on the Project.

Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons. Contractor shall enforce the use of such sanitary facilities by all personnel at the site.

- D. Fences: All existing fences affected by the Work shall be maintained by Contractor until completion of the Work. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use.

On completion of the Work across any tract of land, Contractor shall restore all fences to their original or to better condition and to their original location.

- E. Parking: Contractor shall provide and maintain suitable parking areas for the use of all construction workers and others performing work or furnishing services in connection with the Project, as required to avoid any need for parking personal vehicles where they may interfere with public traffic, County's operations, or construction activities.
- F. Noise Control: Contractor shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work.

Construction activities, such as excavation, demolition, installation, erection, alteration, or repairs, adjacent to residential areas shall be limited to 7:00 a.m. and 8:00 p.m. on weekdays. In the case of urgent necessity in the interest of public safety, the Contractor may request a letter of permission from the County.

- G. Dust Control: Contractor shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical suppressant. When practicable, dusty materials in piles or in transit shall be covered to prevent blowing.
- H. Pollution Control: Contractor shall prevent the pollution of watercourses by sanitary wastes, sediment, debris, and other substances resulting from the construction activities. No sanitary wastes will be permitted to enter any watercourse other than sanitary sewers. No sediment, debris, or other substance will be permitted to enter sanitary sewers, and reasonable measures will be taken to prevent such materials from entering any watercourse.
- I. No separate payment will be made for the installation, maintenance, and removal of any temporary facility needed for the completion of the Work. All costs pertaining to these items shall be included in

the other contract prices.

**TS-11 DEBRIS CONTROL**

- A. During construction, care shall be taken to ensure public safety in the project area. The Contractor shall maintain the project area so that it is free of debris at all times. As each major component of work is completed, excess materials and unnecessary equipment shall be removed from the project area and corresponding backfilling and clean up shall be done promptly.
- B. No separate payment will be made for the debris control. All costs pertaining to this item shall be included in the contract prices of other items.

**TS-12 MOBILIZATION**

- A. Description: This item shall consist of the preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site, for the establishment of construction offices and other facilities necessary for work on the project, including contract bonds and insurance, and for all other work and operations that must be performed or costs incurred prior to beginning work on the various items on the project site.
- B. Mobilization shall conform to Section 618 of the MoDOT Standard Specifications.
- C. **Basis of Payment: Payment item for Mobilization will be Lump Sum.**

**TS-13 CLEARING AND GRUBBING**

- A. Clearing and grubbing shall conform to Section 2101, "Clearing and Grubbing", a subsection of Section 2100 "Grading and Site Preparation", and 2101, "Clearing and Grubbing", of the APWA Standard Specifications except as herein modified. Measurement and Payment shall be in accordance with Section 2103, "Measurement and Payment".
- B. Add to Section 2101.3.A, "Clearing, Grubbing and Site Preparation", a subsection of "Definitions", the following:
  - a. Jackson County Public Works has existing channel easements for this project.
  - b. Right-of-way and easement lines, as shown on the Plans, shall be set by the Contractor prior to beginning clearing, grubbing, and demolition operations.
  - c. The limits of clearing and grubbing for the roadway and channel construction shall be the construction limits where practical but in no case shall they extend beyond the easement and/or Right-of-Way lines. For isolated areas such as pipe runs the area shall be limited to the minimum practical area of construction. The Contractor shall establish all right of way and easement lines and will designate all trees, shrubs, and plants that are to remain. The County will review the trees that are marked for removal and approve the selection. No removals shall be made until this review has been made. See Special Conditions for more information on construction staking.
- C. Add to Section 2101.3.E., "Trees", the following:

- a. Individual trees shall not be classified or measured. All tree removals shall be **SUBSIDIARY** to the unit price bid for Clearing and Grubbing.
  - b. The drawing may not show all trees, the Contractor shall make his own determination as to the number, types and sizes of trees to be removed.
  - c. If the Contractor chips or grinds the timber debris the Contractor shall dispose of the material, legally, in approved disposal sites at no additional cost to the County.
- D. Add to Section 2101.3. "Brush" the following:
- a. Brush shall not be classified or measured. All brush removals shall be **SUBSIDIARY** to the unit price bid for Clearing and Grubbing per Acre.
  - b. Open burning will not be permitted. Controlled burning will be permitted. Contractor will need to acquire permit from Missouri Department to Natural Resources and from **Central Jackson County Fire Protection District**. The County does not issue burning permits. The applications and approvals for a burning permit on this project shall be made to **Central Jackson County Fire Protection District at (816) 229-2522**. The permit shall be posted at the project site prior to and during any burning operations.
- E. Modify Section 2103.2, "Method of Measurement", by adding the following:
- No Measurement will be made of "Clearing and Grubbing".
- F. Modify Section 2103.3, Basis of Payment, by adding the following:
- Payment for "Clearing and Grubbing" will be at the plan quantities and unit bid price per Acre. Tree removal for the project shall be **SUBSIDIARY** to the bid item, "Clearing and Grubbing".

**TS-14 CONSTRUCTION STAKING**

- A. Construction Staking shall be in accordance with the MoDOT Standard Specifications Section 627, "Contractor Surveying and Staking".
- B. Construction Staking shall follow the provisions of Section 627 and the Special Provisions 8 (SP-8) Position, Grade, and Alignment of this contract.
- C. Modify Section 627.2, "Staking Requirements", by adding the following:
  - a. "Upon the completion of the Construction, a Survey Staking of the New and Existing Right-of-Ways shall be staked after the Construction of this project has been finalized.
  - b. The Staking of the Right-of-Way is for the Property Owner's fencing company on relocating existing fencing or installing new fence and gates.
- D. Contractor shall survey the finish grade and set the stakes for the County's portion.
- E. The Contractor shall supply AS-Built Surveyed drawings and electronic PDF and AutoCad drawings, current version, to the County.
- F. All the drawings shall be signed and sealed by a registered Missouri Professional Land Survey (PLS) prior to submitting to the Owner.

- G. Construction Survey shall include all labor and equipment required to 1) layout the proposed improvements in accordance with the plans; 2) engage a Licensed Surveyor to perform Legal Property Survey and mark property corners with #4 flagged rebar. A drawing of the survey with ties, Northing and Easting coordinates based on Mo State Plane Coordinates of 1983 and Elevations, to each bar shall be sealed by a Licensed Surveyor and delivered to the Owner prior to completion of the project. An AutoCaD drawings (current edition by the Owner or comparable) of the survey shall be provided to the Owner as part of the submittals.

#### H. MEASUREMENT AND PAYMENT

- a. "Contractor Furnished Surveying and Staking" will not be paid by measurement, pay item will be Lump Sum (LS).
- b. Equipment, materials, etc. shall be **SUBSIDIARY** to the "Contractor Furnished Surveying and Staking" unit bid item.

#### TS-15 REMOVAL OF IMPROVEMENTS

- A. Removal of the existing structure shall conform to the requirements of Section 202, "Removal of Roadways and Buildings", of the MoDOT Standard Specifications except as herein modified.
- a. Removal of all other existing improvements on the project shall conform to the requirements of Section 202.30, "Removal of Improvements for Roadway Contracts", except as herein modified.
- b. Add to Section 202.30.1, "Description", the following:
1. This work shall include the removal of remnants of construction from the existing asphaltic concrete surface roadway to allow for a new roadway pavement and new structure.
- c. Add to Section 202.30.1.1, a subsection of "Disposal of Materials", Section 202.3 "Construction Requirements", the following:
1. All material removed shall become the property of the Contractor and shall be removed and disposed of by the Contractor.
  2. The Contractor shall remove the existing fencing in the right-of-way to the limits as specified in the Plans.
  3. Contractor shall notify the Property Owner(s) in such case, **72 hours before removal**. No additional payment shall be made for this work.
  4. If the Contractor encounters an Existing standard UPS Mailbox near an Existing Driveway within the work area that is in the way of construction, then the Existing Mailbox will be temporarily removed to a location as agreed upon by the UPS and Property Owner. If the Existing Mailbox is a non-standard UPS Mailbox (custom), then the Contractor shall communicate with the County prior to any and all relocations. The removal, relocating and installation of the Existing Mailbox shall be **SUBSIDIARY** to unit price for "Removal of Improvements".
- d. Add to Section 202.30.1.2, "Description", subsection of Section 202.30 "Removal of Improvements for Roadway Contracts", the following:

The Plans may not show all items to be removed. Other removals, necessary for construction of the proposed improvements, shall be as approved or directed by the Engineer. No additional compensation will be made for such removals.

B. Measurement

a. Modify Section 202.30.2, Method of Measurement, by adding the following:

1. No Measurement will be made of Removal of Improvements.

C. Payment

a. Modify Section 202.30.3, Basis of Payment, by adding the following:

1. Payment for Removal of Improvements will be at the plan quantities and contract Lump Sum price.

**TS-16 REMOVAL OF STRUCTURE**

A. Removal of the existing bridge length culvert shall conform to the requirements of Section 216, "Removal for Bridge Structures," of the MoDOT Standard Specifications except as herein modified.

B. Add to Section 216.10.1, "Description", a subsection of "Removal of Bridges", the following:

a. This work shall also include the removal of remnants of construction from structures that were in place prior to the construction of the existing Bridge including but not limited to existing Bridge structure, foundations, seal courses, toewalls, wingwalls, excavation, traffic signs/posts, unseen falsework or permanent piling, stone abutments, reinforced concrete scour supports along bottom of the stone walls, reinforced concrete top slab, reinforced concrete hub guard walls, stone wingwalls, miscellaneous rubble, concrete deposits, tree branch removal, and backfill to allow for installation of a new structure on suitable subgrade.

b. Amend Section 216.10.2 with the following:

1. The Plans may not show all items to be removed. Other removals, necessary for construction of the proposed improvements, shall be as approved or directed by the County. No additional compensation will be made for such removals.
2. All material removed shall become the property of the Contractor and shall be removed and disposed of by the Contractor.

C. Measurement

a. Modify Section 216.10.3, "Method of Measurement", by adding the following:

1. No Measurement will be made of Removal of Structure.

D. Payment

a. Modify Section 216.10.4, Basis of Payment, by adding the following:

1. Payment for Removal of Structure will be at the contract Lump Sum price.

**TS-17 TYPE 5 AGGREGATE FOR SUBBASE (6 IN. THICK)**

- A. Compacted aggregate subbase course for roadway shall be in accordance with the MoDOT Standard Specifications Section 304, "Aggregate Base Course", Section 310 "Aggregate Surface", Section 1006 "Aggregate for Surfacing, and Section 1007 "Aggregate for Base", except as herein modified.
  - a. Modify Section 310.2, "Material", read as follows:

The aggregate base shall be a MoDOT Type 5 Aggregate for Base. Material shall be delivered to the site pugged.
  - b. The Contractor will be required to supply a field laboratory. The quarry operator shall allow the County inspector or his agent full access and use of the laboratory at the quarry.
  - c. Modify Section 304.3.4.2, a subsection of "Shaping and Compacting", by adding the following:

Compaction to 95% of Standard Maximum density shall be obtained.
- B. Measurement
  - a. Modify Section 310.5, "Method of Measurement", by adding the following:

No field measurement will be made of Type 5 Aggregate for Base (6 In. Thick). The County will pay the plan quantity as shown in the bid.
- C. Payment
  - a. Modify Section 304.6, "Basis of Payment", by adding the following:

Type 5 Aggregate for Base (6 In. Thick) shall be paid per Square Yard.

**TS-18 PRIME COAT**

- A. Prime Coat shall be in accordance with the APWA Standard Specifications 2204, "Prime Coat", except as modified by these Provisions.
  - a. Modify section 408.2, "Material", with the following:
    1. The Prime Coat shall consist of preparing, treating and covering the top of the MoDOT Type 5 Compacted Aggregate base.
    2. The prime coat shall conform to Section 2204.3 Materials. Liquid asphalt may be changed one grade by the engineer during construction at no change in unit price. The Contractor shall uniformly apply the liquid asphalt on the top surface of the 6" aggregate base.
- B. Measurement
  - a. Modify Section 2204.5, "Method of Measurement", by adding the following:

No field measurement will be made of Prime Coat.

C. Payment

- a. Modify Section 2204.6, "Basis of Payment", by adding the following:

Prime Coat shall be **SUBSIDIARY** to the bid item for Type 5 Aggregate for Base (6 In. Thick).

**TS-19 ASPHALTIC CONCRETE MIXTURE APWA TYPE 5-01 SURFACE AND 5-01 BASE**

A. Asphaltic Concrete Mixture AWWA Type 5-01 Surface and 5-01 Base

- a. Asphaltic Concrete shall conform to the applicable requirements of APWA Section 2205 except as modified by the Plans or this Technical Provision.

1. The Material shall be in accordance with the following:

- i. The base course shall consist of a 7" thick, RC Type 5-01 mixture meeting the requirements of Standard Specification Section 2205.3, paragraph A.
- ii. The surface course shall consist of a 2" thick, RC Type 5-01 mixture meeting the requirements of Standard Specification Section 2205.3, paragraph A.

2. Add the following paragraph to Section 2205.7.A.1

- i. In the event the automatic screed controls on the paving machine fails, the Contractor shall be allowed to continue placing mix only until the material in route to the project has been placed.

3. Modify Section 2205.8 by adding the following

- i. The maximum temperature of the mix placed shall be 350° F. Asphaltic concrete pavement received onto the jobsite above this temperature shall be rejected.

4. The density requirements of Standard Specification 2205.8, paragraph E, are revised as follows:

- i. The completed asphalt concrete paving shall have a density equal to or greater than 96 percent for the base course and 98 percent for surface course.

5. Modify Section 2205.8.A. by adding:

- i. All existing pavements shall be saw cut full depth and the edges tacked before any new material is placed adjacent to it.
- ii. All existing surfaces shall be tacked in accordance with Section 2204 prior to paving.
- iii. All costs for tacking the existing asphaltic concrete surface shall be considered **SUBSIDIARY** to the unit price bid for Asphaltic Concrete Surface.
- iv. The subgrade shall be prepared in accordance with Section 2201.



6. Modify section 2205.9. by adding:
  - i. Asphaltic concrete base shall be measure from edge of pavement to edge of pavement and remaining base underneath curb and gutter shall be **SUBSIDIARY** to unit price cost.
7. Temporary Asphalt surfacing:
  - i. Temporary asphalt surfacing is to be placed at the tie-in points on either end of the project as needed to maintain the flow of traffic between the projects and other locations as directed by the engineer.
8. Recycled asphalt shingles (RAS) are not permitted for use.

B. Measurement

- a. The quantities of accepted work for asphaltic concrete base and surface shall be measured per Ton.

C. Payment

- a. Payment for this work will be made at the respective contract unit bid price for "Asphaltic Concrete Mixture APWA Type 5-01 Surface" and "Asphaltic Concrete Mixture APWA Type 5-01 Base" per Ton.

**TS-20 TACK COAT**

- A. Tack Coat shall be in accordance with the APWA Standard Specifications 2204, "Tack Coat", except as modified by these Provisions.

- a. Add to Section 2204.2, "Materials," the following:

The bituminous tack coat shall be asphalt emulsion grade SS-1h and care shall be exercised to make sure that the tack coat materials are kept on the asphaltic concrete surface. The application rate between lifts of base course shall be between 0.03 and 0.05 gallons per Square Yard. The application rate between the base course and the surface course shall be between 0.05 and 0.10 gallons per Square Yard. All pavements shall be tacked. When weather conditions require, the County may direct a different type of asphalt tack material be used.

- b. Add the following provision to Section 2204.7:

Tack coat shall be applied between each layer of new asphaltic concrete to assure bond unless the previously laid surface is absolutely clean and the Engineer is satisfied that proper bonding will occur without tack coat. Tack coating between layers of new asphaltic concrete may be omitted only with the Engineer's permission. Emulsified asphalt, Type SS-1h, shall be diluted one (1) part water emulsion, to (1) part asphalt and mixed uniformly and heated to within the range of 6 F, and 160 degrees F, prior to application

B. Measurement:

- a. Tack Coat will be measured per Gallon.

C. Payment:

- a. Tack Coat shall be paid per Gallon.

**TS-21 EARTHWORK**

- A. This item generally consists of excavation, hauling, placement of earthwork, staging/stockpiling, backfilling, compacting embankment and grading. All materials and labor necessary to excavate and remove materials, provide suitable soils or granular backfill shall be in accordance with MoDOT Standard Specifications Section 203. All subgrade compaction shall be completed in accordance with MoDOT Standard Specifications Section 210.
- B. Modify Section 203.5.3, "Top Lift Thickness", by adding the following:
- a. "Suitable material for the top 18" of earth subgrade shall be entirely imperishable soil. Where rubbery conditions exist at the time the aggregate surface is to be placed, the Contractor shall rework or remove such material as directed by the Engineer and replace it with a suitable subgrade material compacted in accordance with these specifications. All rework or removal and replacement shall be **SUBSIDIARY** to the unit bid price for **Earthwork**."
  - b. "The top 6" of soil outside the roadbed shall be of sufficient fertile nature to support the independent growth of grass. The Contractor at his own cost shall be liable to add nutrients, modify the soil or replace the soil if in 6 months a flourishing stand of grass is not obtained."
- C. Section 203.5.4, "Structure Approach", shall be considered applicable to this contract; i.e. all roadway and channel embankment shall be compacted to 95% plus or minus 5 per cent of the Standard Proctor (ASTM D698) maximum dry density at a moisture content within 3 percent plus or 1 percent minus of optimum moisture content.
- D. Compacting in cut, as required by Section 203.5.8 through 203.5.8.2, subsections of "Compacting in Cut", will not be paid for separately and shall be considered **SUBSIDIARY** to the items of work for which direct payment will be made.
- E. Daylight offset and elevation callouts are approximate and for information only. Plan dimension, section grades, and site conditions shall govern the final construction limits.
- F. Shrinkage and swell factors are assumed to be zero.
- G. See the project Geotechnical Report for boring logs that illustrate the depth to rock. Excavation work on this project will include rock excavation, however, no special measurement or payment will be made for rock excavation.
- H. Sloped fill areas must be benched prior to the placement of fill. These benches are to be horizontal or slightly slope into the hillside to stabilize the fill, which must be properly cut and compacted. In general, the maximum vertical height between benches should be limited to less than three feet.
- I. The Contractor shall excavate a minimum of 3" below the bottom slab of the culvert and shall pour a 3" min. thick concrete grade slab to a form a working base for construction of the culvert slab. The concrete grade slab shall be poured on a sound rock or improved subgrade material as necessary and depicted in the plans. The majority of the excavation material below 790.0 is unknown and shall be field determined by the Contractor.
- J. Modify Section 206.1.2, "Description", subsection of Section 206 "Excavation for Structures", by adding the following:

- a. "No material excavated from the project shall be deposited within any "floodway" or "floodplain" as defined by the FEMA Flood Insurance Maps unless a permit to do so has been obtained. These maps are available for review at the offices of the Engineer."

K. Measurement:

- a. No field measurement will be made for Earthwork.
- b. Modify Section 203.8.1 subsection of "Method of Measurement", by adding the following:
  1. No measurement will be made of the amount of excavation (Structural Excavation (Class 4) or otherwise), embankment, compaction or borrow will be made. It is the responsibility of the Contractor to appraise the site and it's embankments to determine the amount of borrow will be required to complete the project. The cross sections in the plans have the calculated areas of the cuts and fills for the Contractors' use.

L. Payment:

- a. Payment for this work will be made at the Lump Sum price for "Earthwork".
- b. Structural Excavation (Class 4) shall be **SUBSIDIARY** to the unit price for "Earthwork".
- c. Hauling, stockpiling, and transportation costs for earthwork materials are **SUBSIDIARY** to the respective item.
- d. "No claim for extra work will be considered after excavation operations have commenced on the project."
- e. The backfill requirements of the new structure (Aggregate and soil) shall be **SUBSIDIARY** to this bid item.
- f. Granular Backfilling for the RCB of the MoDOT Type 1 aggregate shall be **SUBSIDIARY** to unit price for "Earthwork".

