

PROJECT SPECIFICATIONS
FOR
STROUP ROAD BRIDGE
STP-5403 (656)



County of Jefferson, Missouri
P.O. BOX 100
HILLSBORO, MO 63050
May 24, 2016

REQUEST FOR BID

BID OF

Bidder Name: _____

Bidder Address: _____

FOR CONSTRUCTING:
A Bridge Replacement Over Little Creek
In Jefferson County, Missouri

APPROVED FOR CONSTRUCTION

BY: _____ DATE: 4/22/16
(County Engineer)



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BID NOTICE

Sealed bids for **STROUP ROAD BRIDGE STP-5403 (656)** will be received at the office of The Department of the County Clerk, Jefferson County Administration Center, 729 Maple Street, Hillsboro, Missouri until 2:00 o'clock P.M. (**CDST**) on **May 24, 2016**, and at that time will be publicly opened and read. All bids shall be submitted in triplicate in an opaque sealed envelope, marked with the Project title, name and address of the Bidder, and accompanied by the other required documents. Bids submitted via fax or electronic will be rejected. Late Bids will not be accepted and will be returned to the sender, unopened.

A **Pre-Bid Conference** will be held on **Tuesday, May 10th, 2016 at 10:00 AM**, to address questions and concerns regarding the bid specifications and bid documents and view the site, if needed. Attendance at the pre-bid conference is strongly encouraged but not mandatory. Meeting Place: 2nd Floor Training Conference Room #206 Jefferson County Annex Building, 725 Maple Street, Hillsboro, MO.

The proposed work includes:

The removal of existing bridge structure and construction of new bridge structure relocated approximately 100 ft upstream with associated road improvements on Stroup Road. The work in general will consist of bridge replacement, excavation, placing fill, bituminous surfacing, guardrail installation, and rock blanket. The total length of project is approximately 646 feet.

Work shall be in accordance with the provided Specifications, and Job Special Provisions and Plans. Where not specifically covered by the Specifications, or Job Special Provisions or Plans, the Contractor shall adhere to the 2011 Edition of the "Missouri Standard Specifications for Highway Construction", and all supplemental revisions.

Plans and specifications for this project will be available, at no cost, as a downloadable file from the Jefferson County website (<http://www.jeffcomo.org/PublicWorksProjects.aspx?nodeID=Purchasing>), beginning Friday, April 29, 2016. The bidder will be responsible to check the County's website for addendum(s) regarding this project prior to bid opening. All potential bidders must complete the "Plan Holder Contact Information" form and submit this form to Public Works at pwprojects@jeffcomo.org and request placement on the bidder's list.

All labor used in the construction of this public improvement shall be paid a wage no less than the prevailing hourly rate of wages of work of a similar character in this locality as established by the State of Missouri's "Annual Wage Order" that is currently effective 10 calendar days prior to bid opening.

The County of Jefferson, Missouri hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, businesses owned and controlled by socially and economically disadvantaged individuals will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, religion, creed, sex, age, ancestry, or national origin in consideration for an award.

All bidders must be on MoDOT's Qualified Contractor List per Section 102.2 of the Missouri Standard Specifications for Highway Construction, 2011 Edition including all revisions. **The contractor questionnaire must be on file 7 days prior to bid opening.**

Contractors and sub-contractors who sign a contract to work on public works project must provide a 10-Hour OSHA construction safety program, or similar program approved by the Department of Labor and Industrial Relations, to be completed by their on-site employees within sixty (60) days of beginning work on the construction project.

A certified or cashier's check or a bid bond in the amount of 5% shall be submitted with each proposal. **A certificate of insurance shall be submitted with each proposal.**

All bids shall be made on the forms provided. The County of Jefferson, Missouri reserves the right to reject any or all bids, to waive any informality in the bids received, and to award the contract to the lowest, responsive, responsible bidder with MoDot concurrence.

The DBE Goal for this project is **7%**. On the Job Training Requirements is 0 hours as trainee goal.

No 2nd tier subcontracting will be allowed on this project.