**TS-22 KCMMB 5K CONCRETE (CULVERTS)**

- A. The structure shall be Cast-In-Place construction.
- B. The standard specifications for the design and installation of the Reinforced Concrete Box Bridge are as follows:
  - a. Structural concrete shall be in accordance with Section 501, "Concrete," Section 703, "Concrete Masonry Construction," and Section 1005 "Aggregate for Concrete" of the MoDOT Standard Specifications.
  - b. Modify Section 501.3.2, a subsection of "Mix Design", by adding the following:
    1. "The Cast-in-Place RCB shall be KCMMB 5K Concrete Mixture. Modified to the extent that the concrete strength shall be  $f'c = 5,000$  PSI."
  - c. Modify Section 501.10, "Air Entrained Concrete", by adding the following:
    1. "All concrete shall be air entrained."
  - d. Modify Section 501.10.2, a subsection of "Air Entrained Concrete", by adding the following:

1. "Air- entrainment shall be within a 4% to 7% range."
  - e. Modify Section 501.15, Commercial Mixture, by adding the following:
    1. "Total amount of water (in gallons) in the mixture."
  - f. MoDOT Section 703, Concrete Masonry Construction for means and methods. Concrete shall be KCMMB 5K with granite aggregate and an approved high early strength admixture. **Portland Cement Type III meeting "ASTM C 494 Type C" is not required**, but may be utilized. Contractor may utilize accelerating additives in lieu of Type III cement.
  - g. Add to Section 703.3.6, "Curing Concrete", the following:
    1. "The wall pours and all slabs shall be moist cured by use of white polyethylene sheeting with wet jute, cotton, or burlap mats."
  - h. Modify Section 703.3.6.3.6, a subsection of "Curing Concrete", to read:
    1. Concrete Slabs and Walls shall not be significantly loaded until the concrete has reached 3,000 psi compressive strength.
    2. "Any heavy materials shall not be placed on any component of the structure until the components have reached the following compressive strength."
      - i. Bottom Slab 3,000 PSI
      - ii. Walls 3,500 PSI
    3. "In addition, placement of backfill behind the Cast-in-Place RCB and Retaining Wall walls shall not begin until the retaining wall has reached a compressive strength of 3,000 PSI."
- C. Areas of damaged or honeycombed concrete areas shall be repaired as directed by the Engineer and in accordance with the following:
- a. "In general the defective concrete shall be removed to sound concrete, the are cleaned and repaired with an approved sand cement mixture to which "Acryl-60" (or equal) has been added in accordance with the manufacturer's recommendation. The affected area shall be coated immediately prior to repair with an approved bonding agent. The repair shall be performed at no additional cost to the Owner."
- D. The Contractor shall submit Shop Drawing Plans and specifications of the Cast-In-Place Concrete Reinforced Concrete Box and Retaining Walls that is signed and sealed by a licensed Missouri Professional Engineer. The drawings shall be submitted to the Engineer. It shall include details of the structural steel rebars similar to the Construction Plan sheets.
- a. Shop Drawings will be prepared following Jackson County standards and will consist of 1 Full size D-Size (22" x 34") and 2 Half Size (11"x17").
  - b. The Contractor shall supply AS-Builts of the Construction Plans upon the completion of the construction to the Engineer. The Contractor shall coordinate all redlines and modifications of the Construction Plans with the County inspector and JCPW Engineer prior to the submittal of the AS-Builts.
  - c. Contractor shall provide with the shop drawings the Bill of Reinforcing for RCB and Wingwalls reinforcing steel work to JCPW Engineering for review and approval prior to construction.
  - d. ALL Structural Design shop drawings and calculations will be **SUBSIDIARY** to unit price for **"KCMMB 5K Concrete (Bridges)"** and **"KCMMB 5K Concrete (Retaining Walls)"**
- E. General: The Contractor is responsible for the construction of the proposed Reinforced Concrete Box Culvert.
- F. Minimum Waterway Area: The Reinforced Concrete Box Culvert shall have a minimum waterway area of 216 SF. This meets the hydraulic requirements for the design storm, per the Plans. Embedding of the RCB is allowed with engineer approval.

- G. Design Load: The Reinforced Concrete Box Culvert is designed for an HL-93 loading.
- H. Cover Requirements: Minimum Cover: 1 feet
- I. Backfill Material: Backfill material shall adhere to MoDOT Std. Specifications – Sections 206, 733, and 1007 unless otherwise noted in Plans. This requires suitable material meeting compaction and density requirements in 2020 MoDOT Std. Specifications – Section 203. Backfill for the culvert shall be in compliance with the plan documents which depict limited vertical excavation and aggregate backfill in conjunction with CLSM backfill to minimize the possibility of soil settlement. Contractor shall coordinate placement of CLSM with finished subgrade elevation to ensure the minimum aggregate base and asphalt thicknesses shown on the plans are obtained.
- J. Subgrade Preparation and Bedding: The excavation and backfilling for the box culvert shall be in accordance with Class 4 Excavation and Embankment. The granular material shall be MoDOT Type 1 aggregate for base and shall be placed to extend at least 18-inches on each side and bottom of the structure. Outside of the Class 4 Excavation of the sides of the RCB will have a bench grade of Unclassified Excavation starting from the 18" bottom, extend out a minimum of 1.5' and vertically 4' to a 1:1 side slope to the bottom of the new aggregate base. The bedding shall be compacted to provide uniform support for the bottom of the box. The leveling pad for the cast-in-place section shall be a combination of three (3) inches of KCMMB concrete over the necessary thickness of MoDOT Type 1 aggregate base to provide a uniform surface.
- K. CLSM and Granular Backfilling for the RCB shall be **SUBDIARY** to unit price for "KCMMB 5K Concrete (Culverts)".
- L. Sealant: Contractor use Dayton Superior Weather Worker 40% J29 sealant for the Retaining Walls and RCB Hubbs, OR APPROVED EQUAL, Appendix AP-C. The contractor shall apply the sealant on the front face of the Retaining Walls prior to adding the riprap, and all the exposed concrete of the Retaining Wall, RCB and RCB hubguard.
- M. Cast-In-Place Concrete Toewalls: Design and installation shall adhere to MoDOT Std. Specifications Section 604 unless otherwise noted in Plans.
- N. Site Review: Prior to bidding the work, the Contractor shall examine, investigate, and inspect the construction site as to the nature and location of the work, and general and local conditions at the construction site, including both surface and subsurface conditions, obstacles that could interfere with the work, the general construction site, and shall make additional investigations as they deem necessary for the planning and proper execution of the work.
- O. Differing Site Conditions: If the site conditions differ from those shown on the Plans, the Contractor shall immediately notify the County. The Contractor shall refer to the Special Conditions SC-34, Item D, which governs assessment and resolution of differing site conditions.
- P. Measurement:
- a. There will be no field measurement of the KCMMB 5K Concrete used to build the 12' x 9' Double Cell RCB. The County will pay the plan quantity as shown in the bid.
- Q. Payment:
- a. "KCMMB 5K Concrete (Culverts)" will be paid for plan quantity at the contract unit bid price per Cubic Yard.

- b. "KCMMB 5K Concrete (Culverts)" includes, but is not limited to, the following **SUBSIDIARY** items: providing all materials and labor that shall include but be limited to; concrete, ALL Reinforcing Steel, Shop Drawings, structural calculations, sealant, formwork, installation, dewatering, toewalls, backfill, and excavation (including any necessary rock excavation).

**TS-23 KCMMB 5K CONCRETE (RETAINING WALLS)**

- A. The standard specifications for the design and installation of the retaining walls are as follows:
- a. MoDOT Section 703, Concrete Masonry Construction for means and methods. Concrete shall be KCMMB 5K with granite aggregate and an approved high early strength admixture. **Portland Cement Type III meeting "ASTM C 494 Type C" is not required**, but may be utilized. Contractor may utilize accelerating additives in lieu of Type III cement. Modified to the extent that the concrete strength shall be  $f'c = 5,000$  PSI."
- B. General: The Contractor is responsible for the construction of the proposed reinforced concrete retaining walls.
- C. Backfill Material: Backfill material shall adhere to MoDOT Std. Specifications – Sections 206, 733, and 1007 unless otherwise noted in Plans. This requires suitable material meeting compaction and density requirements in 2020 MoDOT Std. Specifications – Section 203. Aggregate backfill beyond the 12" layer for drainage is not required, but may be used to meet these requirements. Granular Backfilling for the walls shall be **SUBSIDIARY** to unit price for "KCMMB 5K Concrete (Retaining Wall)".
- D. Concrete Walls shall not be significantly loaded until the concrete has reached 3,000 psi compressive strength.
- E. Placement of backfill behind the Cast-in-Place RCB and Retaining Wall walls shall not begin until the retaining wall has reached a compressive strength of 3,000 PSI.
- F. Site Review: Prior to bidding the work, the Contractor shall examine, investigate, and inspect the construction site as to the nature and location of the work, and general and local conditions at the construction site, including both surface and subsurface conditions, obstacles that could interfere with the work, the general construction site, and shall make additional investigations as they deem necessary for the planning and proper execution of the work.
- G. Differing Site Conditions: If the site conditions differ from those shown on the Plans, the Contractor shall immediately notify the County. The Contractor shall refer to the Special Conditions SC-34, Item D, which governs assessment and resolution of differing site conditions.
- H. Sealant: Contractor use Dayton Superior Weather Worker 40% J29 sealant for the Retaining Walls and RCB Hubbs, OR APPROVED EQUAL, Appendix AP-C. The contractor shall apply the sealant on the front face of the Retaining Walls prior to adding the riprap, and all the exposed concrete of the Retaining Wall, RCB and RCB hubguard.
- I. Measurement:
- a. There will be no field measurement of the KCMMB 5K Concrete used to build the retaining walls. The County will pay the plan quantity as shown in the bid.

J. Payment:

- a. "KCMMB 5K Concrete (Retaining Walls)" will be paid for in-place construction at the contract unit bid price per Cubic Yard.
- b. "KCMMB 5K Concrete (Retaining Walls)" includes, but is not limited to, the following **SUBSIDIARY** items: providing all materials and labor that shall include but be limited to; concrete, ALL Reinforcing Steel, Shop Drawings, structural calculations, drains, screens, sealer, formwork, installation, dewatering, joint filler, subgrade compaction, backfill, and excavation (including any necessary rock excavation).

**TS-24 REINFORCING STEEL**

Reinforcing steel shall be in accordance with Section 706, "Reinforcing Steel for Concrete Structures," of the MoDOT Standard specifications, except as herein modified.

- A. Modify Section 706.2, "Material", to the extent that all reinforcing shall be Grade 60 f'y = 60,000 psi.
- B. Add to Section 706.3.1, a subsection of "Construction Requirements", the following:
  - a. "All chairs and bar supported on the formwork of exposed surfaces shall be coated with plastic tipped feet. Unless otherwise approved all reinforcing placed shall be chaired in place.
  - b. Support chairs shall be considered subsidiary to the pay items "Reinforcing Steel and Reinforcing Epoxy Coated" and shall not be measured.
- C. Contractor shall provide with the shop drawings the Bill of Reinforcing for RCB and Wingwalls reinforcing steel work to JCPW Engineering for review and approval prior to construction. The shop drawings for the steel reinforcement shall be signed and sealed by a Missouri Registered Engineer. Design calculations of the RCB and Wingwalls shall be provided to JCPW both by paper and electronic versions such as spreadsheets, AutoCAD (using current version as specified by JCPW) and PDF files (All three preferred).
- D. Measurement:
  - a. Delete Section 706.4, "Method of Measurement", and Section 706.5, "Basis of Payment", and add the following:
    - i. Reinforcing steel shall be measured in accordance with the Shop Drawings.
    - ii. "Reinforcing steel shall be considered subsidiary to the pay items "KCMMB 5K Concrete (Culverts)", and "KCMMB 5K Concrete (Retaining Walls)".

**TS-25 MECHANICAL BAR SPLICE**

- A. Mechanical bar splices shall be provided in accordance with MoDOT Section 706. Splice locations shall be as denoted in the construction drawings. Mechanical bar splices are to be used to provide a future expandability for reinforcing to tie into the box Bridge. Mechanical bar splices shall be either threaded or bar lock coupler systems and include a plastic sleeve packed with heavy grease that encapsulates and seals the open end of the splice to prevent intrusion of cementitious material and moisture. All labor and materials necessary to prepare the ends of the reinforcing and install the mechanical bar splices, complete-in-place, shall be considered completely covered by the contract bid item "Mechanical Bar Splices" per each. No welding will be permitted.

B. Measurement:

- a. Mechanical bar splices shall be measured per each.

C. Payment:

- a. The Contractor will be paid the contract unit price per each for Mechanical Bar Splices.

**TS-26 DIVERSION DAM**

- A. Contractor shall furnish all materials, labor, equipment, staged installation/relocation of diversion dam bypass and dewatering system(s) to complete construction of the box Bridge and retaining walls. Diversion dam efforts may include any necessary dewatering required to provide a dry surface for construction of the seal course and structural concrete. Dewatering methods used in conjunction with the diversion dam may include but not be limited to; well point systems, temporary pipe (diversion) bypasses, benched excavations, cofferdams, temporary shoring, sheet piling, etc. The Contractor is responsible for devising the means and methods for dewatering the construction area, submitting a plan for approval by the Engineer three (3) weeks prior to construction, providing an approved erosion control method to eliminate uncontrolled discharges of sediment and rocky material into the stream, maintenance, and restoration of the streambed and streambanks.
- B. All costs for furnishing material, labor, equipment, construction, drainage and any other incidental work necessary to complete the diversion dam and dewatering; and subsequent removal of any temporary works and any other features as identified by the Engineer will be considered **SUBSIDIARY** to "Diversion Dam" regardless of construction method.
- C. No additional payment for excavation will be made for a contractor proposed method of dewatering/diversion dam.
- D. The method proposed by the Contractor shall stay within the right of way and/or permanent channel easement limits provided in the Contract. Constructions that have tilted or moved laterally during construction shall be repaired and maintained until structures can be backfilled safely.
- E. The Contractor's systems shall be constructed to protect the work against damage from sudden rising waters and to prevent damage to the foundation by erosion. The temporary works shall be removed after the completion of the structure(s), unless specific authority is given for the temporary works to remain in place. The Contractor is responsible for the safety and performance of the contractor's proposed system.
- F. Measurement:
  - a. There will be no field measurement for "Diversion Dam".
- G. Payment:
  - a. The Contractor will be paid the Lump Sum bid price for "Diversion Dam".

**TS-27 SEAL COURSE (3" CONCRETE GRADE SLAB)**

- A. Where shown on the Plans, Contractor shall furnish all materials, labor, equipment necessary to complete a seal course to adequately dewater the site for construction of the box culvert and retaining walls. The seal course may also be warranted to protect exposed shale bedrock upon



excavation. Seal courses shall be installed by the Contractor in accordance with the provisions of MoDOT Section 206.

- B. Upon completion of the subgrade stabilization aggregate, the contractor shall pour a 3" minimum thick concrete grade slab. The top of the grade slab shall be at the bottom of the bottom slab elevation of the RCB, and shall extend 6" outside of the outside face of the RCB. The grade slab may be commercial grade concrete.
- C. The Concrete Grade Slab for RCB (3" Thick) shall be un-reinforced (3,000 psi compressive strength) concrete mix with limestone aggregate.
- D. No special measurement or payment for excavation or subgrade compaction will be made to install the seal course.
- E. Measurement:
  - a. There will be no field measurement for "Seal Course (3" Concrete Grade Slab)".
- F. Payment:
  - a. The Contractor will be paid the Lump Sum bid price for "Seal Course (3" Concrete Grade Slab)".

**TS-28 GRANULAR BEDDING MATERIAL**

- A. Where shown on the Plans and as directed by the Engineer, Contractor shall furnish all materials, labor, equipment necessary to provide the granular bedding material to ensure a suitable and compacted subgrade is provided for construction of the culvert and retaining walls. Material shall be in accordance with MoDOT Standard Specifications Section 1010.
- B. Measurement:
  - a. Field measurement for "Granular Bedding Material" shall be made to the nearest Cubic Yard.
- C. Payment:
  - a. The Contractor will be paid the Contract unit bid price for "Granular Bedding Material" per Cubic Yard.

**TS-29 TRAFFIC CONTROL**

- A. Traffic Control and Traffic Control signs and devices shall conform to the Manual of Uniform Traffic Control Devices (MUTCD), latest edition, and to the requirements of Section 612, "Impact Attenuators", 616, "Temporary Traffic Control", 1042, "Highway Sign Material", 1044 "Posts for Markers and Delineators", and 1063, "Temporary Traffic Control Devices", of the Missouri Department of Transportation Standard Specifications except as herein modified.
- B. Modify Section 616.3.1, subsection of Safety Requirements for Section 616, Temporary Traffic Control, to read as follows:
  - a. The Contractor shall furnish, install, maintain, clean and relocate all signs, drums, cones, barricades, delineators, object markers, flashing arrow panels, channeling devices, lights and other traffic control devices shown on the Plans, or as directed by the County. All Traffic Control

- devices shall meet the requirements of the Manual on Uniform Traffic Control Devices (MUTCD), latest edition. The contractor shall replace any unacceptable device as soon as possible but not to exceed 24 hours after the contractor had been notified.
- b. The Buckner Tarsney Road work zone within the immediate vicinity of the culvert shall be closed to traffic for the limits of the project.
  - c. **The entire project has 90 Working Days. Within the 90 Working Days the Work Zone area for the RCB and Roadway Improvements shall be closed for 60 Calendar Days. The 60 Calendar Days is to minimize the closure of the Work Zone to the public. Liquidated Damages will be in effect for both the 90 Workings Days and the Work Zone closure area 60 Calendar Days.**
  - d. Contractor must notify the Sheriff Department and Fire Department in writing 14 days in advance of the proposed closure date in order to allow sufficient time for public notification.
  - e. Contractor shall be required to maintain access to all properties served by streets affected by the construction work, unless otherwise stated on the Plans.
  - f. Before road closure is allowed all detour signing shall be in place and accepted by the County.
- C. Add to Section 616.4.1.1, subsection of "Construction Requirements", the following:
- a. Care shall be exercised in removal of the existing signs and traffic control devices. No removals shall be made until the construction signs and barricades are in place and accepted. All signs removed shall be stockpiled for the County to salvage.
- D. Contractor shall be required at the time of the pre-construction conference to designate a specific employee (with cell phone number) to be responsible for the maintenance of the traffic regulation devices and establish a method of contacting this person during both working and non-working hours. This information shall be provided to the County's inspector. Contractor may, at his option, establish a maintenance agreement with a qualified firm, approved by the County, to supply, install, and maintain the required traffic regulation devices throughout the duration of this project.
- E. The County inspector on this project will make daily inspections of the traffic control devices installed to help assure compliance of the traffic control plan and the safety of the contract. In addition, the Contractor's representative on this project shall make daily inspections of the traffic regulation devices installed as part of this contract and maintain records of any maintenance required and the date on which it was completed. These records will be maintained for the duration of the project and be incorporated as part of the final records. It shall be Contractor's responsibility to maintain all traffic regulation devices in proper working condition and placement at all times. Contractor shall promptly correct any deficiencies in traffic regulation.
- F. All existing traffic signs, stop signs, and street signs in the way of the work shall be carefully removed or bagged (where applicable) by the Contractor. Where removed they shall be salvaged and saved for the County. No separate payment will be made for this work.
- G. It shall be the responsibility of the Contractor to perform the necessary maintenance and provide additional traffic control devices as necessary for the safety of the traffic.
- H. Signs shall be mounted on sign posts of approved materials and in accordance with the MUTCD and the Plans. The sign posts and their foundation shall be so constructed as to hold the signs in a

proper and permanent position, to resist swaying in the wind. Installations on tripods or similar installation is prohibited unless specifically authorized. When such installations are allowed the Contractor shall place adequate sand bags on the device supporting the sign to ensure that the sign remains in place.

- I. Contractor shall take all proper precautions to guard against injury to persons or damage to property until final acceptance of the work by the Director of Public Works. These precautions should include, but not be limited to, protection of vehicular and pedestrian traffic from injury or damage due to open excavations by the proper placement of appropriate safety devices. Contractor shall maintain safety devices and their proper placement throughout the construction time. Construction practices should be followed that will eliminate all safety hazards as quickly as possible or practicable.
- J. All open trenches and other excavations shall be provided with suitable barriers, signs, lights and other protective devices to the extent that adequate protection is provided to the public against accident by reason of such open construction. Obstructions such as material piles and equipment shall be provided with similar warning lights and signs.
- K. Contractor shall provide all barricades, cones, drums, construction warning signs, flagmen, and incidental devices to protect, warn, and guide vehicular and pedestrian traffic, and to protect his personnel and equipment on the job site. During all phases of construction, Contractor shall display the required signs. Any traffic regulation device not in use shall be covered, removed, or turned away from view of oncoming traffic. Whenever the work area changes all construction-warning signs and traffic channelization devices shall be made current in both legend and function.
- L. All traffic regulation devices shall conform to the current Manual on Uniform Traffic Control Devices. No substitutions for the devices required by the above referenced manual or changes in the methods of traffic regulation as outlined herein will be allowed without the written approval of the Engineer.
- M. Contractor's representative on this project shall make daily inspections of the traffic regulation devices installed as part of this contract and maintain records of any maintenance required and the date on which it was completed. These records will be maintained for the duration of the project and be incorporated as part of the final records. It shall be Contractor's responsibility to maintain all traffic regulation devices in proper working condition and placement at all times. Contractor shall promptly correct any deficiencies in traffic regulation
- N. Damage to existing utilities during construction of this project which require immediate repair may be considered as an "emergency", and as such may not be subject to all of the restrictions contained herein. Therefore, Contractor should immediately contact the utility company whose facilities are involved and Jackson County Public Works whenever any utilities are damaged, which may require immediate repair. Any costs incurred by Contractor for such "emergency" utility repair, including the cost of any additional traffic regulation that may be required, will be Contractor's sole responsibility.
- O. If Contractor encounters conditions that require a change in method of traffic regulation Contractor shall immediately notify the inspector. At least 48 hours before the start of the proposed change, the inspector will request approval of the change from the Jackson County Public Works.
- P. If the Contractor wishes to modify the traffic control, the Contractor shall submit in writing 14 days in advance of beginning of construction to Jackson County Public Works for review. This suggested

change cannot increase the cost of the contract.

- Q. Contractor shall sign the County's traffic control permit with MoDOT and provide a 24-hour contact to the County and MoDOT for purposes of ensuring a contact is provided that can ensure the traffic control is maintained.
- R. The Contractor shall install Type III Barricades with Flashers (T3B) as shown on the Traffic Control Plans. The barricades installation and maintaining shall be **SUBSIDIARY** to the unit price of "Temporary Traffic Control".
- S. Measurement:
- a. There will be no field measurement of the Temporary Traffic Control. The Contractor shall utilize the minimum dimensions and sizes of the Signs and Traffic Control Devices as specified in the Traffic Control Plans.
- T. Payment:
- a. The Contractor will be paid the Lump Sum unit price bid. All labor and materials needed to provide, maintain, remove or reset temporary signage shown in the Traffic Control Plan complete-in-place or otherwise needed by way of the project specifications or site specific requirements shall be considered **SUBSIDIARY** to "Temporary Traffic Control" per Lump Sum. Interim payments for Temporary Traffic Control shall be paid based on the percent complete (based on contract value).

**TS-30 FURNISHING AND PLACING TYPE 2 ROCK BLANKET (24" THICK) AND GEOTEXTILE FABRIC**

- A. Contractor shall furnish all materials, labor, and equipment necessary to install the rock blankets. Type 2 Rock Blanket shall be installed by the Contractor in accordance with the provisions of MoDOT Section 611.
- B. Modify Section 611.30.2, "Material", subsection of Section 611.30, "Rock Blanket", by adding the following:
- a. "No broken concrete shall be used for Rock Blanket."
- C. Modify section 611.30.2 by stating that the Rock Blanket shall be Type II.
- a. "The Contractor shall install under the Rock Blanket a Class 2, Type H Geotextile material that is similar to Mirafi 1100N geotextile OR APPROVED EQUAL, see Appendix AP-B, 10 oz. per Square Yard non-woven polypropylene, by Tancate or approved equal by the Engineer, and shall be spread over the leveled surface with overlaps as recommended by the fabric manufacturer. The Geotextile shall be in accordance with Sections 624, "Geotextile Construction", and 1011.3.3, "Permanent Erosion Control Geotextile", of the Standard Specifications. Installation shall be in accordance with the Standard Specifications and the manufacturer's recommendations.
- iii. The Geotextile shall not be exposed to the elements beyond 14 days and shall be protected from shipping and storage damage by the envelopment of the product in a wrapping material which protects the fabric from water, sunlight and contaminants.
- iv. The Geotextile shall be laid upon a smooth surface without any voids underneath the fabric and shall be free of wrinkles and folds.

- v. The fabric shall be placed in accordance with the manufacturer's recommendations.
  - vi. The minimum overlap, in both directions, shall be one foot.
  - vii. The manufacturer shall certify that all materials delivered to the project meet or exceed the specifications."
- D. **SUBSIDIARY** to the unit price bid for "**Furnishing and Placing Type 2 Rock Blanket ( 24" Thick) and Geotextile Fabric**" shall be the excavation, backfill, the rock in the tow trenches, cost for providing and installing the Geotextile and any expense incurred for hand placement of Rock Blanket adjacent to pipes, structures, the thrie beam rail posts, etc.
- E. If suitable, and acceptable onsite materials are excavated the contractor may utilize these materials in the rock blanket installation.
- F. No special measurement or payment for excavation, backfilling or subgrade compaction to install the rock blanket.
- G. Measurement:
- a. Measurement will be made to the nearest Cubic Yard of material in place in the completed blanket.
- H. Payment:
- a. See Section 611.30.5 Basis of Payment.
  - b. The Contractor will be paid the contract unit bid price per Cubic Yard for "**Furnishing and Placing Type 2 Rock Blanket ( 24" Thick) and Geotextile Fabric**". No direct payment will be made for excavating the trench or for backfilling. These items shall be considered **SUBSIDIARY** to the bid items "**Furnishing and Placing Type 2 Rock Blanket (24" Thick) and Geotextile Fabric**".

**TS-31 GUARDRAIL AND MSKT TL-3 END TERMINALS**

- A. Contractor shall furnish all materials, labor, equipment necessary to install the guardrail and end terminals. Guardrail and end terminals shall be installed by the Contractor in accordance with the provisions of MoDOT Sections 606 and 1040, except the end terminals shall be MSKT TL-3 with no offset.
- B. Modify sub section 606.3.3.1 of section 606.3.3 "Posts for Guardrail and One-Strand Access Restraint Cable" by noting that **all POSTS shall be STEEL and all 12" BLOCKS shall be PLASTIC.**
- C. The MSKT-SP-MGS Terminal End Sections for the 12" Blocks shall be Test Level 3 from Road Systems, Inc. (RSI) or APPROVED EQUAL.
- D. No special measurement or payment for excavation, backfilling or subgrade compaction to install the guardrail items.
- E. Measurement:
- a. Measurement for "Guardrail" will be made to the nearest Lineal Foot complete-in-place.
  - b. Measurement for "MSKT TL-3 End Terminals" will be made per each.

F. Payment:

- a. The Contractor will be paid the contract unit bid price Lineal Foot for "Guardrail".
- b. The Contractor will be paid the contract unit bid price per each for "MSKT TL-3 End Terminals".

**TS-32 EROSION AND SEDIMENT CONTROL DEVICES**

A. This work shall consist of furnishing, installing, maintaining, and removing temporary control measures as ordered by the County. This work shall conform to the general requirements of Division 800, "Roadside Development", of the MoDOT Standard Specifications as modified by this Technical Specification. The control of water pollution will be accomplished with Silt Fences, Rock Ditch Checks, Wattle Logs, and Biodegradable Log Inlet Protection in accordance with these specifications.

B. The temporary pollution control provisions contained herein shall be coordinated with the permanent erosion control features specified elsewhere in the contract to assure economical, effective, and continuous erosion control. These provisions shall also apply to work within easements designated by the Engineer.

C. The purpose of these specifications is to set forth certain temporary water pollution control measures, which shall be required of the contractor. The contractor shall exercise best management practices throughout the life of the project to control water pollution. Pollutants such as chemicals, fuels, lubricants, bitumens, concrete wash water or deleterious construction materials, raw sewage, or other harmful material shall not be discharged from the project.

D. Prior to the pre-construction conference and prior to the start of construction the contractor shall submit for acceptance his schedules for the implementation of temporary and permanent erosion control work, as are applicable for each phase of construction. No work shall be started until the appropriate erosion control measures have been installed and approved by the County.

E. Measurement:

- a. Field measurement of the Rock Ditch Checks, Silt Fence, Wattle Log, Biodegradable Log Inlet Protection will be made per Lineal Foot.

F. Payment:

- a. Contractor will be paid for in-place field quantities of Rock Ditch Checks, Silt Fence, Wattle Log, and Biodegradable Log Inlet Protection by the Contract Unit bid price per Lineal Foot.

**TS-33 TEMPORARY SEEDING AND MULCHING**

A. When directed by the Engineer, the Contractor shall apply temporary seeding to all areas to minimize erosion control measures.

B. Temporary seeding and mulching shall be in accordance with APWA Standard Specification Section 2153.5. The Contractor shall apply the Type "TR" Seed or Type "TM" Seed based on the time of year that the seed and mulch are being applied.

C. Temporary seeding and mulching including any necessary site preparation work and watering shall be **SUBSIDIARY** to the contract unit price for "Hydro Seed & Mulch". No direct measurement or

payment will be made for temporary seeding and mulching.

**TS-34 SEEDING**

A. This work shall consist of seeding, fertilizing and mulching all disturbed areas within the project limits unless otherwise directed by the County. This work shall be in accordance with the APWA Standard Specifications Section 2404, "Hydroseeding". The seed mix for steeper slope projects (Type 1) is as follows:

PLS Rate: Lbs/Ac	Seed Name
50	Indiangrass (Cheyenne)
55	Little Bluestem (Cimarron)
45	Switchgrass (Alamo)
55	Annual Ryegrass
25	Perennial Ryegrass
15	Partridge Pea (Comanche)
25	White Prairie Clover
85	Side Oats Gramma (El Reno)
25	Coreopsis
55	Creeping Red Fescue
435	= Pounds Seed / Acres
10 Lbs/1,000 SF	= Minimum Application Rate
Per Manufacturer	Fertilizer (13-13-13)

B. Unless otherwise noted in Plans, Erosion control blanket to be installed in these areas per current APWA requirements.

C. Type 2 seeding shall be used in areas with flatter slopes (4:1 slope or flatter). The seed mix for turf areas (Type 2) consists of the following:

Festuca arundinacea, Fineleaf Tall Fescue. Varieties- Hounddog V. Rebel Jr., Rebel III, Rebel 3D, Barlexas, Millennium, Southern Choice, Tar Heel, Wolf Pack, Bonsai 2000, Shortstop II Coyote, or other pre-approved substitutes ..... 87.5%

Lolium multiflorum – annual ryegrass..... 12.5%

A. Mix required to meet percentage by weight of pure live seed in each lot of seed, as listed above.

D. Measurement:

a. Seeding will be measured by in-place area per Acre. There will be no measurement or separate payment for any items of work not specifically identified and listed in the Contract Documents.

E. Payment:

a. The Contractor will be paid the contract unit bid price per Acre. All labor and materials (including but not limited to; seed, mulch, tackifier, fertilizer, water, herbicides, etc) needed to prepare the soil, scalp existing vegetation, compaction, provide, maintain, repair, clean-up and re-seed shall be considered **SUBSIDIARY** to "Hydro Seed & Mulch" per Acre.

- b. County approval is required before final payment will be made. Seeded areas shall be observed to consist of a healthy stand of green grass.

**TS-35 PAVEMENT MARKING (PAINT)**

- A. Pavement Marking shall be installed in accordance with MoDOT Section 620, Pavement Marking.
- B. "All paint shall be Acrylic Waterborne MSP-94-06J." The Contractor shall submit to the Engineer, certification from the manufacturer that all paint used on the project is in compliance with the specifications listed in the Appendix of this Contract.
- C. The painted markings shall be applied with a truck-mounted striping machine capable of heating the materials to approximately 140°F and spraying onto the pavement in a uniform dimension strip. The machine shall be capable of applying either a continuous or intermittent lines in any pattern prescribed for longitudinal pavement markings in the M.U.T.C.D. Glass spheres shall be applied by automatic dispensers which are synchronized with the paint spray equipment. Paint shall be applied at a rate of at least 17 gal./mile of 4" continuous line so that a wet film thickness of at least 15 mil will be achieved.
- D. Reflective glass spheres shall be applied at a rate of 6 lb./gal. And spheres shall be uniformly distributed across the width of the line. Intermittent skip lines shall be painted as 10-foot segments with 30-foot gaps. Double centerlines should consist of 4" lines separated by a 4" space.
- E. Completed traffic stripes shall have clean and well defined edges, shall be uniform, shall be straight on tangent alignment, and shall be on a true arc on curved alignment. The widths of completed traffic stripes shall not deviate more than ¼ inch on tangent nor more than ½ inch on curves from the required widths. Broken traffic stripes shall also conform to the following requirements.
- F. The lengths of the gaps and individual stripes that form broken traffic stripes shall not deviate more than two inches from the lengths required. The lengths of the gaps and individual stripes shall be of such uniformity throughout the entire length of each broken traffic stripe that a normal striping machine will be able to repeat the pattern and superimpose additional coats of paint upon the traffic stripe being painted.
  - a. Drips, over spray, improper markings, and paint tracked by traffic shall be immediately removed from the pavement surface by methods approved by the engineer. All such removal work shall be at the contractor's expense.
  - b. Traffic stripes and pavement markings shall be applied only on dry surfaces and only during periods of favorable weather.
  - c. Painting shall not be performed when the atmospheric temperature is below 40°F, when freshly painted surfaces may become damaged by rain, fog, or condensation, nor when it can be anticipated during the drying period.
  - d. Surfaces which are to receive traffic stripes and pavement markings shall be cleaned of all dirt and loose material.
  - e. The volume of paint applied shall be measured by stabbing the paint tank with a calibrated rod. At the option of the engineer, if the striping machine is provided with air atomized spray units (not airless) and is equipped with paint gauges, the volume of paint may be determined by using such gauges.



- f. All equipment used in the application of traffic stripes and pavement markings shall produce stripes and pavement markings of uniform quality that conform to the specified requirements. The striping machine shall be capable of accurately superimposing succeeding coats of traffic paint upon the first coat and upon existing stripes at a speed of at least five miles per hour.
  - g. Each coat of paint for any traffic stripe shall be applied in one pass of the striping machine, regardless of the number, widths, and types of individual stripes involved.
  - h. All spray equipment shall be of a proper type and of adequate capacity for the work. Air atomized spray equipment shall be equipped with oil and water extractors and pressure regulators and shall have adequate air volume and compressor recovery capacity. Spray gun tip needle assemblies and orifices shall be of the proper sizes.
  - i. Newly painted traffic stripes and pavement markings shall be protected from damage by traffic or other causes until the paint is thoroughly dry.
- G. The contractor will, at his own expense, be required to maintain traffic. Traffic control shall be in accordance with the M.U.T.C.D. and with directions issued by the engineer. The engineer shall determine the adequacy of the traffic control procedures or devices in use and may halt the marking operations until adequate protective measures are taken.
- H. Striping work on this project shall be scheduled and completed in a manner to provide the least interference with vehicular traffic without complete street closures or detours. Pavement marking work must be scheduled to avoid congestion, or hazard to the public and to provide the most satisfactory appearance of the work.
- I. Separate payment for compliance with traffic handling requirements will not be made and this item will be considered incidental to completion of the project.
- J. The contractor shall provide a pilot vehicle to lead and a chase vehicle to follow the paint truck while paint is being applied. The pilot vehicle and the chase vehicle shall have an arrow board and appropriate signs in accordance to the M.U.T.C.D.
- K. Marking Definition for the Painted Striping.
- a. **4" White Edge Line** (white longitudinal marking): A solid white line on the right and left edge of a roadway.
  - b. **4" Double Yellow** (yellow longitudinal marking): Two solid yellow lines at the center of a roadway where two direction no passing is required.
- L. Materials:
- a. Fast-drying traffic paint and reflectorizing glass spheres shall fully comply with all of the requirements of the attached specifications appendices. No allowance for mixing losses shall be made in determining percentages of pigment. The mixed paint will be required to contain the stated percentage of pigment on analysis.
  - b. The engineer reserves the right to take reasonable samples from the contractor's stock of materials at any time during the project and submit same for testing. Substitutions of materials or changes in the supplier will not be allowed without written consent of the engineer.

- c. Installation shall be in accordance with the manufacturers specifications as shown in for the following:
- d. Appendix B: White and Yellow Acrylic Waterborne Traffic Marking Paint MSP-94-06J and Glass Beads
- e. All Painted Striping shall be directed and approved by the Engineer.

M. Measurement:

- a. "4" Solid White Edge Line" and "4" Solid Yellow Centerline" striping shall be measured per Lineal Foot.

N. Payment:

- a. The Contractor will be paid the contract unit bid price per Lineal Foot for "4" Solid White Edge Line" and "4" Solid Yellow Centerline".

**TS-36 CLEANOUT EXISTING 15" CPP**

- A. Cleanout Existing 15" CPP shall be completed in accordance with MoDOT Section 604, Miscellaneous Drainage. Contractor shall provide all materials, labor, and equipment necessary to remove, clean and dispose of all debris and obstructions from the existing pipe. No special measurement or payment will be made for these activities.

B. Measurement:

- a. "Cleanout Existing 15" CPP" shall be measured per each.

C. Payment:

- a. The Contractor will be paid the contract unit bid price per each for "Cleanout Existing 15" CPP".

**TS-37 PRECAST INLETS**

- A. Contractor shall furnish all materials, equipment, and labor necessary to install the storm structures in accordance with MoDOT Section 604, Miscellaneous Drainage. This work shall also include all excavation, subgrade compaction and subgrade stabilization, dewatering, shoring, removals, hauling, cleanout, fine grading, formwork, concrete, reinforcing, grates, hardware, bearing plates, and backfilling necessary to complete the installation of the structures. No special measurement or payment will be made, and these items shall be considered **SUBSIDIARY** to either "Precast Concrete Type S-2 Inlet, 3' x 5'" or "Precast Concrete Area Inlet, 6' x 6".
- B. See MoDOT Standard Plans 731.10 for MoDOT Type S-2 Inlet Details and Standard 614.10T for the required Grate and Bearing Plate.
- C. Concrete mix design shall be KCMMB 5K in accordance with APWA Section 2604.2, Materials.
- D. Design of the precast structures shall be either based upon the Contract Documents, MoDOT standard plans, or an approved equivalent provided by the Contractor's Precast Manufacturer. Structures shall be designed for HS-20 live loading as well as adequate soil (50 pcf equivalent fluid

pressure, min.) and hydraulic loading. Contractor shall prepare and submit design calculations, where necessary, by a licensed professional engineer in the State of Missouri.

E. Contractor shall prepare and submit construction shop drawings for review and approval by the Engineer prior to ordering materials.

F. Measurement:

a. "Precast Concrete Type S-2 Inlet, 3' x 5' and "Precast Concrete Area Inlet, 6' x 6' shall be measured per each.

G. Payment:

a. The Contractor will be paid the contract unit bid price per each for "Precast Concrete Type S-2 Inlet, 3' x 5'" and "Precast Concrete Area Inlet, 6' x 6'".

**TS-38 30" CMP FLARED END SECTION**

A. Flared end section shall be installed in accordance with MoDOT Section 732, Flared End Sections. See MoDOT Standard Plan 732.00 for details of the flared end section. Flared end section material shall be consistent with MoDOT requirements, except a CMP section shall be used.

B. Measurement:

a. "30" CMP Flared End Section" shall be measured per each.

C. Payment:

a. The Contractor will be paid the contract unit bid price per each for "30" CMP Flared End Section".

**TS-39 30" CMP AND 36" RCP (CLASS III)**

A. Contractor shall furnish all materials, equipment, and labor necessary to install the drainage pipes in accordance with MoDOT Section 604, Miscellaneous Drainage. This work shall also include all materials and labor necessary to complete the excavation, trenching, shoring, subgrade compaction or stabilization, bedding, cleanout, jointing, penetrations, concrete, reinforcement, and backfilling (including flowable fill) necessary to complete the installation of the pipes. No special measurement or payment will be made, and these items shall be considered **SUBSIDIARY** to either "30" CMP" or "36" RCP (Class III)".

B. Contractor shall prepare and submit construction shop drawings and catalog cuts for review and approval by the Engineer prior to ordering materials.

C. Measurement:

a. "30" CMP" and "36" RCP (Class III)" shall be measured per Lineal Foot.

D. Payment:

a. The Contractor will be paid the contract unit bid price per Lineal Foot for "30" CMP" and "36" RCP (Class III)".

**TS-40 PIPE COLLAR (30")**

- A. Contractor shall furnish all materials, equipment, and labor necessary to install the pipe collar in accordance with MoDOT Section 604, Miscellaneous Drainage.
- B. Measurement:
  - a. "Pipe Collar (30")" shall be measured per each.
- C. Payment:
  - a. The Contractor will be paid the contract unit bid price per each for "Pipe Collar (30)".

**TS-41 ACCESS AND RESTORATION**

Re-establishment of any disturbed areas within public right-of-way will be accomplished by the Contractor. Should the Contractor elect to use private property to stockpile materials, restoration shall be by the Contractor with no direct payment being made. Contractor shall obtain written permission via temporary easement from private property owners and provide a copy of this documentation to the County, if necessary.

**TS-42 DISPOSAL OF EXCESS MATERIAL**

Excess materials shall be legally disposed of at locations outside the right-of-way and provided by the Contractor. No direct payment will be made for this work.

**TS-43 FORCE ACCOUNT**

- A. Force Account shall conform to Section 105.1.1 Authority of Engineer, Section 109.4.3 Equitable Adjustment, Section 109.4.4 Application of Force Account, and Section 109.5 Force Account Computation of the Missouri Standard Specifications for Highway Construction (2020).
- B. The Contractor shall perform other unforeseen work, for which there is no condition included in the contract, whenever it is deemed necessary or desirable to complete the work as designated by the County. Such work shall be performed in accordance with the Standard Specifications and as directed by the County.
- C. Payment for the work performed under this Technical Specification shall be made in accordance with the proposal unit prices where the requested work is covered by an item listed in the proposal. If the work is not represented by a unit price listed in the proposal, payment will be in accordance with the General Conditions and more specifically GC-35 "Extra Work".

**TS-44 ITEMS NOT LISTED IN THE PROPOSAL**

There will be no measurement or separate payment for any items of work not specifically identified and listed in the Proposal, and all costs pertaining thereto will be included in the contract unit prices for other items listed in the Proposal.

**TS-45 SUBSIDIARY WORK**

All work shown in the plans or referred to in the Technical Specifications and not specifically set forth in the Itemized Proposal as a pay item shall be considered a **SUBSIDIARY** obligation of the Contractor and all costs in connection therewith shall be included in the prices named in the proposal.

**TS-46 ESTIMATED QUANTITIES**

- A. Payment for the following listed items will be based on the contract quantity shown on the plans. No final measurement of quantities will be made.
- a. Clearing and Grubbing
  - b. Earthwork
  - c. MODOT Type 5 Aggregate Subbase Course (6" Thick)
  - d. Structural Excavation (Class 4)
  - e. Removal of Improvements
  - f. Removal of Structure
  - g. Seal Course (3" Concrete Grade Slab)
  - h. Seeding, Fertilizing, and Mulching
- B. In the event of authorized changes, during construction, or appreciable error found in an estimated quantity, the Contractor may request in writing that a final measurement for payment be made of that item. Additionally for the above noted reasons the Engineer may make a final measurement for payment. If a measurement and re-computation of the quantity is done it shall be accordance with these Technical Specifications and the Standard Specifications and payment made based on the unit price noted in the proposal.