END BID NOTICE

BID SUBMITTAL PACKAGE



JEFFERSON COUNTY, MISSOURI DEPARTMENT OF PUBLIC WORKS

PROJECT NAME: STROUP ROAD BRIDGE

PROJECT NUMBER: STP-5403 (656)

BID OPENING DATE: May 24, 2016 @ 2:00 o'clock P.M. (CDST)

Funding Source: Federal Highway Administration Surface Transportation Project (STP)

County Project Manager: Robert Russell (636)797-5342 rrussell@jeffcomo.org

BIDDER'S NAME:_____

IN ORDER TO BE CONSIDERED A RESPONSIVE, RESPONSIBLE BIDDER, THE CONTRACTOR MUST READ, UNDERSTAND, COMPLETE AND SUBMIT 3 COPIES OF ALL FORMS WITHIN THIS BID SUBMITTAL PACKAGE (INCLUDING THIS COVER AND ALL SHEETS WITH THE BID SUBMITTAL BORDER), ALONG WITH OTHER SUBMITTAL REQUIREMENTS AS STATED ON THE BIDDER CHECKLIST.

The County does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

PLAN HOLDER CONTACT INFORMATION

All potential bidders **must** complete this form and submit it to the Jefferson County email address listed below in order to provide contact information as required. All other plan holders may submit this form at their own option. Addendums will be posted on the county website. In the event of disruption of website services, all such information will be communicated to all registered plan holders.

Project:	STROUP ROAD BRIDGE STP-5403 (656)
Plans & Specifications:	\$0.00 AVAILABLE ONLINE
Bid Opening Date:	May 24, 2016
Estimate:	\$1,085,000.00

Company Name*:	
Contact Name*:	
Address*:	
Phone*:	
Email*:	

*required information

Email this
completed form to:

pwprojects@jeffcomo.org

BIDDER CHECKLIST

- ☐ 1. 3 collated copies of all of the following documents encompass a complete bid submittal
 - a) Complete and Submit Plan Holder's List Form prior to bid submittal (email before bid opening)
 - b) Bid Submittal Cover Sheet with bidder's name printed or typed
 - c) Instructions and Notices to Contractors initialed on each page, all spaces filled, signed.
 - d) Balanced Bid Form, complete, signed, and embossed (if corporation), **addenda acknowledged and attached**
 - e) Bid Guaranty/Bid Bond (Assurance Company's form is valid substitute to generic form herein)
 - f) Bidder's Acknowledgement completed and signed
 - g) Affidavit of Federal Employment Authorization (Annual Worker Eligibility Verification Affidavit)
 - h) Disadvantaged Business Enterprise (DBE) Identification (within 3 days of bid opening)
 - i) Certification Regarding Anti-collusion (see notice 12)
 - j) Certification Regarding Use of Contract Funds for Lobbying (see notice 12)
 - k) Certification Regarding Debarment and Suspension (see notice 12)
 - l) Certification Regarding Affirmative Action and Equal Opportunity (see notice 12)
 - m) Bid to be submitted in ink with proper signatures with no white out or initialed changes
 - n) Enclose Certificate of Insurance
- ☐ 2. Submit completed Contractor Questionnaire and/or Contractor Prequalification Questionnaire with attachments not later than seven (7) days prior to the date and hour of the bid opening. See Secs 101-103 of the Standard Specifications, and Rule 7 CSR 10-15.900, "Prequalification to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website (required on highway and bridge projects)
- ☐ 3. For submittal of paper bids, the complete set of bidding documents includes all information through the DBE form. The Technical Specifications/Job Special Provisions are for the bidder's information only and is not to be returned with the bid.
- ☐ 4. If submitting the bid by mail, it is to be completed, executed, and submitted in a sealed envelope addressed to County of Jefferson, Missouri. **Provide the vendor name, vendor address, vendor number, county, route and federal project number on the outside of the envelope (if applicable).**
- ☐ 5. Please read all items in the bidding document carefully. For paper bids, complete all items in **ink** or by **typing** in the information.
- ☐ 6. Sign this bidding document properly. If submitted in the name of a firm or corporation, the legal name of the firm or corporation should appear in the space designated, and be signed for by one or more persons legally qualified to execute papers in the name of said firm or corporation. Affix Corporate Seal if the Bidder is a Corporation.
- ☐ 7. For paper bids, submit a bid bond executed by bidder and surety, or attach cashier's check to the bid bond form.
- ☐ 8. For paper bids, staple addenda (if applicable) to the bid in the appropriate part of the bid. The letter accompanying the addenda should be stapled to the inside of the back cover of the bid and returned. The bidder should retain a duplicate copy.
- ☐ 9. Common Mistakes:
 - a) Not signing the bid
 - b) Not incorporating the addendum into the bidding documents, including attaching the letter to the bid
 - c) Not providing a bid bond
 - d) Using a different bid bond form than the one provided
 - e) Using pencil to fill out the bid
 - f) Using white out to make corrections to the itemized bid sheets
 - g) Not initialing changes made