**END OF SECTION**

WHITE AND YELLOW ACRYLIC WATERBORNE TRAFFIC MARKING PAINT MSP-94-06J

- 1.0 **Description.** Three specifications cover waterborne traffic paint for application on bituminous or Portland cement concrete pavements at application temperatures of 50 to 150 F (10 to 65 C). The paint shall be capable of receiving and holding glass beads for producing reflectorized traffic markings.
- 2.0 **Materials.** The paint shall not contain more than 3200 ppm lead and/or more than 800 ppm chromium, based on dry weight, and shall have limited Volatile Organic Content (VOC), as noted herein.
- 2.1 **Acrylic Emulsion Polymer.** The acrylic emulsion polymer used in the manufacture of the paint shall be Rohm & Haas E-2706, Dow DT211, or equal.
- 2.2 **General.** The finished paint shall be formulated and manufactured from firstgrade materials and shall be a fast drying, water based acrylic resin type paint capable of withstanding air and roadway temperatures without bleeding, staining, discoloring, or deforming. The dried paint film shall be capable of maintaining its original dimensions and placement without chipping, spalling, or cracking. In addition, it shall not deteriorate because of contact with sodium chloride, calcium chloride, mild alkalis and acids, or other ice control materials, or oil, gasoline or diesel fuel drippings from vehicles.
- 2.3 **Durability Testing.** Determination of conformance to this specification will include, but will not be limited to, the evaluation of test data from AASHTO's National Transportation Product Evaluation Program (NTPEP) or other MoDOT approved facilities. The maintained retroreflectivity and durability shall conform to the following requirements after being installed on at least one NTPEP test deck for a minimum of six (6) months. The six-month data must include the winter months of December, January, and February and the data shall be obtained from evaluation on an NTPEP test deck in a northern, wet climate region.
- 2.3.1 **Maintained retroreflectivity.** Photometric quantity to be measured is coefficient of retroreflective luminance in accordance with the requirements of ASTM E1743 for 15 meter geometry and ASTM E1710 for 30-meter geometry. The average retroreflective luminance for concrete and asphalt surfaces shall be expressed in millicandelas per square foot per foot-candle and shall be at least 100 for 15 meter geometry or 75 for 30 meter geometry, when measured in the wheel path area.
- 2.3.2 **Durability.** Paint shall have a durability rating of at least 4 for both concrete and asphalt surfaces when tested in the wheel path area of the NTPEP test deck.
- 2.4 **Mixed Paint.** The mixed paint shall conform to the following requirements.
- 2.4.1 The paint shall be strained before filling, using a screen or strainer not coarser than 40 mesh or equivalent.
- 2.4.2 The volatile content of the finished paint shall contain less than 150 grams of volatile organic matter per liter in accordance with ASTM D3960.
- 2.4.3 The paint shall have the following properties:

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**2.4.3.1 Physical Properties**

Weight per Gallon, 77°F (25°C), lbs.	Report
Viscosity, 77°F (25°C), Krebs Units	83-98
Grind (Hegman Gage), min.	3
Laboratory Dry Time, ASTM D 711, minutes, max.	10
Dry Through Time, minutes, max.	150

**2.4.3.2 Color.** For white, the color shall closely match Color Chip 37925 of Federal Standard 595b and for yellow, the color shall closely match Color Chip 33538 of Federal Standard 595b. Color determination will be made for markings and the diffuse daytime color of the markings shall conform to the below CIE Chromatically coordinate limits. Color determination for liquid marking materials will be made over the black portion of a 2A or 5C Leneta Chart (or equal) at least twenty-four (24) hours after application of a 15mil wet film. Color readings will be determined in accordance with the requirements of ASTM E1349 using CIE 1931 2 standard observer and CIE standard illuminant D65.

CIE CHROMATICITY COORDINATE LIMITS (INITIAL)								
Color	1		2		3		4	
	x	y	x	y	x	y	x	y
White	0.334	0.357	0.334	0.317	0.297	0.357	0.297	0.317
Yellow	0.531	0.483	0.531	0.429	0.471	0.483	0.471	0.429

**2.4.3.3 Flexibility.** The paint shall show no cracking or flaking when tested in accordance with Federal Specification TT-P-1952B.

**2.4.3.4 Water Resistance.** The paint shall conform to Federal Specification TT-P-1952B. There shall be no blistering or appreciable loss of adhesion, softening, or other deterioration after examination.

**2.4.3.5 Freeze-Thaw Stability.** The paint shall show no coagulation or change in consistency greater than 10 Krebs Units. When tested in accordance with Federal Specification TT-P-1952B.

**2.4.3.6 Heat Stability.** The paint shall show no coagulation, discoloration or change in consistency greater than 10 Krebs Units, when tested in accordance with Federal Specification TT-P-1952B.

**2.4.3.7 Dilution Test.** The paint shall be capable of dilution with water at all levels without curdling or precipitation such that the wet paint can be readily cleaned up with water only.

**2.4.3.8 Storage Stability.** After 30 days storage in three-quarters filled, closed container, the paint shall show no caking that cannot be readily remixed to a smooth, homogeneous state, no skinning, livering, curdling, or hard setting. The viscosity shall not change more than 5 Krebs Units from the viscosity of the original sample.

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- 2.4.3.9 **Contract Ratio.** The minimum contract ratio (hiding power) shall be 0.96 when drawn down with a 0.005 mil film applicator on a 2A or 5C Leneta Chart (or equal) and air dried for 24 hours. Contrast Ratio = Black/White.
- 2.4.3.10 **Reflectance.** The daylight directional reflectance of a 15 mil wet film applied to a 2A or 5C Leneta Chart (or equal) and dried for a minimum of 24 hours shall not be less than 84 percent for the white paint and not less than 50 percent for the yellow paint.
- 2.4.3.11 **Bleeding.** The paint shall have a minimum-bleeding ratio of 0.97 when tested in accordance with Federal Specification TT-P1952B. The asphalt-saturated felt shall conform to ASTM D 226 for Type 1.
- 2.4.3.12 **No-Tracking Time Field Test.** The paint shall dry to a no-tracking condition under traffic in three minutes maximum when applied at  $15 \pm 1$  mil wet film thickness at  $130^{\circ} - 150^{\circ} \text{ F}$  ( $54-66^{\circ} \text{ C}$ ) and from three to ten minutes when applied at ambient temperature, with 6 pounds (2.72 kilograms) of glass beads per gallon (3.8 liters) of paint. "No tracking" shall be the time in minutes required for the line to withstand the running of a standard automobile over the line at a speed of approximately 40 mph (64 kph) simulating a passing procedure with tracing of the reflectorized line when viewed from a distance of 50 feet (15 meters).
- 2.4.3.13 **Dry Through Time.** The paint shall be applied to a non-absorbent substrate at a wet film thickness of  $15 \pm 1$  mils and placed in a humidity chamber controlled at  $90 \pm 5$  percent R.H. and  $72.5 \pm 2.5^{\circ} \text{ F}$ . The dry through time shall be determined according to ASTM D 1640, except that the pressure exerted shall be the minimum needed to maintain contact with the thumb and film.
- 2.4 **Glass Beads.** Unless otherwise specified, Type 1 moisture resistant beads shall be used at the minimum rate of 8 pounds per gallon of paint.
- 3.0 **Acceptance.**
- 3.1 Except as noted herein, each batch or lot of paint shall be sampled and approved prior to use.
- 3.2 No paint shall be used that is more than 15 months old.
- 3.3 Paint furnished by a paint manufacturer who has been listed by the MoDOT Materials Manual as being currently tested and has otherwise complied with all requirements of this specification for a General Services bid request may be accepted on the basis of a manufacturer's certification stating that the material is the same as that furnished for bid Request \_\_\_\_\_. The certification shall include the lot number of the paint being furnished.
- 3.4 The paint manufacturer shall supply certification that the paint supplied meets the requirements of this specification. The certification shall include reference to the specific NTPEP test deck to which the paint was applied, including NTPEP identification numbers and report numbers.



SPECIFICATION FOR GLASS BEADS  
FOR APPLICATION ON TRAFFIC MARKING PAINT

- 1.0 Scope. These specifications cover free flow glass beads for drop-on application on traffic paint for the production of a reflective surface to improve the night visibility of the paint film.
- 2.0 Materials. The glass beads shall be manufactured from glass of a composition that is highly resistant to traffic wear and to the effects of weathering.
- 2.1 Roundness. The glass beads shall be spherical in shape, containing not more than 30 percent irregularly shaped particles, when tested in accordance with ASTM D1155-53 (111983).
- 2.2 Refractive Index. The glass beads shall have a refractive index of not less than 1.50 as determined by comparing them with oils of known refractive index by the following test.

Place a few beads in the cavity of a hanging drop microscope slide, having a cavity approximately 1.7 millimeter deep. Select an oil of approximately the expected refractive index and add an amount sufficient to immerse the beads in the cavity. A set of oils in the proper range, graduated in steps of 0.01, is used for this comparison. Place the slide on the stage of a microscope having a magnification of approximately 100 power and illuminated from beneath with a white light source. A band of light, known as the Becke Line moves toward the medium of higher refractive index if the focus is raised, and toward the medium of lower index if the focus is lowered. By making slides using oils of varying refractive indices, the gradually narrowing the ranges, above or below the one originally used as become necessary, a point will be reached where the beads become invisible or have only a thin faint yellow Becke Line surrounding them. When this occurs, the beads have the same refractive index as the oil, and this is the value to be reported for the beads.

- 2.3 Water Resistance. The glass beads shall show no readily discernible dulling, and the amount of 0.1 Normal Hydrochloric Acid needed to titrate the filtrate shall not exceed 4.5 milliliter when subjected to the following test.

Ten  $\pm$  0.5 grams of beads placed in a Whatman single thickness cellulose extraction thimble, 33 by 80 millimeters, are refluxed for one hour in a Soxhlet extractor having an 85 millimeter siphon capacity using 150 milliliters of distilled water. All connections shall be ground glass. At the end of the refluxing period, allow the filtrate to cool to room temperature, and titrate with 0.1 normal hydrochloric acid, using phenolphthalein indicator. The beads shall be dried at 100 C, and examined for dulling under 60-power magnification.

- 2.4 Resistance to Calcium Chloride. The glass beads shall show no readily discernible dulling when subjected to the following test.

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Immerse approximately 10 grams of the beads in a 1.0 normal calcium chloride solution for 3 hours. Rinse well, by decantation, with distilled water. Spread beads on a clean filter paper and allow to dry. Examine the beads for dulling under 60-power magnification.

- 2.5 Resistance to Sodium Sulfide. The glass beads shall show no readily discernible darkening or dulling when subjected to the following test.

Immerse approximately 10 grams of the beads in a 50 percent solution of sodium sulfide for one hour. Rinse well by decantation, with distilled water. Spread beads on a clean filter paper and allow to dry. Examine the beads for darkening or dulling under 60-power magnification.

- 2.6 Flow Properties. The glass beads shall be sufficiently free of clusters and hard lumps to flow uniformly through dispensing equipment under any weather conditions suitable for striping. In addition, they shall pass the following laboratory test.

Weigh 100 grams of beads in a Corning 3140 crystallizing dish 100-mm diameter by 50-mm depth. Place the dish in a Corning 3080 desiccator, 250 mm inside diameter by 330 mm overall height and 130 mm chamber depth, which shall be filled with a sulfuric acid-water solution having a point one inch below the top of a size 5 Coors 60003 desiccator with the cover in place at 25 ± 5 C for four hours. When the sample is removed from the desiccator, the beads are transferred to a metal pan and inspected for lumps and clusters. The beads shall be essentially free of lumps and cluster and shall flow without stoppage through a Corning 6120 glass funnel with top diameter of 5 inches, stem length of 4 inches, and stem inside diameter of 7/16 inches.

- 2.7 Silica Content. The glass beads shall be made of glass containing no less than 58.0 percent Silica (SiO<sub>2</sub>) when tested in accordance with ASTM C 169-80 (1985), Procedure for Referee Analysis.

- 2.8 Gradation. The glass beads shall meet the following gradation requirements when tested in accordance with ASTM Method D 1214 (1983).

<u>U.S Standard Sieve No.</u>	<u>Percent Passing</u>
20	100
40	70-90
80	0-20
100	0-5
200	0-1

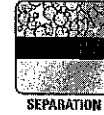
- 3.0 Sampling and Testing. The manufacturer shall furnish the engineer free access to all parts of the plant and shall furnish every reasonable facility for inspection

3.1 The engineer reserves the right to sample at the point of manufacture, at intermediate points of storage, or at destination. The engineer will determine the location and frequency of sampling.

- 3.2 All tests shall be performed in accordance with Section 2 of this specification.

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- 4.0 Certification and Acceptance.
- 4.1 The manufacturer shall furnish to the engineer, at destination, prior to approval and use of any material delivered, a certification, in triplicate, for each shipment, certifying the beads conform to all requirements of these specifications. The certification shall include or have attached specific results of tests performed for Roundness, Refractive Index, Flow Properties, and Gradation. The certifications shall show the purchase order number, destination, quantity, date shipped, and lot number.
- 4.2 Acceptance of the beads will be based on the manufacturer's certification and upon the results of such tests and may be performed by the engineer.
- 5.0 Packaging Marking.
- 5.1 The glass beads shall be packaged in clean, corrugated fiberboard boxes meeting Federal Specification PPP-B-640 d, Class II capable of withstanding shipping and handling without rupture, deformation, or loss of glass beads. The containers shall repel rather than absorb moisture and shall have a minimum 4-mil thick plastic liner. The containers shall be shipped with a wooden, double-faced pallet approximately 40 by 42 inches, and be capable of being stacked two high without damage to the container. Each container should be approximately 40 by 40 by 29 inches high and shall contain a nominal weight of 2000 pounds of glass beads.
- 5.2 Each container shall be marked with the name and type of contents, manufacturer of the beads, net weight, and lot designation.



# Mirafi® 1100N

Mirafi® 1100N is a needlepunched nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Mirafi® 1100N is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	250 (1113)	250 (1113)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	100 (445)	100 (445)
CBR Puncture Strength	ASTM D6241	lbs (N)	700 (3115)	
			Maximum Opening Size	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	100 (0.15)	
			Minimum Roll Value	
Permittivity	ASTM D4491	sec <sup>-1</sup>	0.8	
Flow Rate	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	75 (3056)	
			Minimum Test Value	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70	
Physical Properties		Unit	Roll Size	
Roll Dimensions (width x length)		ft (m)	15 x 300 (4.57 x 91.4)	
Roll Area		yd <sup>2</sup> (m <sup>2</sup> )	500 (418)	

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FGS000363  
ETQR43



GAI-LAP-25-97

**TECHNICAL DATA SHEET**

**DESCRIPTION**

Weather Worker 40% J29 is a proprietary 40% silane that penetrates into concrete and provides long term weatherproofing protection. Weather Worker 40% J29 is a single component product that is ready to use and typically requires only one application. The silane molecule can penetrate deeper into the substrate than conventional sealers and even deeper than a typical siloxane sealer. Once the silane molecule penetrates the surface, it chemically reacts with, and bonds to, the concrete or masonry substrate. As a result of the strong chemical bond, silane waterproof protection will last many times longer than conventional coatings. Weather Worker 40% J29 will not darken the surface or leave a visible surface film. It is ideal for aesthetic/architectural surfaces.

**USE**

Weather Worker 40% J29 provides outstanding long term weatherproof protection for all types of concrete and masonry surfaces that will dramatically increase the life expectancy of concrete or masonry. Weather Worker 40% J29 dries quickly, allowing traffic to resume quickly. Weather Worker can be applied in cold temperature, down to 32°F (0°C). Weather Worker 40% J29 protects all types of structures: (New and Old) cast-in-place and precast concrete, exposed aggregate mortar, stucco. Weather Worker 40% J29 prevents or inhibits: moisture penetration, attack by deicing salts and chloride ions, reinforcing steel and precast anchor corrosion, mildew, leaching attack by airborne industrial chemicals, spalling caused by freeze-thaw cycles, efflorescence, surface scaling

**FEATURES**

- Small silane molecules result in deep penetration
- Outstanding protection against deicing salts and chloride ions
- Tested per N.C.H.R.P Report 244
- Will not change the traction or skid resistance of a surface
- No color change/will not darken surface
- Strong chemical bond to the substrate
- Can be applied down to 32°F (0°C)
- Dries quickly, can be reopened to traffic within one hour
- Improves adhesion for solvent based paints

**PROPERTIES**

Active Material: 40% minimum by weight  
 AASHTO T259/T260  
 Chloride Reduction @ 0.5"- 80%  
 Chloride Reduction @ 1.0"- 82.3"  
 N.C.H.R.P Report 244:  
 Series II -  
 Water Absorption Reduction 85%  
 Chloride Reduction 86%  
 Series IV -Accelerated weathering - Reduced average chloride ion content by 88%.  
 Vapor Transmission - Excellent - No moisture retained after 21 days.  
 Freeze-Thaw (ASTM-C 672) 50 cycles  
 Treated Sample - + 0  
 Control - 5

**Drying time:**

1 hr. at 70°F (21°C)

**Note:**

The data shown is typical for controlled laboratory conditions. Reasonable variation from these results can be expected due to interlaboratory precision and bias. When testing the field mixed material, other factors such as variations in mixing, water content, temperature and curing conditions should be considered.

**voc**

Complies with U.S. EPA requirement with less than 500 g/L.

**Estimating Guide**

Coverage: 75-150 sq. ft./gal. (2.0-3.7 sq. M/L)  
 Substrate texture and porosity will influence actual coverage rates. For best results, apply product to substrate saturation point.

**Packaging**

PRODUCT CODE	PACKAGE	SIZE	
		Gallons	Liters
69138	Pail	5	18.93
69137	Drum	55	208.2

**STORAGE**

The Weather Worker™ 40% J29 should be stored in tightly sealed original factory containers. Store in a horizontal position to prevent moisture accumulation on the drum head. Store in a temperature range between 0°F (-18°C) to 110°F (43°C). Shelf life of properly stored, unopened containers is 24 months.

**TECHNICAL DATA SHEET****Surface Preparation:**

New concrete must be cured a minimum of 28 days. It is recommended to cure in accord with ACI 308. If a membrane forming cure is used it will not be compatible and will have to be removed. Tuckpointing must cure a minimum of 3 days and caulking should be fully cured before application.

Concrete surfaces should be clean, free of dirt, oil, grease and other contaminants. The surface must be sufficiently porous to allow immediate penetration of Weather Worker 40% J29.

A good test is to place a few drops of Weather Worker 40% J29 or water onto the clean surface. The Weather Worker 40% J29 or water droplets should be immediately absorbed into the surface.

**Mock Up:**

Always test each substrate with an application of Weather Worker 40% J29 to a minimum of 5 ft. x 5 ft. (1.5 M x 1.5 M) area to check for proper surface preparation, performance, water repellency and to verify the coverage rate.

**Placement:**

Before application, the surface should be completely dry. Allow at least 24 hours with sunshine for drying, if surface was wet. Do not apply below 32°F (0°C) or above 100°F (38°C). Do not apply if rain is expected within 3 hours. Do not apply during windy conditions. Apply a single application of Weather Worker 40% J29 with low pressure spray equipment, roller or broom. Use a fan type spray nozzle for greatest efficiency. On vertical surfaces, apply the material from the bottom of the wall upwards spraying so that it will run down the surface at least six inches (15.2 cm) below the spray pattern. On horizontal surfaces, Weather Worker 40% J29 should be sufficiently applied to completely saturate the surface. Typically, the surface can be reopened to traffic in one hour, if the temperature is at 72°F (22°C) or above. Broom out puddles or ponded material. Opened containers of Weather Worker 40% J29 should be tightly resealed when not in use. The full chemical reaction of the silane will take approximately 3-5 days. Do not expect a water beading effect until after 5 days.

**CLEAN UP**

Use water or alcohol to clean tools and equipment

**LIMITATIONS****FOR PROFESSIONAL USE ONLY**

Apply only between 32°F - 100°F (0°C - 38°C).

Do not apply to a damp or wet surface.

Cover and protect all grass, shrubs, plants, etc. from overspray.

Do not spray onto plastic or specialty coated glass, protect all asphalt based materials and painted surfaces.

Keep containers tightly sealed when not in use.

Not for use on porous concrete block.

**PRECAUTIONS****READ SDS PRIOR TO USING PRODUCT**

- Keep material and containers away from high heat, open flames, sparks or other sources of ignition
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

**MANUFACTURER**

Dayton Superior Corporation  
1125 Byers Road  
Miamisburg, OH 45342  
Customer Service: 888-977-9600  
Technical Services: 877-266-7732  
Website: [www.daytonsuperior.com](http://www.daytonsuperior.com)

**TECHNICAL DATA SHEET****WARRANTY**

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. **THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.**

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT  
601 E. 12<sup>TH</sup> STREET, 635 FEDERAL BUILDING  
KANSAS CITY, MO 64106-2824

January 5, 2021

Regulatory Branch  
NWK-2020-01037  
Jackson, MO, NWP 14

Mr. Earl Newill  
Jackson County, Missouri Public Works  
303 West Walnut  
Independence, MO 64050

Dear Mr. Newill:

This letter pertains to an application received on December 14, 2020 for a Department of the Army (DA) permit. The proposed work concerns the replacement of a road culvert which will involve the placement of fill material within a tributary to Sni-A-Bar Creek. The project is located in Section 2, Township 48 North, Range 30 West, Jackson County, Missouri.

The Corps of Engineers has jurisdiction over all waters of the United States. Discharges of dredged or fill material in waters of the United States, including wetlands, require prior authorization from the Corps under Section 404 of the Clean Water Act (33 USC 1344). The implementing regulation for this Act is found at 33 CFR 320-332.

We have reviewed the information furnished and have determined that your project is authorized by nationwide permit (NWP) 14, provided you ensure that the conditions listed in the enclosed copy of excerpts from the January 6, 2017 Federal Register, Issuance of Nationwide Permits, are met. You must also comply with the Kansas City District Regional NWP Conditions posted at:  
<http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/NationWidePermits.aspx>

The Missouri Department of Natural Resources has certified that this NWP will not violate existing state water quality standards provided you comply with the conditions included in their attached certification document. All conditions included in the water quality certification become conditions of the NWP authorization. Please review all conditions associated with this NWP. If you have any questions concerning state water quality standards or compliance issues with the associated certification conditions, please contact the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102-0176. You may also contact the office at 573-526-3589 or by email at [wpsc401cert@dnr.mo.gov](mailto:wpsc401cert@dnr.mo.gov).

**General condition 30** requires you to sign and submit the enclosed "Compliance Certification" within 30 days of completing the authorized activity or the completion of the implementation of any required compensatory mitigation.

This NWP verification is valid until March 18, 2022. Should your project plans change or if your activity is not complete within the specified verification term, you must contact this office for another permit determination. Although the Corps has verified your project would meet the terms and conditions of a nationwide permit, other Federal, state and/or local permits may be required. You should verify this yourself.

We are interested in your thoughts and opinions concerning your experience with the Kansas City District, Corps of Engineers Regulatory Program. Please feel free to complete our Customer Service



Survey form on our website at: [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey). You may also call and request a paper copy of the survey which you may complete and return to us by mail.

Mr. Jesse Cochran, Regulatory Specialist, reviewed the information furnished and made this determination. If you have any questions concerning this matter, please feel free to contact Mr. Cochran at 816-389-3739 or by email at [jesse.s.cochran@usace.army.mil](mailto:jesse.s.cochran@usace.army.mil). Please reference Permit No. NWK-2020-01037 in all comments and/or inquiries relating to this project. This letter is only being provided to you electronically at: [enewill@jacksongov.org](mailto:enewill@jacksongov.org).

Enclosures

cc (electronically w/o enclosures):

Environmental Protection Agency,  
Watershed Planning and Implementation Branch  
U.S. Fish and Wildlife Service, Columbia, Missouri  
Missouri Department of Natural Resources,  
Water Protection Program  
State Historic Preservation Office  
Missouri Department of Conservation

### COMPLIANCE CERTIFICATION

General condition 30 of this Nationwide Permit requires that you submit a signed certification regarding the completed work and any required mitigation. This certification page satisfies this condition if it is provided to the Kansas City District at the address shown at the bottom of this page within 30 days of completing the authorized activity or the completion of the implementation of any required compensatory mitigation.

**APPLICATION NUMBER:** NWK-2020-01037

**APPLICANT:** Jackson County, Missouri Public Works  
303 W. Walnut  
Independence, Missouri 64050

**PROJECT LOCATION:** In a tributary to Sni-A-Bar Creek, located in Section 2, Township 48 North, Range 30 West, Jackson County, Missouri.

- a. I certify that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions.
- b. I certify that any required mitigation was completed in accordance with the permit conditions.
- c. Your signature below, as permittee, indicates that you have completed the authorized project as certified in paragraphs a and b above.

\_\_\_\_\_  
(PERMITTEE)

\_\_\_\_\_  
(DATE)

Return this certification to:

U.S. Army Corps of Engineers  
Kansas City District, ODR  
601 East 12<sup>th</sup> Street, Suite 402  
Kansas City, MO 64106-2824



US Army Corps  
of Engineers  
Kansas City District

### **Nationwide Permit No. 14 Linear Transportation Projects.**

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to



**US Army Corps  
of Engineers  
Kansas City District**

be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

## **Excerpts from the January 6, 2017 Federal Register Nationwide Permit General Conditions**

### 1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

### 2. Aquatic Life Movements.

No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

### 3. Spawning Areas.

Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

### 4. Migratory Bird Breeding Areas.

Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

### 5. Shellfish Beds.

No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

### 6. Suitable Material.

No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes.

No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments.

If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows.

To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains.

The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment.

Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls.

Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills.

Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance.

Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project.

The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights.

No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species.

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate

documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA



section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

#### 19. Migratory Birds and Bald and Golden Eagles.

The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

#### 20. Historic Properties.

(a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include

background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

#### 21. Discovery of Previously Unknown Remains and Artifacts.

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or

remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

## 22. Designated Critical Resource Waters.

Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

## 23. Mitigation.

The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

#### 24. Safety of Impoundment Structures.

To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

#### 25. Water Quality.

Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to

ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management.

In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions.

The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits.

The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications.

If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

### 30. Compliance Certification.

Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

### 31. Activities Affecting Structures or Works Built by the United States.

If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

### 32. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided



results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form

must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

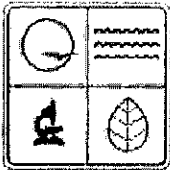
3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district

engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).



# Missouri Department of Natural Resources

## CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION 2017 GENERAL AND SPECIFIC CONDITIONS

Water Protection Program

03/2017

Division of Environmental Quality Acting Director: Steve Feeler

PUB02235

Consistent with Section 401 of the Clean Water Act, these precertified conditions are designed to ensure activities carried out under Nationwide Permits (NWP) authorized by the U.S. Army Corps of Engineers (USACE) do not violate Missouri Water Quality Standards at 10 CSR 20-7.031, resulting in permanent damage to habitat, increased turbidity, reduced bank and channel stability or impacts to the biological and chemical integrity of the waters. Where applicable, these conditions are in addition to, not a replacement for, any federal requirements or conditions.

The conditions outlined in this document apply to those authorized projects where the applicant has chosen to accept these conditions instead of pursuing an individual Clean Water Act Section 401 Water Quality Certification (WQC) for the following NWPs:

- Only General Conditions apply to projects authorized by NWPs 5, 7, 15, 18, 23, 25, 27, 29, 30, 31, 36, 39, 40, 43, 45, and 46.
- Both General and Specific Conditions apply to projects authorized by NWPs 3, 4, 6, 7, 12, 13, 14, 16, 19, 20, 22, 33, 41, 42, 53 and 54.

Alternatively, an applicant may apply for individual WQC if they do not wish to accept the conditions outlined in this document.

Projects authorized by NWPs 17, 21, 32, 34, 37, 38, 44, 48, 49, 50, 51 and 52 require individual WQC by the Department of Natural Resources.

NWPs 1, 2, 8, 9, 10, 11, 28 and 35 authorize projects under Section 10 of the Rivers and Harbors Act of 1899 only. An activity needing only a Section 10 permit may require a WQC if that activity can reasonably be expected to result in any discharge either during construction or operation of the facility. Thus, if the agency determines the activity is likely to result in a discharge during construction or operation, the Department of Natural Resources has the discretion to require a WQC for a Section 10 activity. The USACE will advise a Section 10 permit applicant that they may need a WQC if there is a reasonable expectation that a discharge will occur either during the construction or operation of the project.

Pursuant to Chapter 644.037, RSMo, the Department of Natural Resources shall certify without conditions NWPs as they apply to impacts on wetlands in Missouri.

Pursuant to Chapter 644.038, RSMo, the Department of Natural Resources certifies all NWPs for impacts in all waters of the state without the above-stated or any other conditions for the construction of highways and bridges approved by the Missouri Highway and Transportation Commission. The Memorandum of Understanding of 2016 and any subsequent modifications between the two agencies outline the requirements by which the Missouri Department of Transportation will design and construct projects in order to protect the water quality of waters of the state.

### GENERAL CONDITIONS

1. NWPs shall not allow the filling of jurisdictional springs such as those associated with a water body's point of origin or located in a streambed.
2. Acquisition of NWPs and the attendant WQCs shall not be construed or interpreted to imply the requirements for other permits are replaced or superseded, including Clean Water Act Section 402 National Pollutant Discharge Elimination System Permits for land disturbance or return water from material deposition. Permits or any other requirements shall remain in effect. Applicants with questions are encouraged to contact the Department of Natural Resources' regional office in the project area. A regional office map with contact information can be located at [www.dnr.mo.gov/regions/regions.htm](http://www.dnr.mo.gov/regions/regions.htm).

3. Care shall be taken to keep machinery out of the water way as much as possible. If work in the water way is unavoidable, it shall be performed in a way that minimizes the duration and amount of any disturbance to banks, substrate and vegetation to prevent increases in turbidity. Fuel, oil and other petroleum products, equipment, construction materials and any solid waste shall not be stored below the ordinary high water mark at any time or in the adjacent flood-prone areas beyond normal working hours. All precautions shall be taken to avoid the release of wastes or fuel to streams and other adjacent waters as a result of this operation.
4. Petroleum products spilled into any water or on the banks where the material may enter waters of the state shall be immediately cleaned up and disposed of properly. Any such spills of petroleum shall be reported as soon as possible, but no later than 24 hours after discovery to the Department of Natural Resources' Environmental Emergency Response number at 573-634-2436 or website at <http://dnr.mo.gov/env/esp/esp-eer.htm>.
5. Only clean, nonpolluting fill shall be used. The following materials are not suitable where contact with water is expected such as for bank stabilization, and shall not be used due to their potential to cause violations of the general and numeric criteria of the Water Quality Standards:
  - a. Earthen fill, gravel, broken concrete where the material does not meet the specifications stated in the "Missouri Nationwide Permit Regional Conditions" (updated link based on 2017 regional condition revisions) and fragmented asphalt, since these materials are usually not substantial enough to withstand erosive flows.
  - b. Concrete with exposed rebar.
  - c. Tires, vehicles or vehicle bodies, construction or demolition debris are solid waste and are excluded from placement in the waters of the state.
  - d. Liquid concrete, including grouted riprap, if not placed as part of an engineered structure.
  - e. Any material containing chemicals that would result in violation of water quality standards.
6. Clearing of vegetation and trees shall be the minimum necessary to accomplish the activity except for the removal of invasive or noxious species and placement of ecologically beneficial practices. A vegetated riparian buffer strip shall be maintained during all stages of the project, including post-construction, from the high bank on either side of the jurisdictional channel to protect water quality and to provide for long-term stability of the stream channel, unless physical barriers prevent such a corridor. For purposes of these NWP's, lack of ownership or control of any portion of the riparian buffer strip may be considered a legitimate and discretionary cause to waive this requirement on that portion.
7. An individual WQC is required for any NWP issued on a water that is:
  - a. Listed for a sediment-related impairment, aquatic habitat alteration or unknown impairment as listed in the most current Water Quality Report (Section 305(b) Report) at <http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm>; or
  - b. Located in or occur within two miles upstream of a designated outstanding state or national resource water as found in 10 CSR 20-7.031, Tables D and E at <http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf>.

The Department of Natural Resources' geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Services website at [msdis.missouri.edu/](http://msdis.missouri.edu/). Additional information to identify the project location, including stream reaches with listed impairments or special water designations, may be obtained from the Department of Natural Resources' Water Protection Program at 573-522-4502.

8. Discharge to designated metropolitan no-discharge streams is prohibited, except as specifically permitted under the Water Quality Standards, 10 CSR 20-7.031, and non-contaminated stormwater flows. No water contaminant except uncontaminated cooling water, permitted stormwater discharges in compliance with permit conditions, and excess wet-weather bypass discharges not interfering with beneficial uses should be discharged to the watersheds of streams listed in 10 CSR 20-7.031, Table F at <http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf>.
9. A stream's pattern, profile and dimension, including but not limited to sinuosity, slope and channel width, shall be maintained as much as practicable. Streambed gradient shall not be adversely impacted during project construction. No project shall accelerate bed or bank erosion.
10. NWP's authorized by the USACE for which the district engineer waives the impact limit related to linear feet (LF) or width shall require notification to the Department of Natural Resources. The Department of Natural Resources shall respond within 15 calendar days whether or not individual WQC would be required. This is applicable to NWP's 13, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52 and 54.

11. Proposed projects authorized by the USACE and containing a waiver of any "Missouri Nationwide Permit Regional Condition," except Regional Conditions 2, 3 and 7, shall require an individual WQC by the state.
12. Representatives from the Department of Natural Resources shall be allowed upon request on the project property, which includes the site(s) where the authorized activity takes place and any associated compensatory mitigation site(s), to inspect the authorized activity and mitigation efforts as deemed necessary by the Department of Natural Resources to ensure compliance with WQC conditions and water quality standards. The applicant or their consultant shall submit any requested information deemed necessary by the Department of Natural Resources to ensure compliance with WQC conditions.
13. After avoidance and minimization for the project, all unavoidable, adverse impacts shall be mitigated appropriately based on type and extent of impact.
  - a. Mitigation for loss of aquatic resources shall be in conformance with the currently approved "Missouri Stream Mitigation Method" and/or other mitigation guidance approved for use in Missouri. Mitigation guidance documents can be located online at [www.nwk.usace.army.mil/Missions/RegulatoryBranch/StateofMissouri](http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/StateofMissouri).
  - b. Mitigation shall be within the state of Missouri.
  - c. The applicant shall comply with the higher value of compensatory mitigation required by either the Department of Natural Resources or the USACE, but not both unless explicitly noted.
  - d. Stream impacts shall require compensatory mitigation with only in-stream or riparian corridor credits, unless the Department of Natural Resources agrees to an alternative.
14. Antidegradation requirements dictate all appropriate and reasonable Best Management Practices related to erosion and sediment control, project stabilization and prevention of water quality degradation are applied and maintained; for example, preserving vegetation, streambank stability and basic drainage. Best Management Practices shall be properly installed prior to conducting authorized activities and maintained, repaired and/or replaced as needed during all phases of the project to limit the amount of discharge of water contaminants to waters of the state. The project shall not involve more than normal stormwater or incidental loading of sediment caused by project activities so as to comply with Missouri's general water quality criteria [10 CSR 20-7.031(4); Page 15 at <http://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf>].
15. Channelization of streams is not allowed under this precertification:
  - a. Channelization includes but is not limited to reducing the length of the channel, widening the channel for increased water storage or flow, and/or construction of hard structures which concentrate flow.
  - b. Bank stabilization activities along one bank of a stream are permitted, including but not limited to, bank sloping and riprapping.
  - c. The redirection of flow by excavation of the opposite bank or a streambed is considered a channel modification and is prohibited.
16. No new or expanded wet stormwater retention basins or similar impoundment structures may be constructed unless they are located off-channel. In-channel dry stormwater detention basins are allowable if the stream channel is either temporarily or not adversely affected by the basin.
17. Any waste concrete or concrete rinsate shall be disposed of in a manner that does not result in any discharge to the jurisdictional waterways.

#### **SPECIFIC CONDITIONS**

18. Nationwide Permit 3 Maintenance
  - a. Silt, sediment and debris removal shall be limited to a maximum of 100 LF upstream and 100 LF downstream of structures.
  - b. During dewatering, water shall not be returned directly to the water way but shall be pumped upland and filtered through an appropriate treatment device as prescribed in any existing separate permit authorizing the discharge of return water. If, however, instream flow is 1 cubic foot per second (cfs) or greater and the return rate is set at 1 cfs or less, return may be made directly to the stream.
19. Nationwide Permit 4 Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities  
Any inorganic or extraneous debris such as may be found on Christmas trees shall be removed to qualify as clean, nonpolluting fill.



20. Nationwide Permit 6 Survey Activities  
Water, fines and excavated materials displaced by activities such as borings, shall not be returned directly to the water way, but shall be pumped upland and filtered through an appropriate treatment device as prescribed in any existing separate permit authorizing the discharge of return water.
21. Nationwide Permit 7 Outfall Structures and Associated Intake Structures  
WQC does not replace or negate the need to obtain any required state permits under the Missouri Clean Water Law (Chapter 644, RSMo) for construction of wastewater treatment facility components including outfall structures; permits to release wastewater effluents; or for the construction of components related to public water supplies including intake structures as may be required by the Missouri Safe Drinking Water Law (Chapter 640, RSMo).
22. Nationwide Permit 12 Utility Line Activities
- For utility crossings that must disturb a water body, work shall be conducted in such a manner as to seal off the work area from flow and minimize sediment transport.
  - Material resulting from activity may not be temporarily side-cast into waters of the state for more than one month.
  - Directional boring to avoid impacts to waters of the state is recommended.
  - Drilling mud and/or other materials shall not be discharged into waters of the state. Best Management Practices shall be implemented to prevent possible discharges from reaching waters of the state. In the event materials are inadvertently discharged to waters of the state, notification to the Department of Natural Resources is required within 24 hours by calling 573-522-4502. Restoration of the impacted water(s) may be required.
  - Utility line crossings shall be placed as close to perpendicular as possible, and be limited to a maximum crossing length of no more than one and one-half times the width of the stream.
  - New utilities lines, when considering the project as a whole, which (1) Cross more than one jurisdictional water resulting in greater than 500 LF and/or 0.50 acre of impact to jurisdictional waters as a project total, and (2) Travel through more than two county jurisdictions or more than one state jurisdiction shall be viewed as a whole project in the WQC process and require individual WQC of all crossings, except crossings utilizing directional boring.
23. Nationwide Permit 13 Bank Stabilization  
Innovative stabilization approaches require consultation with the Department of Natural Resources prior to approval and may require an individual WQC. The permittee shall invite the USACE and the Department of Natural Resources as well as the other state and federal resource agencies to examine innovative approaches.
24. Nationwide Permit 14 Linear Transportation Projects
- The permittee must propose and employ measures to mitigate the removal of impounded sediment (e.g., sand, gravel) in the unstable area upstream of a proposed project to prevent it from being transported downstream and/or construct a notched weir to slow the release of impounded sediment from upstream of the proposed project. Accumulated gravel may be allowed to naturally deposit into downstream plunge pool voids. Consultation with a hydrologist or other scientist is recommended if the amount of accumulated unconsolidated gravel exceeds the volume of plunge pool voids.
  - Where this NWP is used to authorize bridge and culvert structures, stream channel work is limited to a maximum of 100 feet upstream and a maximum of 100 feet downstream of the bridge or culvert. For purposes of this condition, a channel modification is any activity that alters the width, depth, length and/or sinuosity of a water way.
25. Nationwide Permit 16 Return Water from Upland Contained Disposal Areas  
These activities could have specific tasks or processes involved which may require the acquisition of separate general or site specific permits. All applicants shall contact the Department of Natural Resources' Water Protection Program at 573-522-4502 to determine any specific requirements which may or may not require an individual WQC.
26. Nationwide Permit 19 Minor Dredging  
These activities could have specific tasks or processes involved which may require the acquisition of separate general or site specific permits. All applicants shall contact the Department of Natural Resources' Water Protection Program at 573-522-4502 to determine any specific requirements which may or may not require an individual WQC.
27. Nationwide Permit 20 Response Operations for Oil and Hazardous Substances
- These activities could have specific tasks or processes involved which may require the acquisition of separate general or site specific permits. All applicants shall contact the Department of Natural Resources' Water Protection Program at 573-522-4502 to determine any specific requirements which may or may not require an individual WQC.
  - Oil and hazardous substance releases are to be reported to the Department of Natural Resources' Environmental Emergency Response number at 573-634-2436. Continue to report updates with regard to the containment and cleanup of releases.

28. Nationwide Permit 22 Removal of Vessels  
Use of this NWP in Missouri is limited to removal actions only and shall not be used for any disposal of vessel.
29. Nationwide Permit 33 Temporary Construction, Access and Dewatering  
a. The use of this NWP shall be limited to impacts of six months or less in duration.  
b. Any removal of accumulated sediment (e.g., sand, gravel) upstream of a proposed project shall be limited to the quantity necessary to relieve any obstruction or to protect downstream habitat. The permittee must propose and employ measures to mitigate the removal of impounded sediment in the unstable area upstream of a proposed project to prevent it from being transported downstream and/or construct a notched weir to slow the release of impounded sediment from upstream of the proposed project.
30. Nationwide Permit 41 Reshaping Existing Drainage Ditches  
a. Material from the reshaping activities shall not be side-cast into any jurisdictional waters.  
b. Removal of vegetation shall be the minimum necessary to conduct approved activity except for the removal of invasive or noxious species. The Department of Natural Resources encourages deep-rooted vegetation to be maintained on at least one side of the water way to protect water quality; for example, leaving trees on the west side to prevent temperature exceedances in the water way.
31. Nationwide Permit 42 Recreational Facilities  
The vegetated riparian buffer strip to be maintained from the high bank on either side of the jurisdictional channel may be used in part for the construction of public recreational trails, including those constructed to standards set by the Americans with Disabilities Act (ADA).
32. Nationwide Permit 53 Removal of Low-Head Dams  
a. The permittee must propose and employ measures to mitigate the removal of impounded sediment (e.g., sand, gravel) in the unstable area upstream of a proposed project to prevent it from being transported downstream and/or construct a notched weir to slow the release of impounded sediment from upstream of the proposed project. Accumulated gravel may be allowed to naturally deposit into downstream plunge pool voids. Consultation with a hydrologist or other scientist is recommended if the amount of accumulated unconsolidated gravel exceeds the volume of plunge pool voids.  
b. Stream channel work is limited to a maximum of 100 feet upstream and a maximum of 100 feet downstream of the dam.  
c. Restoration of the stream channel to its former, natural state is authorized. Individual WQC is required for non-natural channel modifications. For purposes of this condition, a channel modification is any activity that alters the width, depth, length and/or sinuosity of a water way.
33. Nationwide Permit 54 Living Shorelines  
Innovative stabilization approaches require consultation with the Department of Natural Resources prior to approval and may require an individual WQC. Invite the USACE and the Department of Natural Resources as well as the other state and federal resource agencies to examine innovative approaches.

Applications for WQC should be sent to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176, or electronically to [wpsc401cert@dnr.mo.gov](mailto:wpsc401cert@dnr.mo.gov). A complete application consists of the application submitted to the USACE as well as additional information necessary for a complete review of the project. This may include but is not limited to topographical maps, locational maps, engineering plans, project diagrams and where applicable mitigation plans [Section 644.026.26, RSMo and 10 CSR 20-6.060(5)].

An issued WQC becomes part of and expires with the Section 404 and/or Section 10 permit unless explicitly stated in the WQC. Consultation with the Department of Natural Resources is required should the permit require modification. Not all permit modifications require the WQC to be modified or reissued. For example when a permit expiration date is extended or the permit is reissued and there are no changes to the original project or water quality standards, the WQC may remain valid for that project.

The Department of Natural Resources encourages, but does not require the permittee to consider environmentally-friendly design techniques to include stormwater management strategies that maintain or restore the original site hydrology through infiltration, evaporation or reuse of stormwater. Designs might include creating vegetated swales or rain gardens, or using porous pavement. More information can be found at these websites: [www.epa.gov/owow/NPS/lid/](http://www.epa.gov/owow/NPS/lid/) and [www.lid-stormwater.net/lid\\_techniques.htm](http://www.lid-stormwater.net/lid_techniques.htm).

The Department of Natural Resources encourages the use of native vegetation to protect impacted areas from future water quality concerns. Native vegetation has evolved with Missouri's geology, climate and wildlife to occur within a region as a result of natural processes rather than human intervention. For areas where direct impacts to streams are to be avoided, the Department of Natural Resources recommends a minimum riparian buffer strip width of 50 feet as measured from top of bank.

The following publication provides guidance on how to protect water quality through Best Management Practices on project sites. For more information, please read: "Protecting Water Quality: A field guide to erosion, sediment and stormwater best management practices for development sites in Missouri and Kansas" dated January 2011 and located online at <http://dnr.mo.gov/env/wpp/wpcp-guide.htm>.

To help determine if a proposed activity could encounter species or sites of conservation concern within or near a project, including those that have not been recorded, the applicant is encouraged to visit:

- Missouri Department of Conservation's "Natural Heritage Review" website at <https://naturalheritagereview.mdc.mo.gov/>, and
- U.S. Fish and Wildlife Service's "Information, Planning and Conservation" website at <http://ecos.fws.gov/ipac/>.