All questions concerning the bid document preparation can be directed to the Jefferson County Public Works Department at 636-797-5342. Project specific questions can be directed to ROBERT RUSSELL.

Special Needs: If you have special needs addressed by the Americans with Disabilities Act, please notify Jefferson County Public Works Department, at 636-797-6080 or through Missouri Relay System, TDD 1-800-735-2966, at least five (5) working days prior to the bid opening.

INSTRUCTIONS AND NOTICES TO CONTRACTORS

BIDDER SHALL INITIAL EACH SHEET ACKNOWLEDGING UNDERSTANDING AND ACCEPTANCE

Sealed bids for the proposed work will be addressed and delivered to the office of The County Clerk, 729 Maple Street, Jefferson County Administration Center, Hillsboro, Missouri until 2:00 o'clock P.M. (CDST) on May 24, 2016, and at that time will be publicly opened. All bids shall be submitted in triplicate in an opaque sealed envelope, marked with the Project title, name and address of the Bidder, and accompanied by the other required documents. Bids submitted via fax or electronic will be rejected. Late Bids will not be accepted and will be returned to the sender, unopened.

This project has Federal Funding so the following terms apply:

- The prime contractor must be on MoDOT's approved contractor listing at least 7 days before the day of the bid opening in order for MoDOT to concur with the award of this project.
- Only work performed by DBE subcontractors that appear on MoDOT's approved listing at the time of the bid opening will be applied towards calculating the DBE Goal.
- All prospective bidders shall read and have an understanding of the DBE Contract Provisions. The low bidder and the second low bidder shall submit the DBE Submittal forms within three working days after the letting date. Failure to do so may be cause for rejection of the bid. No extension of time will be allowed for any reason and failure to deliver the completed DBE Submittal forms by 4:00 p.m. on the third working day after the letting will be cause for rejection of the low bid and the proposed guaranty will become the property of the Owner.
- MoDOT will only concur with awarding the contract to a responsible bidder who has submitted the lowest, responsive bid. A responsive bid is one that meets all requirements of the advertisement and proposal, and "responsible" is defined as one who is physically organized and equipped with the financial wherewithal to undertake and complete the contract.

(1) PROPOSED WORK:

The removal of existing bridge structure and construction of new bridge structure relocated approximately 100 ft upstream with associated road improvements on Stroup Road. The work in general will consist of bridge replacement, excavation, placing fill, bituminous surfacing, guardrail installation, and rock blanket. The total length of project is approximately 646 feet.

- (2) PLANS AND SPECIFICATIONS:** Plans (if applicable) and specifications for this project are available through the Jefferson County, Missouri Government website (Jeffcomo.org) under the "Invitation for Bids/Request for Proposals" tab in the "Quick Links" box in the upper right corner of the homepage. It is the bidder's responsibility to obtain these documents from the provided source, including copies for use in construction if awarded the project. Paper copies of any documents will require advance notice and are subject to administrative fees for labor and material costs, similar to that of a "Freedom of Information Act" request. Plans, specifications, and any other project documents are made available only for the purposes of obtaining bids, and as a resource to the awarded contractor. These documents do not confer a license or grant for any other use.