If the proposed project encounters and will potentially affect a species of concern, please report it to the Missouri Department of Conservation and the U.S. Fish and Wildlife Service.

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For more information  
Missouri Department of Natural Resources  
Water Protection Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
[wpsc401cert@dnr.mo.gov](mailto:wpsc401cert@dnr.mo.gov)  
800-361-4827 or 573-522-4502  
<http://www.dnr.mo.gov/env/wpp>

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# **GEOTECHNICAL ENGINEERING REPORT**

## **BUCKNER TARSNEY ROAD BRIDGE REPLACEMENT NORTH OF RYAN ROAD COUNTY PROJECT NO. 3252 COUNTY BID NO. PW 02-2021 NEAR GRAIN VALLEY, MISSOURI**

**Prepared For:**  
Jackson County, Missouri  
Engineering Division  
303 W. Walnut  
Independence, MO 64050

January 13, 2021  
Olsson Project No. C18-1897

The logo for Olsson, featuring the word "olsson" in a lowercase, bold, sans-serif font. The letters are filled with a stippled or textured pattern.

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- Appendix A: Boring Location Map
- Appendix B: Symbols and Nomenclature Boring Logs
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## A. PROJECT UNDERSTANDING

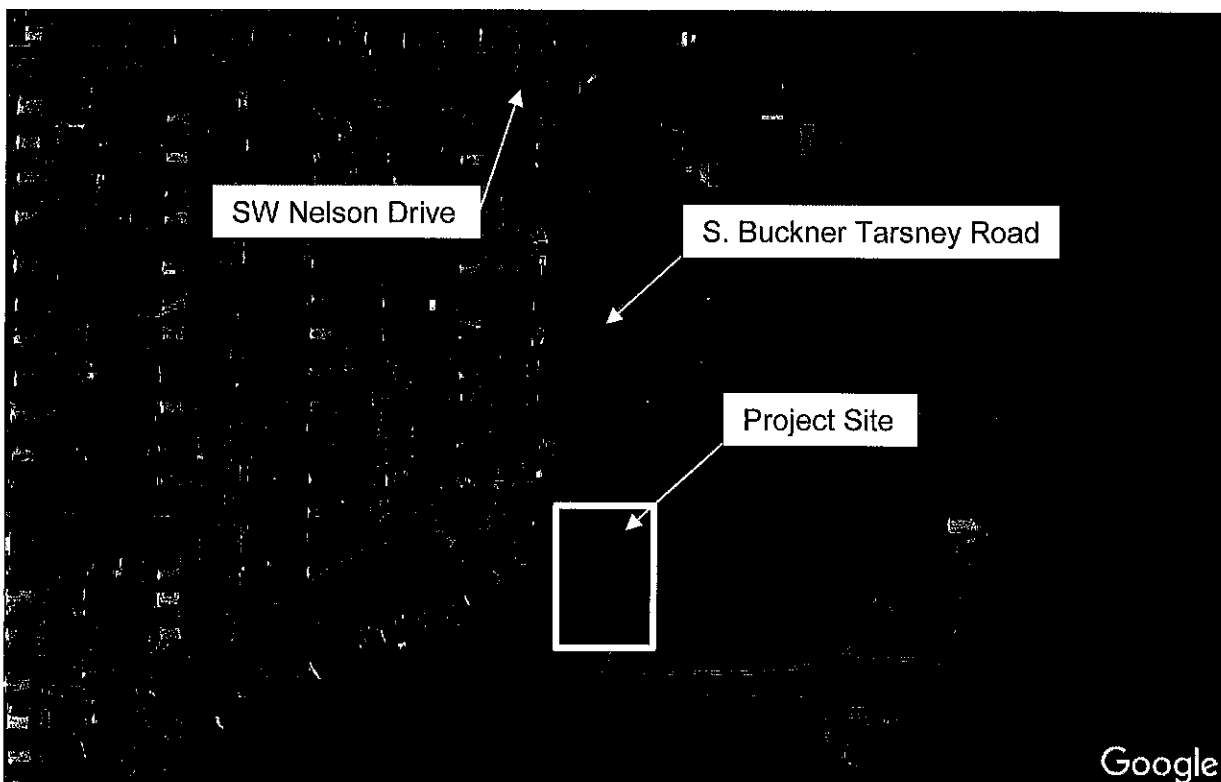
### A.1. GEOTECHNICAL SCOPE

This Geotechnical Engineering Report presents the results of our subsurface exploration performed for the Reinforced Concrete Box (RCB) culvert replacement along Buckner Tarsney Road near Grain Valley, Missouri. Our subconsultant, *TSI Geotechnical* drilled four borings near each corner of the existing RCB culvert. The locations of the borings are shown on the Boring Location Map in Appendix A. The associated Borehole Reports are in Appendix B. The purpose of this report is to review the existing subsurface conditions, and based on those conditions, provide geotechnical engineering recommendations for the design of the RCB culvert replacement and accompanying wing walls.

### A.2. SITE INFORMATION

The existing RCB is located approximately one-quarter mile south of the intersection of SW Nelson Drive and S Buckner Tarsney Road. The location of the culvert is shown in Figure 1. The existing creek flows southwest to northeast.

Figure 1: Site Location



### A.3. PROJECT INFORMATION

We understand that the project will consist of removing and replacing the existing box culvert along S. Buckner Tarsney Road. The new structure planned beneath S. Buckner Tarsney Road will consist of a double 12' x 9' reinforced concrete box (RCB) (Figure 2). In addition, wing walls are planned to extend outward from each corner of the RCB approximately 25 feet to allow for the grade change. The wing walls will consist of cast-in-place (CIP) concrete retaining walls. The wing wall profiles and cross-sections are shown in Figure 3, 4 and 5.

Figure 2: RCB Profile

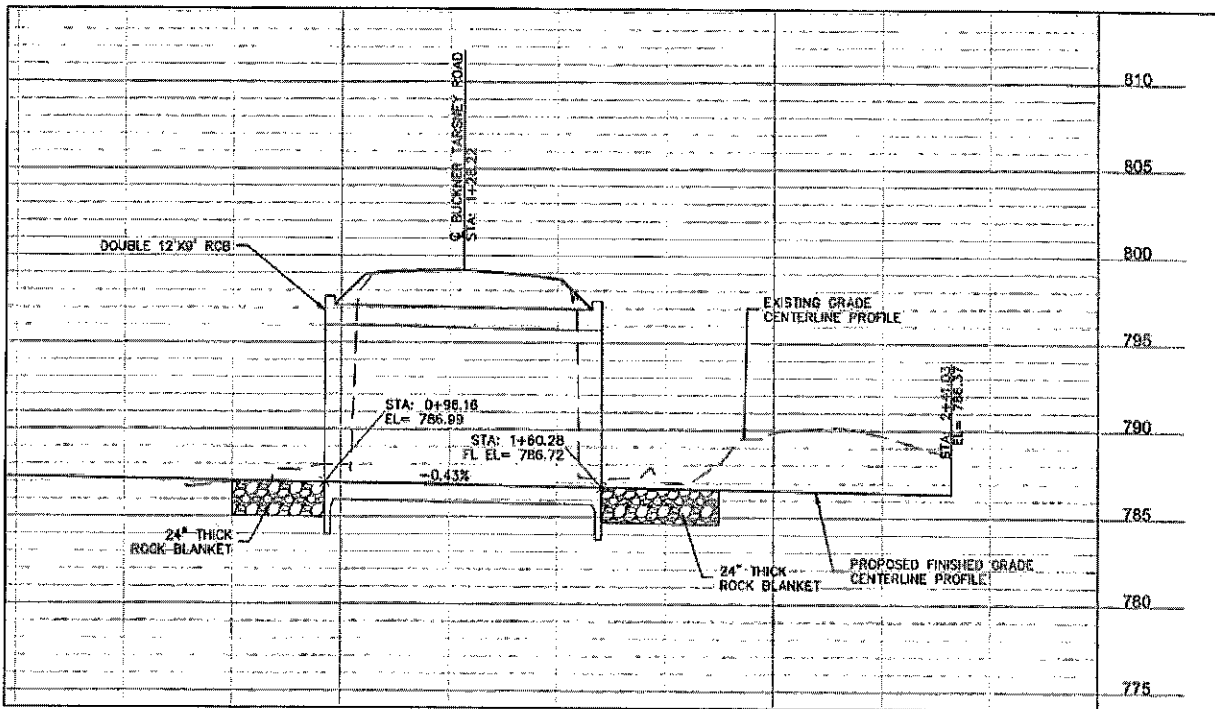


Figure 3: Wing wall Profiles

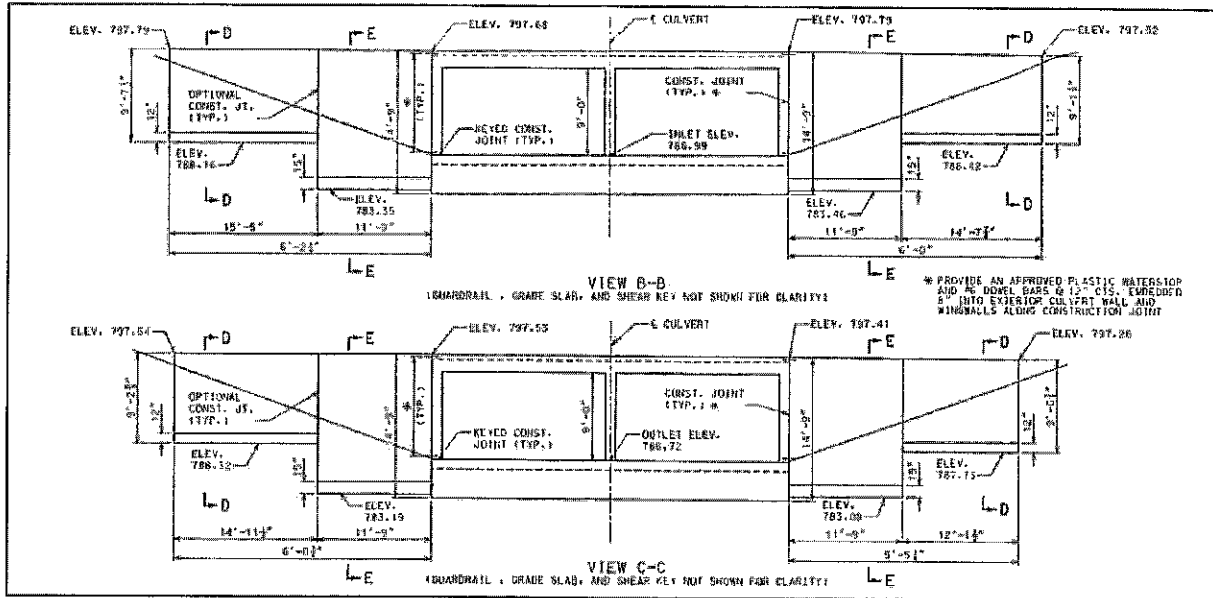


Figure 4: Wing wall Cross-Section D-D

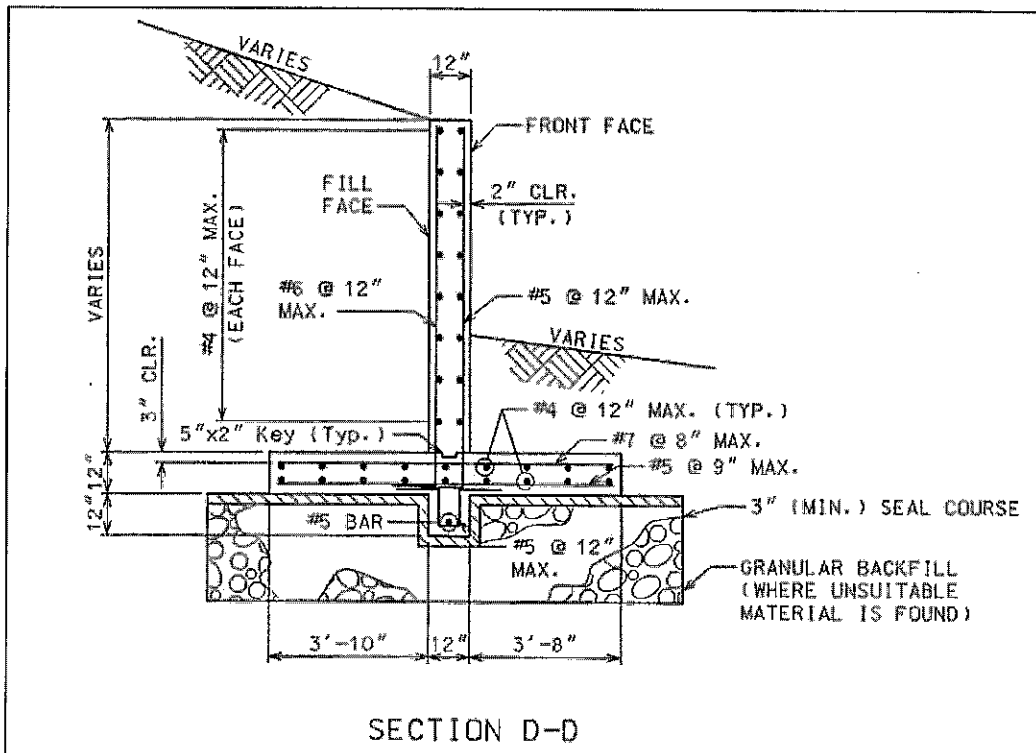
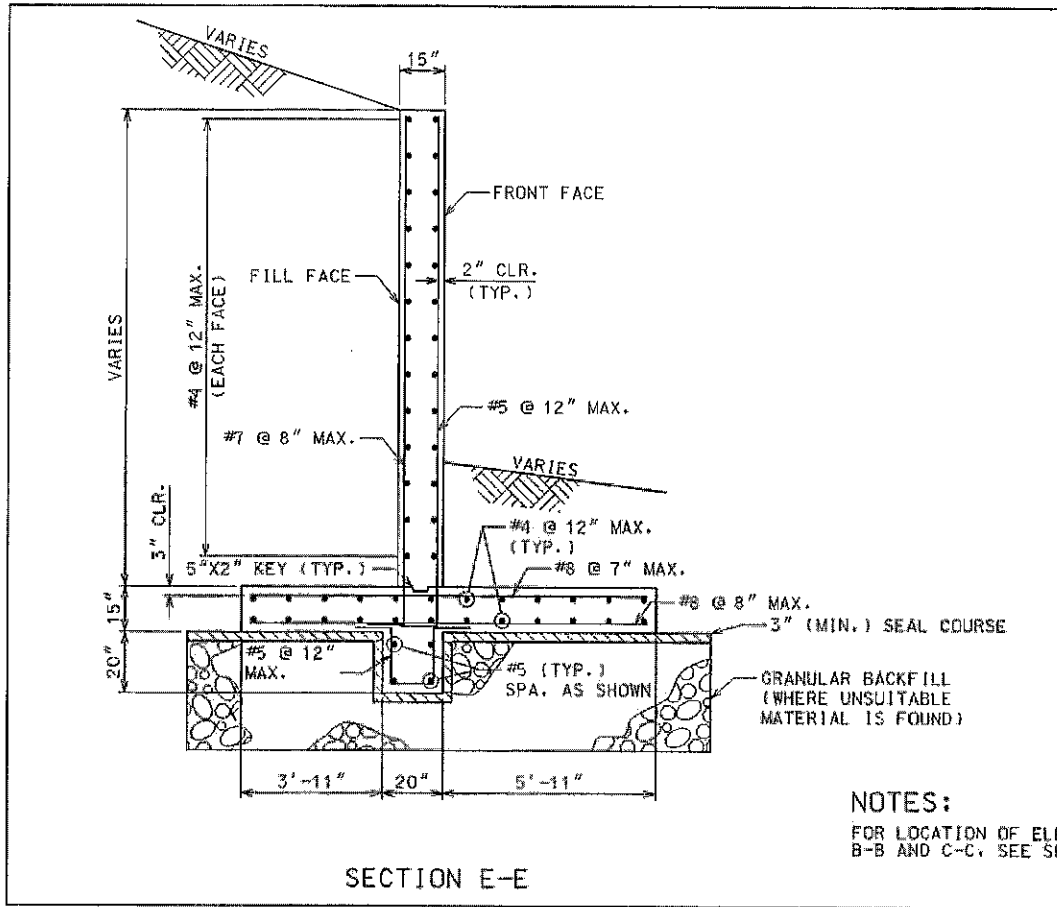




Figure 4: Wing wall Cross-Section E-E



## **B. EXPLORATORY AND TEST PROCEDURES**

### **B.1. FIELD EXPLORATION**

*TSi Geotechnical* was contracted to drill the borings at the site. The drill crew located the borings using GPS coordinates. A truck mounted CME-550 drill rig advanced the four borings at the site. The approximate locations of the borings are shown on the Boring Location Map in Appendix A.

The borings were drilled to approximately 25 feet below the existing surface or practical auger refusal on limestone bedrock. Soil samples were obtained using thin-walled sampling tubes hydraulically pushed into the soil and a split-barreled sampler during the performance of the Standard Penetration Test (SPT). Sampling depths and SPT blow counts (N-values) are shown on the appended Borehole Reports in Appendix B.

The drill crew prepared a field log for each boring. These field logs include the visual classifications of the materials encountered during drilling operations as well as the drillers' interpretation of the subsurface conditions between samples. Water level observations were in the borings at the depths and under the conditions noted on the appended borehole reports.

### **B.2. LABORATORY TESTING**

At our laboratory, we visually classified the soil samples in accordance with the Unified Soil Classification System (USCS). We measured the moisture content of each sample. Density and unconfined compressive strength tests were performed on selected tube samples. Two Atterberg limits tests were performed to aid in the classification of the soils under the USCS. A one-dimensional swell and consolidation test was performed on the 8.5-to-10-foot sample from boring B-3. A direct shear test was performed on the 13.5-to-15-foot sample from boring B-4. Based on the laboratory test results and our observations of the samples, we modified the field logs that were prepared by the drill crew. Results of the laboratory tests are shown on the appended Borehole Reports.

## C. SUBSURFACE CONDITIONS

### C.1. SUBSURFACE STRATIGRAPHY

The subsurface conditions shown on the boring logs represent conditions at the specific boring locations at the times they were drilled. Variations may occur between or beyond the borings. The stratification lines shown on the boring logs represent the approximate locations of changes in the soil and bedrock types. The actual transitions between materials is usually gradual. Based on the borings, the subsurface conditions at this project site can be generalized as follows.

Each boring was drilled within the roadway and encountered around 1 foot of asphaltic concrete and/or baserock. Beneath the roadway material, the drill crew encountered previously placed fill to a depth of 3 feet at each of the borings. The fill consisted of brown with gray clay with various amounts of gravel. Below the fill, native lean-to-fat clay soils were encountered to depths ranging from 11.3 feet at boring B-1 to 22 feet at boring B-3. The clay soils extended significantly deeper on the east side of the roadway. The native clay was generally moist and firm to stiff with isolated soft zones. Variable amounts of silt were encountered in the clay. Limestone and shale bedrock was encountered below the clay soils. Table 1 presents the depths and type of bedrock encountered

**Table 1: Bedrock Depth and Thickness**

Boring	Bedrock Type, Depth, & Elevation (feet)	Boring Termination Depth and Elevation (feet)
B-1	Limestone @ 11.3' (787.7')	11.4' (787.6') AR <sup>1</sup> on Limestone
B-2	Weathered Shale @ 14' (785')	23.9' (775.1') in Shale
	Shale @ 19' (780')	
B-3	Shale @ 22' (776.5')	24' (774.5') in Shale
B-4	Weathered Shale @ 19' (780')	24' (775') in Shale
	Shale @ 23.5' (775.5')	

1- AR: Auger Refusal

### C.2. GROUNDWATER OBSERVATION

Each boring was inspected for the presence of groundwater during and immediately after the drilling procedures. Groundwater was encountered during drilling and immediately after drilling operations at boring B-3 at 14 feet below the surface of the boring. Water was not observed in

the remaining borings. The presence or lack of water should not be construed to represent a permanent or stable condition. Variations and uncertainties exist with relatively short-term water level observations in boreholes. Water levels can and should be anticipated to fluctuate between boring locations, as well as with time within specific borings. Water typically collects near the interface between different materials, such as bedrock and soil. Groundwater levels fluctuate with variations in precipitation, site grading, drainage, and adjacent land usage. Long term monitoring with piezometers generally provides a more representative reflection of the potential range of groundwater conditions.

## **D. CONCLUSIONS AND RECOMMENDATIONS**

### **D.1. EXCAVATIONS**

Site preparation should commence with the demolition of the existing structures including the existing box culvert and portions of S. Buckner Tarsney Road that will be removed and replaced. Construction debris should be completely removed from the site. Outside of the existing roadway and structure, site preparation should consist of stripping all vegetation, root systems, organic soils, and any loose, soft, or otherwise unsuitable material from the construction limits. Any required tree removal should also be accomplished at this time. Care should be taken to thoroughly remove all related root systems. Materials disturbed during the removal of the tree stumps should be undercut and replaced with structural fill or approved soil. A zone of desiccated soils may exist in the vicinity of the trees. The desiccated soils have a higher swell potential and should be undercut and replaced with structural fill or approved soil. Site clearing, grubbing and stripping operations should be performed during dry conditions. Operation of heavy equipment on the site during wet conditions could result in excessive rutting and mixing of organic debris with the underlying soils.

Excavations should be cut to a stable slope or temporarily braced, depending upon the excavation depths and subsurface conditions encountered. Temporary construction slopes should be designed in strict compliance with the most recent governing regulations. Stockpiles should be placed well away from the edge of the excavation and their heights should be controlled so they do not surcharge the sides of the excavation. Surface drainage should be carefully controlled to prevent flow of water into the excavations. Construction slopes should be closely observed for signs of mass movement: tension cracks near the crest, bulging at the toe, ect. If potential stability problems are observed, a geotechnical engineer should be immediately contacted.