- (3) CONTRACT DOCUMENTS AND SITE CONDITIONS:** Before submitting a Bid, each Bidder must (a) examine the Contract Documents thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; and (d) study and carefully correlate Bidder's observations with the Contract Documents. Each bidder will, at his own expense, make such investigations and tests as the bidder may deem necessary to determine his Bid for performance of the Work in accordance with the time, price and other terms and conditions of the Contract Documents. On request, the County will provide each bidder access to the site to conduct such investigations and tests, as each bidder deems necessary for submission of his Bid. The lands upon which the Work is to be performed rights - of - way for access thereto and other lands designated for use by the Contractor in performing the work are identified in the projects specifications or plans.

BIDDER'S INITIALS INDICATING UNDERSTANDING AND ACCEPTANCE _____

- (4) COMPLIANCE WITH CONTRACT PROVISIONS:** The bidder, having examined and being familiar with the local conditions affecting the work, and with the contract, contract documents, including the Missouri Highways and Transportation Commission's "Missouri Standard Specifications for Highway Construction, 2011," and "Missouri Standard Plans for Highway Construction, 2009" and Supplemental Revisions (if applicable), their revisions, and the request for bid, including appendices, the special provisions and plans, hereby proposes to furnish all labor, materials, equipment, services, etc., required for the performance and completion of the work. All references are to the Missouri Standard Specifications for Highway Construction, as revised, unless otherwise noted. All questions about the meaning or intent of the Contract Documents shall be submitted to the county project manager as stated on the "Bidder Checklist." Replies will be issued by Addenda, mailed or electronically delivered, to all parties recorded by the County Engineer as having received the Bidding Documents. Oral and other interpretations or clarifications will be without legal effect.

The following documents are available on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business with MoDOT" "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to October 2009 Missouri Std. Plans
For Highway Construction (if applicable)

These supplemental bidding documents contain all current revisions to the bound printed versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

Please note that within the above-listed documents, the term "Commission" shall be replaced with the term, "County of Jefferson", and the term "Engineer" is a reference to the County Director of Public Works/Highway Engineer.

The contracting authority for this contract is Jefferson County Public Works.

- (5) PRIME CONTRACTOR REQUIREMENTS:** The prime contractor must be on MoDOT's approved contractor listing at least 7 days before the day of the bid opening in order for MoDOT to concur with the award of this project. The limitation in Sec 108.1.1 of the Missouri Standard Specifications for Highway Construction that "the contractor's organization shall perform work amounting to not less than 40 percent of the total contract cost" is waived for this contract. Instead, the less restrictive terms of the Federal Highway Administration's rule at Title 23 Code of Federal Regulations (CFR) § 635.116(a) shall apply, so that the contractor must perform project work with its own organization equal to and not less than 30 percent of the total original contract price. Second-tier subcontracting will not be permitted on this contract. All other provisions in Sec 108.1.1 et seq. of the Missouri Standard Specifications for Highway Construction shall remain in full force and effect, and shall continue to govern the contractor and its subcontractors, in accordance with the provisions of Title 23 CFR § 635.116.

- (6) SUBCONTRACTORS:** No subcontract may be awarded by the prime contractor under this contract to anyone without approval of the County. In order for such approval to be obtained the Contractor shall submit a request to subcontract. This is not required for bid submittal. The proposed subcontractor must also submit, through the Contractor, the following documents in an acceptable form:

- a. Copy of any subcontracts, if requested
- b. Certification by proposed subcontractor regarding equal employment opportunity;
- c. Certification by proposed subcontractor concerning labor standards and prevailing wage requirements;
- d. Any such other documents and evidence as the County may reasonably request to show that the subcontractor has fully complied with any reporting requirements to which it is or was subject.
- e. Affidavit of Federal Employment Authorization to be completed and turned in by proposed subcontractors.
- f. Subcontractor shall have certificate of insurance with the same limits as the prime contractor listing Jefferson County Public Works as Additional Insured and as a certified holder. The endorsement is also required.
- g. E-verify MOU in its entirety.