### **D.2. BACKFILL**

Backfill placed above the RCB and within the roadway or any other settlement sensitive areas should consist of either flowable fill or properly placed and compacted granular backfill, such as MoDOT Type 5 baserock. In our opinion, and provided some surface settlement is acceptable, in areas not currently occupied, nor planned to be occupied, by roadways or any other settlement sensitive structures, the excavated clay soils can be reused as backfill.

Samples of potential backfill materials should be submitted for approval prior to use on the site. Laboratory Proctor compaction test and classification tests should be performed on any fill material placed during backfill operations.

We recommend that backfill be compacted in accordance with the criteria provided in Table 2. An *Olsson* or Owner's representative should observe fill placement operations and perform field density tests concurrently to indicate if the specified compaction is being achieved.

**Table 2: Fill Placement Guidelines**

Area of Fill Placement	Material	Compaction Recommendation (ASTM D-698)	Moisture Content (Percent of Optimum)
Non-Settlement Sensitive Areas	On-site Cohesive Soil	95%	-1 to +3 Percent
Settlement Sensitive Areas	MoDOT Type 5 Baserock	95%	As necessary to obtain density

Backfill should be placed in thin loose lifts of 8 inches or less prior to compaction. The moisture content for suitable borrow soils at the time of compaction should generally be maintained between the ranges specified above. More stringent moisture limits may be necessary with certain soils and some adjustments to moisture contents may be necessary to achieve compaction in accordance with project specifications.

**D.3. DRAINAGE AND GROUNDWATER CONSIDERATIONS**

Provisions should be made to quickly remove accumulating seepage water or storm water runoff from excavations. Undercut or excavated areas should be sloped toward one corner to allow rainwater or surface runoff to be quickly collected and gravity drained or pumped from the construction areas.

## **E. STRUCTURES**

### **E.1. BOX CULVERT SUBGRADE RECOMMENDATIONS**

We anticipate the new RCB culvert will bear on bedrock and/or clay soils. Where the RCB will bear on clay soils, we recommend the material be inspected by an *Olsson* representative immediately prior to placement to determine if it is suitable as a bearing material. In many instances, clay soils near the creek flow line will be soft and wet. If soft/compressible clay soils are encountered at the bearing elevation of the RCB, we recommend they be removed and replaced with structural fill and/or stabilized in place.

As noted, shale is likely to be encountered. If soft, weathered shale bedrock is encountered, the shale should be removed to expose more competent shale material. A lean concrete mud mat or seal course placed over the exposed shale bedrock may be needed to protect the shale from further degradation.

To provide a uniform bearing layer, a minimum of 4 inches of MoDOT Type 5 baserock should be used beneath the culvert. The well-graded granular material should be placed and compacted in accordance with the recommendations in Table 2.

### **E.2. WING WALL FOUNDATION RECOMMENDATIONS**

Based on the borings, we anticipate that proposed wing walls will bear on firm clay soils. For walls supported on firm clay soils, a maximum net allowable soil bearing pressure of 2,000 pounds per square foot (psf) can be used for design. The net allowable bearing pressure refers to the bearing pressure at foundation level in excess of the surrounding overburden pressure.

The wing walls should bear at a minimum of 3 feet below the adjacent final ground surface to comply with local frost depth regulations. The base of all foundation excavations should be free of all water and loose material prior to the placement of concrete. *Olsson* should observe the foundation bearing materials. If soft, wet, compressible clay soils are encountered, they should be over-excavated and replaced with structural fill.

After foundation subgrades have been observed and evaluated by an *Olsson* representative, concrete should be placed as soon as possible to avoid subjecting the exposed soils to drying,

wetting, or freezing conditions. If foundation subgrade soils are subjected to such conditions, **Olsson** should be contacted to reevaluate the foundation bearing materials.

### E.3. WING WALL LATERAL EARTH PRESSURES

The following soil parameters are provided for use in wing walls subject to lateral earth pressures. The parameters are based on the understanding that retained soils will be similar in composition to the on-site soils encountered during this exploration.

Wall that are unrestrained at the top and are free to deflect or rotate slightly may be designed for “active” earth pressure conditions. Active earth pressure is commonly used for design of free-standing cantilever retaining walls. The “passive” earth pressure condition should be used to evaluate the resistance of soil to lateral loads. Table 3 presents the recommended values of earth pressure coefficients based on our experience with soils in the area. Equivalent drained fluid densities are frequently used for the calculation of lateral earth pressures and are therefore provided in Table 3 as well.

**Table 3: Earth Pressure Parameters**

Condition	Earth Pressure Coefficient		Equivalent Fluid Density (pcf/ft)	
			Drained Condition	Undrained Condition
Active ( $K_a$ )	Cohesive soils	0.41	50	85
	Granular Material	0.31	40	N/A
Passive ( $K_p$ )	Cohesive soils	2.46	295	205
	Granular Material	3.25	390	N/A

\*NA – Not Applicable

The following assumptions were made:

- The equivalent fluid densities in Table 3 do not include the effects of surcharge loading.
- For active earth pressures, the wall must rotate about the base, with top lateral movements ranging from  $0.002 \cdot H$  to  $0.004 \cdot H$  (H is wall height).
- The wall must “move” horizontally to mobilize passive resistance.
- In-situ soil backfill has a maximum weight of 120 pcf.
- Horizontal backfill is compacted to 95% of standard Proctor maximum dry density.
- Heavy equipment and other concentrated load components are not included.
- No hydrostatic pressure acting on wall.



- No safety factor is included.
- Passive pressure in the frost zone should be ignored.

Backfill placed against structures should consist of granular soils or low plasticity cohesive soils. For the granular values to be valid, the granular backfill must extend out from the base of the wall at an angle of at least 45 and 60 degrees from vertical for the active and passive cases, respectively. To calculate the resistance to sliding, an ultimate coefficient of friction value of 0.35 should be used where the footing bears on soil.

To intercept infiltrating surface water behind the wall, we recommend a perimeter drain be installed at the foundation level and/or weep holes be placed at regular intervals along the wall. The drain line invert should be below the finished subgrade elevation for the interior floor. The drain line should be sloped to provide positive gravity drainage and should be surrounded by free draining granular material graded to prevent the intrusion of fines, or an alternative free-draining granular material encapsulated with suitable filter fabric. A minimum 1-foot wide section of free draining granular fill should be used for backfill above the drain line and adjacent to the wall and should extend to within 2 feet of final grade. The granular backfill should be capped with compacted cohesive fill to minimize infiltration of surface water into the drain system.

## **F. CONCLUSIONS AND LIMITATIONS**

### **F.1. CONSTRUCTION OBSERVATION AND TESTING**

We recommend that all earthwork during construction be monitored by a representative of **Olsson**, including site preparation, placement of all structural fill and trench backfill. The purpose of these services would be to provide **Olsson** the opportunity to observe the soil conditions encountered during construction, evaluate the applicability of the recommendations presented in this report to the soil conditions encountered, and recommend appropriate changes in design or construction procedures if conditions differ from those described herein.

### **F.2. LIMITATIONS**

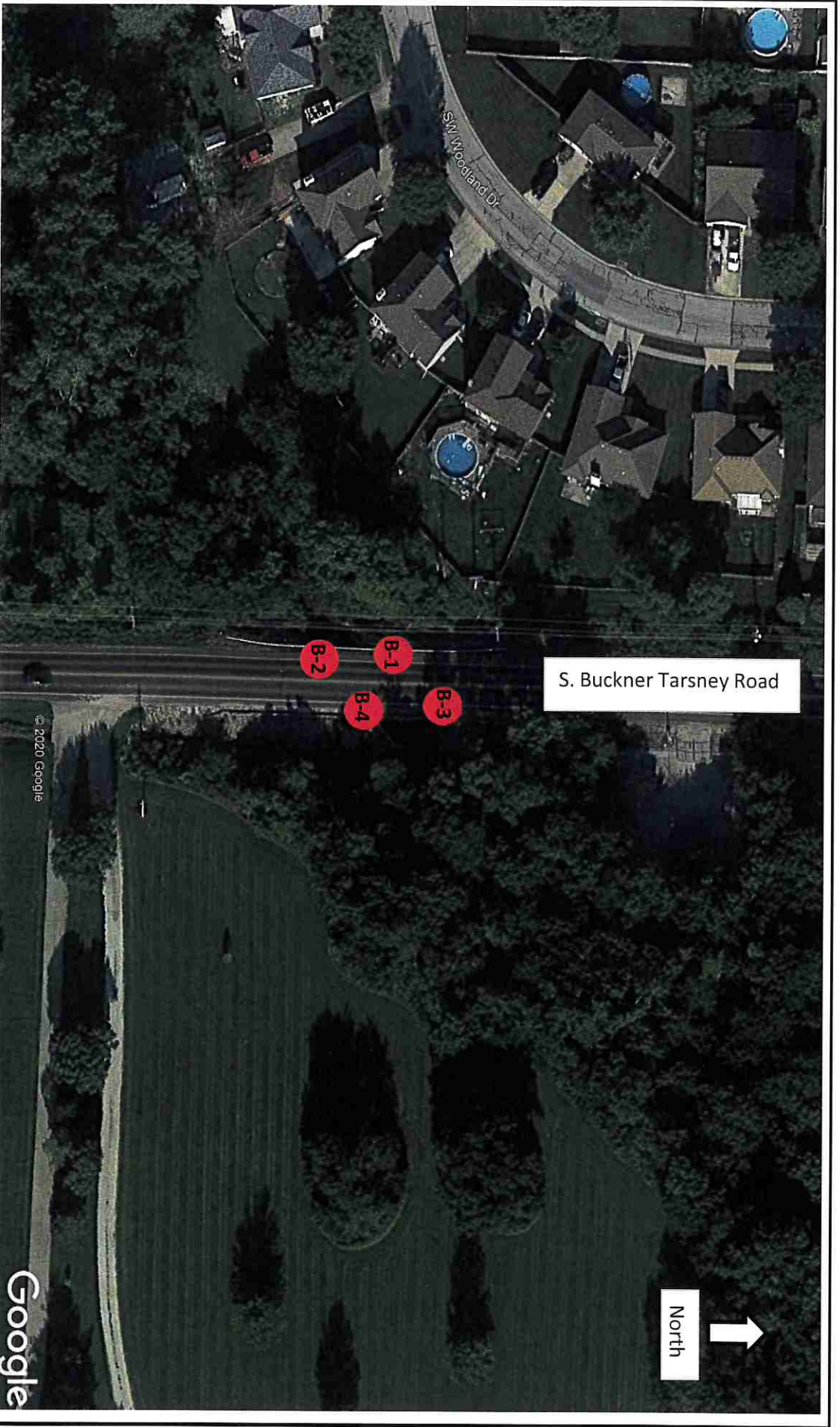
The conclusions and recommendations presented in this report and based on the information available regarding the proposed construction, the results obtained from our borings, laboratory testing program, and our experience with similar projects. The borings represent a very small statistical sampling of subsurface soils and it is possible that conditions may be encountered during construction that are substantially different from those indicated by the borings. In these instances, adjustments to design and construction may be necessary.

This geotechnical report is based on the site plan and information provided to **Olsson** and our understanding of the project as noted in this report. Changes in the location or design of new structures could significantly affect the conclusions and recommendations presented in this geotechnical report. **Olsson** should be contacted in the event of such changes to determine if the recommendations of this report remain appropriate for the revised site design.

This report was prepared under the direction and supervision of a Professional Engineer registered in the State of Missouri with the firm of **Olsson, Inc.** The conclusion and recommendations contained herein are based on generally accepted, professional, geotechnical engineering practices at the time of this report, within this geographic area. No warranty, express or implied, is intended or made. This report has been prepared for the exclusive use of **Jackson County, Missouri** and their authorized representatives for the specific application to the proposed project described herein.

**APPENDIX A**  
**Boring Location Plan**

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**olsson**

Scale: n.t.s.
Project No. C18-1897
Approved by: JDP
Date: 9/15/2020

Boring Location Plan
<b>Buckner Tarsney RCB</b> <b>Grain Valley, Missouri</b>

**APPENDIX B**  
**Symbols and Nomenclature**  
**Boring Logs**

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# SYMBOLS AND NOMENCLATURE

## DRILLING NOTES

### DRILLING AND SAMPLING SYMBOLS

SS: Split-Spoon Sample (1.375" ID, 2.0" OD)	HSA: Hollow Stem Auger	NE: Not Encountered
U: Thin-Walled Tube Sample (3.0" OD)	CFA: Continuous Flight Auger	NP: Not Performed
CS: Continuous Sample	HA: Hand Auger	NA: Not Applicable
BS: Bulk Sample	CPT: Cone Penetration Test	% Rec: Percent of Recovery
MC: Modified California Sampler	WB: Wash Bore	WD: While Drilling
GB: Grab Sample	FT: Fish Tail Bit	IAD: Immediately After Drilling
SPT: Standard Penetration Test Blows per 6.0"	RB: Rock Bit	AD: After Drilling
		CI: Cave-In

### DRILLING PROCEDURES

Soil samples designated as "U" samples on the boring logs were obtained in using Thin-Walled Tube Sampling techniques. Soil samples designated as "SS" samples were obtained during Penetration Test using a Split-Spoon Barrel sampler. The standard penetration resistance 'N' value is the number of blows of a 140 pound hammer falling 30 inches to drive the Split-Spoon sampler one foot. Soil samples designated as "MC" were obtained in using Thick-Walled, Ring-Lined, Split-Barrel Drive sampling techniques. Recovered samples were sealed in containers, labeled, and protected for transportation to the laboratory for testing.

### WATER LEVEL MEASUREMENTS

Water levels indicated on the boring logs are levels measured in the borings at the times indicated. In relatively high permeable materials, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels is not possible with only short-term observations.

## SOIL PROPERTIES & DESCRIPTIONS

Descriptions of the soils encountered in the soil test borings were prepared using Visual-Manual Procedures for Descriptions and Identification of Soils.

### PARTICLE SIZE

Boulders	12 in. +	Coarse Sand	4.75mm-2.0mm	Silt	0.075mm-0.005mm
Cobbles	12 in.-3 in.	Medium Sand	2.0mm-0.425mm	Clay	<0.005mm
Gravel	3 in.-4.75mm	Fine Sand	0.425mm-0.075mm		

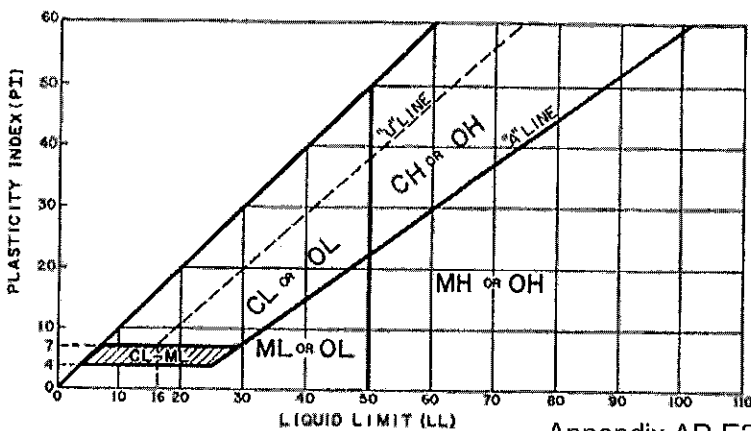
### COHESIVE SOILS

### COHESIONLESS SOILS

### COMPONENT %

<u>Consistency</u>	<u>Unconfined Compressive Strength (Qu) (tsf)</u>	<u>Relative Density</u>	<u>'N' Value</u>	<u>Description</u>	<u>Percent (%)</u>
Very Soft	<0.25	Very Loose	0 - 3	Trace	<5
Soft	0.25 - 0.5	Loose	4 - 9	Few	5 - 10
Firm	0.5 - 1.0	Medium Dense	10 - 29	Little	15 - 25
Stiff	1.0 - 2.0	Dense	30 - 49	Some	30 - 45
Very Stiff	2.0 - 4.0	Very Dense	≥ 50	Mostly	50 - 100
Hard	> 4.0				

### PLASTICITY CHART



### ROCK QUALITY DESIGNATION (RQD)

<u>Description</u>	<u>RQD (%)</u>
Very Poor	0 - 25
Poor	25 - 50
Fair	50 - 75
Good	75 - 90
Excellent	90 - 100

# olsson



PROJECT NAME <b>Buckner Tarsney Road RCB</b>	CLIENT <b>Jackson County, Missouri</b>
PROJECT NUMBER <b>C18-1897</b>	LOCATION <b>Grain Valley, Missouri</b>

ELEVATION (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	DEPTH (ft)	SAMPLE TYPE NUMBER	CLASSIFICATION (USCS)	BLOWS/6" N-VALUE	UNC. STR. (tsf)	MOISTURE (%)	DRY DENSITY (pcf)	LL/PI (%)	ADDITIONAL DATA/REMARKS
	APPROX. SURFACE ELEV. (ft): 799		0								
	ASPHALTIC CONCRETE		0.8'								
	AGGREGATE BASE		1.0'								
	FILL			SS 1		9-3-3 N=6		20.6			
	Brown with gray clay, gravel, moist		3.0'								
795	FAT CLAY			U 2				25.5	96.6		P.P.=2.4
	Stiff, brown with trace gray, moist, trace gravel		5								
			6.0'								
	Stiff, light brown and gray, moist			U 3			1.6	24.7	101.1	53/34	P.P.=2.6
790			10								
			14.0'								
785	WEATHERED SHALE			SS 4		6-9-16 N=25		19.3			
	Light brown with gray		15								
			19.0'								
780			20	SS 5		8-32-50/2.5"		14.4			

CONTINUED NEXT PAGE

WATER LEVEL OBSERVATIONS		<b>OLSSON, INC.</b> 1700 E. 123RD STREET OLATHE, KANSAS 66061	STARTED: 9/16/20	FINISHED: 9/16/20
WD	∇ Not Performed		DRILL CO.: TSI	DRILL RIG: CME 550
IAD	∇ Not Performed		DRILLER: RONNIE	LOGGED BY: A. BORGES
AD	∇ Not Performed		METHOD: CONTINUOUS FLIGHT AUGER	



0133011

**BOREHOLE REPORT NO. B-2**

**Sheet 2 of 2**

PROJECT NAME <b>Buckner Tarsney Road RCB</b>		CLIENT <b>Jackson County, Missouri</b>									
PROJECT NUMBER <b>C18-1897</b>		LOCATION <b>Grain Valley, Missouri</b>									
ELEVATION (ft)	<input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby Tube  <b>MATERIAL DESCRIPTION</b>	GRAPHIC LOG	DEPTH (ft)	SAMPLE TYPE NUMBER	CLASSIFICATION (USCS)	BLOWS/6" N-VALUE	UNC. STR. (tsf)	MOISTURE (%)	DRY DENSITY (pcf)	LL/PI (%)	ADDITIONAL DATA/REMARKS
	<b>SHALE</b> <i>Gray (continued)</i>										
			23.9'	<input checked="" type="checkbox"/> SS 6		50/5"		10.3			

**BASE OF BORING AT 23.9 FEET**

WATER LEVEL OBSERVATIONS		<p align="center"><b>OLSSON, INC.</b>  <b>1700 E. 123RD STREET</b>  <b>OLATHE, KANSAS 66061</b></p>	STARTED: 9/16/20	FINISHED: 9/16/20
WD	<input checked="" type="checkbox"/> Not Performed		DRILL CO.: TSI	DRILL RIG: CME 550
IAD	<input checked="" type="checkbox"/> Not Performed		DRILLER: RONNIE	LOGGED BY: A. BORGES
AD	<input checked="" type="checkbox"/> Not Performed		METHOD: CONTINUOUS FLIGHT AUGER	

OLSSON, INC.

**BOREHOLE REPORT NO. B-3**

**Sheet 1 of 2**

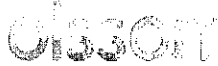
PROJECT NAME: **Buckner Tarsney Road RCB** CLIENT: **Jackson County, Missouri**

PROJECT NUMBER: **C18-1897** LOCATION: **Grain Valley, Missouri**

ELEVATION (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	DEPTH (ft)	SAMPLE TYPE NUMBER	CLASSIFICATION (USCS)	BLOWS/6" N-VALUE	UNC. STR. (tsf)	MOISTURE (%)	DRY DENSITY (pcf)	LL/PI (%)	ADDITIONAL DATA/REMARKS
	APPROX. SURFACE ELEV. (ft): 798.5		0								
	ASPHALTIC CONCRETE		0.5'								
	AGGREGATE BASE		1.0'								
	FILL										
	Brown with gray clay, gravel, moist			SS 1		9-3-4 N=7		25.6			
795	FAT CLAY		3.0'								
	Firm, dark brown, moist			SS 2		2-3-4 N=7		27.8			
			7.0'								
	Firm, dark brown with brown, wet			U 3			0.8	32.1	90.7		P.P.=0.7
790			12.0'								
	Soft, brown with gray, silty, wet			U 4			0.3	29.5	94.3		P.P.=1.6
785			17.5'								
	Firm, gray with brown, silty, wet			SS 5		2-3-3 N=6		30.3			
780			20								

CONTINUED NEXT PAGE

WATER LEVEL OBSERVATIONS		<b>OLSSON, INC.</b> <b>1700 E. 123RD STREET</b> <b>OLATHE, KANSAS 66061</b>	STARTED: 9/17/20	FINISHED: 9/17/20
WD	▽ 14.0 ft		DRILL CO.: TSI	DRILL RIG: CME 550
IAD	▽ 14.0 ft after 0 Hrs		DRILLER: RONNIE	LOGGED BY: A. BORGES
AD	▽ Not Encountered		METHOD: CONTINUOUS FLIGHT AUGER	



# BOREHOLE REPORT NO. B-3

Sheet 2 of 2

PROJECT NAME <b>Buckner Tarsney Road RCB</b>	CLIENT <b>Jackson County, Missouri</b>
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PROJECT NUMBER <b>C18-1897</b>	LOCATION <b>Grain Valley, Missouri</b>
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ELEVATION (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	DEPTH (ft)	SAMPLE TYPE NUMBER	CLASSIFICATION (USCS)	BLOWS/6" N-VALUE	UNC. STR. (tsf)	MOISTURE (%)	DRY DENSITY (pcf)	LL/PI (%)	ADDITIONAL DATA/ REMARKS
		<input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby Tube	20								
	<i>Firm, gray with brown, silty, wet (continued)</i>										
	<b>SHALE</b>		22.0'								
775	Gray										
			24.0'	<input checked="" type="checkbox"/> SS 6		50		17.3			
<b>BASE OF BORING AT 24.0 FEET</b>											

WATER LEVEL OBSERVATIONS WD    ▽ 14.0 ft IAD   ▽ 14.0 ft after 0 Hrs AD    ▽ Not Encountered	<b>OLSSON, INC.</b> <b>1700 E. 123RD STREET</b> <b>OLATHE, KANSAS 66061</b>	STARTED:    9/17/20    FINISHED:    9/17/20 DRILL CO.:    TSI        DRILL RIG:    CME 550 DRILLER:     RONNIE    LOGGED BY:    A. BORGES METHOD: CONTINUOUS FLIGHT AUGER
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PROJECT NAME: **Buckner Tarsney Road RCB** CLIENT: **Jackson County, Missouri**

PROJECT NUMBER: **C18-1897** LOCATION: **Grain Valley, Missouri**

ELEVATION (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	DEPTH (ft)	SAMPLE TYPE NUMBER	CLASSIFICATION (USCS)	BLOWS/6" N-VALUE	UNC. STR. (tsf)	MOISTURE (%)	DRY DENSITY (pcf)	LL/PI (%)	ADDITIONAL DATA/REMARKS
	ASPHALTIC CONCRETE		0								
	FILL Brown with gray clay, gravel, moist		1.0'	SS 1		9-4-4 N=8		21.5			
795	FAT CLAY Firm, brown and dark brown, moist, trace gravel		3.0'	SS 2		3-3-4 N=7		23.5			
	Firm, dark gray and brown, moist		6.0'								
790				U 3			0.9	27.5	94.9		P.P.=0.5
			13.0'								
785	LEAN CLAY Stiff, gray with light brown, silty, moist		15	U 4			1.2	19.5	108.5		P.P.=2.1
780			19.0'								
			20	SS 5		12-24-32 N=56		15.8			

CONTINUED NEXT PAGE

WATER LEVEL OBSERVATIONS		<b>OLSSON, INC.</b> <b>1700 E. 123RD STREET</b> <b>OLATHE, KANSAS 66061</b>	STARTED: 9/17/20	FINISHED: 9/17/20
WD	∇ Not Encountered		DRILL CO.: TSI	DRILL RIG: CME 550
IAD	∇ Not Encountered		DRILLER: RONNIE	LOGGED BY: A. BORGES
AD	∇ Not Encountered		METHOD: CONTINUOUS FLIGHT AUGER	

Olsson

**BOREHOLE REPORT NO. B-4**

**Sheet 2 of 2**

PROJECT NAME: **Buckner Tarsney Road RCB** CLIENT: **Jackson County, Missouri**

PROJECT NUMBER: **C18-1897** LOCATION: **Grain Valley, Missouri**

ELEVATION (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	DEPTH (ft)	SAMPLE TYPE NUMBER	CLASSIFICATION (USCS)	BLOWS/6" N-VALUE	UNC. STR. (tsf)	MOISTURE (%)	DRY DENSITY (pcf)	LL/PI (%)	ADDITIONAL DATA/REMARKS
	<b>WEATHERED SHALE</b> <i>Brown with gray (continued)</i>		20								
775	<b>SHALE</b> <i>Gray</i>		23.5' 24.0'	SS 6		50		11.3			

--- 23.5'  
--- 24.0'  
**BASE OF BORING AT 24.0 FEET**

WATER LEVEL OBSERVATIONS	
WD	∇ Not Encountered
IAD	∇ Not Encountered
AD	∇ Not Encountered

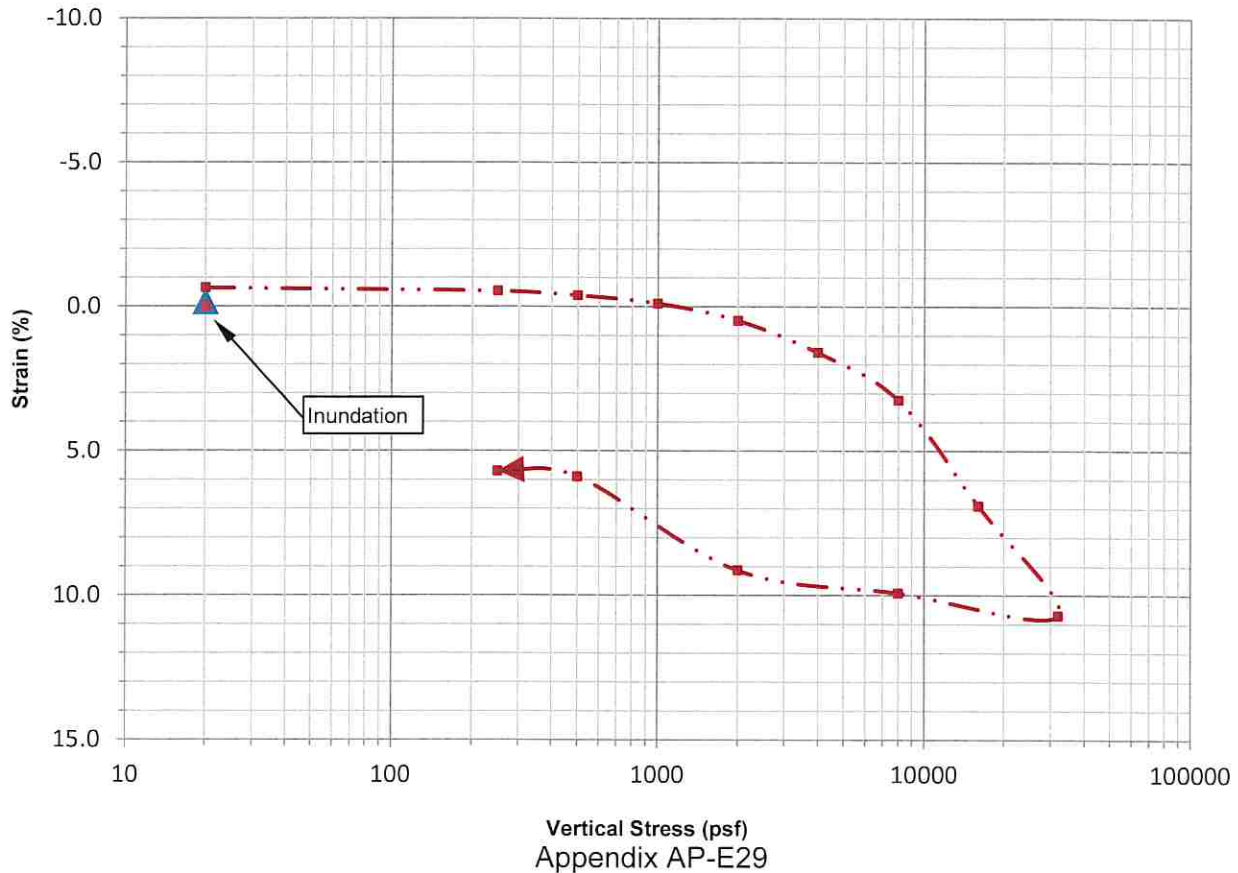
**OLSSON, INC.**  
1700 E. 123RD STREET  
OLATHE, KANSAS 66061

STARTED:	9/17/20	FINISHED:	9/17/20
DRILL CO.:	TSI	DRILL RIG:	CME 550
DRILLER:	RONNIE	LOGGED BY:	A. BORGES
METHOD: CONTINUOUS FLIGHT AUGER			

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**APPENDIX C**  
**Additional Test Results**

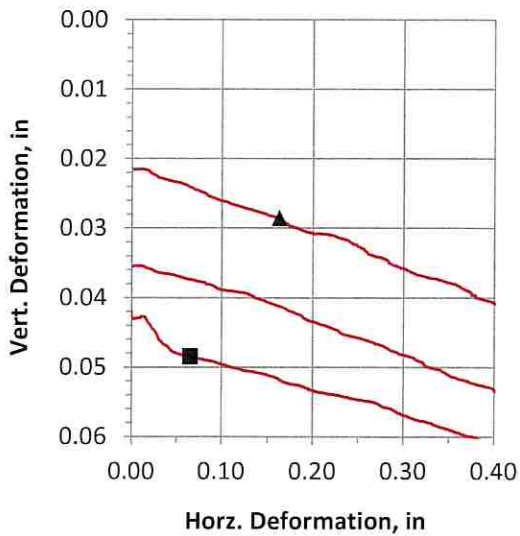
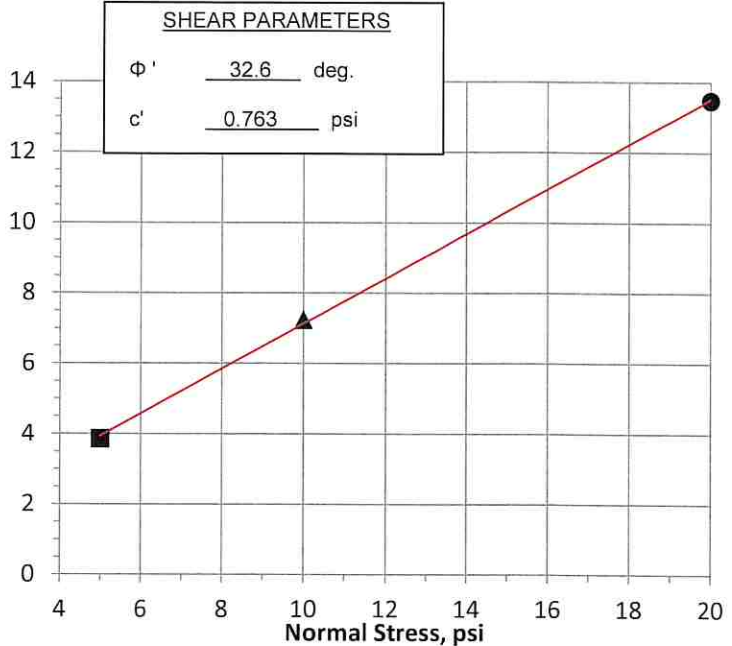
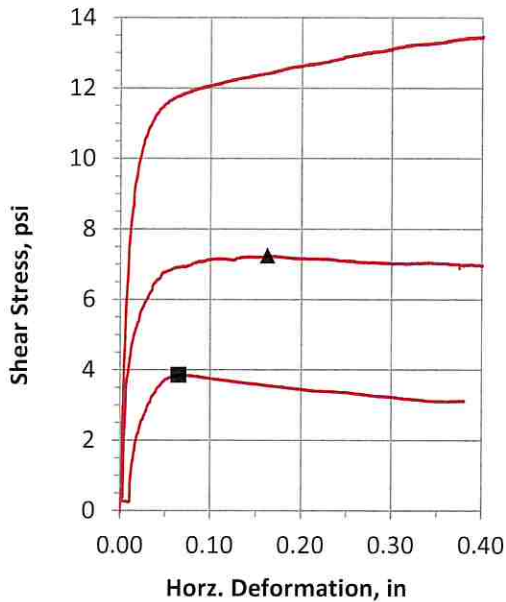
Project Information			
Project Name:	Buckner Tarsney Road		
Project Number:	C18-1897		
Client Name:	Jackson County, MO		
Project Location:	Grain Valley, Missouri		
Sample Information			
Boring No.:	B-3	Before Test	After Test
Sample No.:	U-3	Water Content (%):	23.3      19.9
Depth.:	8.0' - 10.0'	Dry Unit Weight (pcf):	98.2      104.1
Elevation.:	N/A	Saturation (%):	87.9      86.7
Date Tested:	2-Nov-20	Void Ratio:	0.720      0.620
Tested By:	J. Caulfield	Specimen Mass (lb.):	0.344      0.334
Checked By:	D. Sileo	Liquid Limit:	N/A
		Plasticity Index:	N/A
Sample Description:	(CH) Fat clay, very dark brown, moist		
Test Data			
Initial Height ( $h$ ):	1.000		
Height After Swell ( $h_1$ ):	1.006		
Magnitude of Swell (%):	0.6		
Swell Pressure (psf):	1192		
Final Height ( $h_2$ ):	0.943		





1700 E. 123rd St. TEL 913.829.0078  
 Olathe, KS 66061 FAX 913.829.0258  
[www.olssonassociates.com](http://www.olssonassociates.com)

## Direct Shear ASTM D 3080



Symbol	■	▲	●	
Test No.	1	2	3	
Sample No.	B-4 U-4	B-4 U-4	B-4 U-4	
Depth, ft	13.0'-15.0'	13.0'-15.0'	13.0'-15.0'	
Shape	Circular	Circular	Circular	
Initial	Diameter, in	2.5	2.5	2.5
	Area, in <sup>2</sup>	4.91	4.91	4.91
	Height, in	0.980	0.880	1.000
	Water Content, %	18.9	19.0	18.2
	Dry Density, pcf	108.6	108.9	107.8
	Saturation, %	92.4	93.6	87.3
Consol.	Height, in	0.987	1.011	0.956
	Void Ratio	0.378	0.550	0.485
	Final	Water Content, %	25.2	22.0
Dry Density, pcf		117.2	117.3	115.0
Saturation, %		100.0	100.0	100.0
Void Ratio		0.437	0.437	0.465
Normal Strees, psi	5	10	20	
Max. Shear Stress, psi	3.9	7.2	13.5	
Time to Failure, min	226	480	1093	
Disp. Rate, in/min	0.002	0.002	0.002	
Estimated Specific Gravity	2.7	2.7	2.7	
Liquid Limit	N/A	N/A	N/A	
Plastic Limit	N/A	N/A	N/A	
Plasticity Index	N/A	N/A	N/A	

Project Name: Buckner Tarsney Road  
 Location: Grain Valley, Missouri  
 Project No: C18-1897  
 Boring No: B-4  
 Sample Type: U-4

Description: Silty clay, gray with brown, moist, trace fine sand.  
 Remarks: N/A





Planning and Zoning Division
Public Works Department
Jackson County, Missouri
Application for Special Use Permit

Date Printed:
02/24/2021

Application #: SU20210013 Application Date: 02/24/2021 Project ID No.: PR20210056

Permission is hereby requested by
To perform the following described work on:

Type of Work: Floodplain Dev Permit Work Sub Type: Floodplain Dev Permit

Street Address: Lot: Subdivision:
Buckner Tarsney RD

Section: Township: Range:

General Location: 12x9 RCB Construction
Permit Fee Received

Signature of Owner Signature of Agent / Contractor

(This is an Application, NOT a Permit. Work cannot start until a Permit has been RECEIVED.)

Owner: JACKSON COUNTY PUB Agent: Contractor:
ENGINEERING DIVISION
303 W WALNUT
INDPENDENCE, MO 64050
816-881-4499 Office

DO NOT START ANY CONSTRUCTION
UNTIL YOU RECEIVE YOUR PERMIT.

- 1: The permit will state the minimum allowable size culvert pipe to be used.
2: It will be mailed to address given on the application.
3: If a concrete drive is installed, inspection will need to be conducted prior to the concrete being poured.
4: Gravel and asphalt drive inspection will be conducted when drive is complete.

## FLOODPLAIN DEVELOPMENT PERMIT/APPLICATION

Application No.: SU-2021-0013 Date: 2-24-21

TO THE ADMINISTRATOR: The undersigned hereby makes application for a permit to develop in the Special Flood Hazard Area (SFHA) or "floodplain." The work to be performed, including flood protection works, is as described below and in attachments hereto. The undersigned agrees that all such work shall be in accordance with the requirements of the Floodplain Management Ordinance and with all other applicable county/city ordinances, federal programs, and the laws and regulations of the State of Missouri.

Olsson ATTN Ethan Price	02/15/2021	Jackson County Public Works Department
Owner or Agent	Date	Builder
7301 W. 133rd Street, Suite 200 Overland Park, KS 66213		303 W. Walnut Street Independence, MO 64050
Address		Address
913-381-1170		816-581-4530
Telephone Number		Telephone Number

**SITE DATA**

1. Location: SW 1/4; SW 1/4; Section 2; Township 48N; Range 30W  
 Street Address: S. Buckner Tarsney Road 1500 feet south of RD Mize Road, Grain Valley, MO

2. Type of Development: Filling  Grading  Excavation  Minimum Improvement   
 Routine Maintenance  Substantial Improvement  New Construction  Other

3. Description of Development: Removal of the existing reinforced box culvert (RBC) at S. Buckner Tarsney Road and the construction of a new double 12' x 9' reinforced box culvert.  
 Structure size, improvement value, etc are not applicable because the structure is not a building. Additionally freezeboard requirements do not apply.

4. Premises: Structure Size n/a ft. By n/a ft. Area of Site n/a Sq. Ft.  
 Principal Use: Stormwater Conveyance Accessory Uses (storage, parking, etc.): \_\_\_\_\_

5. Value of Improvement (fair market): \$ n/a Pre-Improvement/Assessed Value of Structure: \$ n/a

6. Is the Property Located in a Designated FLOODWAY? Yes  No

**IF ANSWERED YES, CERTIFICATION MUST BE PROVIDED PRIOR TO THE ISSUANCE OF A PERMIT TO DEVELOP, THAT THE PROPOSED DEVELOPMENT WILL RESULT IN NO INCREASE IN THE BASE (1%) FLOOD ELEVATIONS.**

7. Is the Property Located in a Designated Floodplain FRINGE or a Floodplain (SFHA) without a Designated FLOODWAY? Yes  No

8. Elevation of the 1% Base Flood (ID source) 799.5 (from HEC-RAS existing conditions model) (NAVD 88) NGVD/NAVD

9. Elevation of the Proposed Development Site n/a (not a building) NGVD/NAVD

10. Community Ordinance Elevation/Floodproofing Requirement n/a (not a building) NGVD/NAVD

11. NEIP Flood Insurance Rate Map Panel(s) Number(s) map panel # 29095C0452G

12. Other Permits Required? 

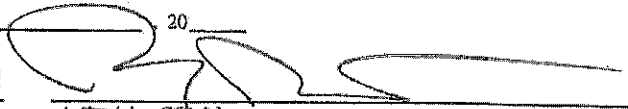
Cops of Engineer 404 Permit:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Provided <input type="checkbox"/>
State Department of Natural Resources 401 Permit:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Provided <input type="checkbox"/>
Environmental Protection Agency NPDES Permit:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Provided <input type="checkbox"/>

All Provisions of Ordinance Number \_\_\_\_\_, the "Floodplain Management Ordinance", shall be in compliance.

**PERMIT APPROVAL/DENIAL**

Plans and Specifications Approved/Denied this \_\_\_\_\_ Day of \_\_\_\_\_ 20

Signature of Property Owner or Agent  
 Eric Shelton, Senior Engineer  
 Print Name and Title

  
 Authorizing Official  
 Randy Dehl  
 Print Name and Title  
 2-24-21

THIS PERMIT IS ISSUED WITH THE CONDITION THAT THE LOWEST FLOOR (INCLUDING BASEMENT FLOOR) OF ANY NEW OR SUBSTANTIALLY IMPROVED RESIDENTIAL BUILDING WILL BE ELEVATED \_\_\_\_\_ FOOT/FEET ABOVE THE BASE FLOOD ELEVATION. IF THE PROPOSED DEVELOPMENT IS A NON-RESIDENTIAL BUILDING, THIS PERMIT IS ISSUED WITH THE CONDITION THAT THE LOWEST FLOOR (INCLUDING BASEMENT) OF A NEW OR SUBSTANTIALLY IMPROVED NON-RESIDENTIAL BUILDING WILL BE ELEVATED OR FLOODPROOFED \_\_\_\_\_ FOOT/FEET ABOVE THE BASE FLOOD ELEVATION.

THIS PERMIT IS USED WITH THE CONDITION THAT THE DEVELOPER/OWNER WILL PROVIDE CERTIFICATION BY A REGISTERED ENGINEER, ARCHITECT, OR LAND SURVEYOR OF THE "AS-BUILT" LOWEST FLOOR (INCLUDING BASEMENT) ELEVATION OF ANY NEW OR SUBSTANTIALLY IMPROVED BUILDING COVERED BY THIS PERMIT.

State of Missouri Floodplain Development Permit No.: SJ-2021-0013

ENGINEERING "NO-RISE" CERTIFICATION

Community: Grain Valley County: Jackson State: Mo

Applicant: Jackson County Date: 02/15/2021

Engineer: Olsson

Address: 303 W. Walnut Street Independence, MO 64050

Address: 7301 W. 133rd Street, Suite 200, Overland Park, KS 66213

Telephone: 816-881-4530

Telephone: 913-381-1170

SITE DATA

1. Location: SW 1/4; SW 1/4; Section 2; Township 48N; Range 30W

Street Address: S. Buckner Tarsney Road 1500 feet south of RD Mize Road, Grain Valley, MO

2. Panel(s) No. of NFIP map(s) affected: 29095C0452G

3. Type of Development: Filling  Grading  Excavation  Minor Improv.   
Substantial Improv.  New Construction  Other

4. Description of Development: Removal of existing reinforced box culvert (RCB) at S. Buckner Tarsney Road and the construction of a new double 12' x 9' reinforced box culvert.

5. Name of Flooding Source: Sin-A-Bar Creek

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This is to certify that I am a duly qualified engineer licensed to practice in the State of Missouri. It is to further certify that the attached technical data supports the fact that the proposed development described above will not create any increase to the Base Flood Elevations, on the named flooding source, at published cross sections in the Flood Insurance Study for the above community dated 01/20/2017 and will not create any increase to the Base Flood Elevations at unpublished cross sections in the vicinity of the proposed development.

Name: Eric Shelton

Signature: \_\_\_\_\_ Digitally signed by Eric Shelton Date: 02/23/2021  
Date: 02/23/2021

Title: Senior Engineer License No.: 2015000604

(Seal)