The documents by proposed subcontractors are not required to be attached to the Contractor's Bid.

BIDDER'S INITIALS INDICATING UNDERSTANDING AND ACCEPTANCE _____

- (7) **SUBCONTRACTOR DISCLOSURE:** Requirements contained within Sec 102.7.12 of the Missouri Standard Specification for Highway Construction shall be waived for this contract.
- (8) **SALES AND USE TAX EXEMPTION:** County of Jefferson, a tax exempt entity, will furnish a Missouri Project Exemption Certificate as described in Section 144.062 RSMo to the awarded contractor who in turn may use the certificate to purchase materials for a specific project performed for the tax exempt entity. Only the materials and supplies incorporated or consumed during the construction of the project are exempt. The certificate will be issued to the contractor for a specific project for a defined period of time.
- (9) **PERIOD OF PERFORMANCE:** If the bid is accepted, the bidder agrees that work shall be diligently prosecuted at such rate and in such manner as, in the judgment of the engineer, is necessary for the completion of the work within the time specified as follows in accordance with Sec 108:

90 Working Days

- (10) **LIQUIDATED DAMAGES:** The bidder agrees that, should the bidder fail to complete the work in the time specified or such additional time as may be allowed by the engineer under the contract, the amount of liquidated damages to be recovered in accordance with Sec 108 shall be as follows:

Liquidated damages per day: **\$1,100.00**

- (11) **BID GUARANTY:** The bidder shall submit a Bid Guaranty. The project bid bond form is included in the bid book. The bidder shall mark the box below to identify the type of Bid Guaranty.

- ☐ Paper Bid Bond
☐ Cashier's Check

Bid Guaranty shall be made payable to the Owner, in the amount of five percent of the Bidder's maximum Bid price and in the form of a certified or bank check or a Bid Bond (on form attached, if a form is prescribed) issued by a Surety.

The Bid security of the Successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required Contract Security within 15 days of the Notice of Award. Failure to do so may result in the annulment of the Notice of Award and forfeiture of the Bid Security. The Bid Security of any Bidder whom the Owner believes to have a reasonable chance of receiving the award may be retained by the Owner until the earlier of the seventh day after the "effective date of the Agreement" (which is the date when the agreement has been executed by all parties) by Owner to Contractor and the required Contract Security is furnished or the sixty-first day after the Bid opening. Bid Security of other Bidders will be returned within seven days of the Bid opening.

- (12) **CERTIFICATIONS FOR FEDERAL JOBS:** By signing and submitting this bid, the bidder makes the certifications appearing in Sec. 102.18.1 (regarding affirmative action and equal opportunity), Sec. 102.18.2 (regarding disbarment, eligibility, indictments, convictions, or civil judgments), Sec. 102.18.3 (regarding anti-collusion), and Sec. 102.18.4 (regarding lobbying activities). Any necessary documentation is to accompany the bid submission, as required by these sections. As provided in Sec. 108.13, the contracting authority may terminate the contract for acts of misconduct, which includes but is not limited to fraud, dishonesty, and material misrepresentation or omission of fact within the bid submission.
- (13) **SUBSTITUTE MATERIALS, EQUIPMENT, AND VALUE ENGINEERING:** The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by a Contractor, it must first be approved to be acceptable by the county. Proposals to alter the project design or specifications, otherwise known as "Value Engineering" must also be proposed, submitted, and accepted. Application for such acceptance will not be considered by County Engineer until after the "effective date of the Agreement". Bidders should assume that no modifications to the contract or design will be allowed for it is not guaranteed that a modification will be allowed. Bid on the plans and Specifications "As-Is" or with any issued addendum during the bidding phase.

BIDDER'S INITIALS INDICATING UNDERSTANDING AND ACCEPTANCE _____

(14) **MATERIALS INSPECTION:** All technicians who perform, or are required by the FHWA to witness, such sampling and testing shall be deemed as qualified by virtue of successfully completing the requirements of EPG 106.18 Technician Certification Program, for that specific technical area.

(15) **BUY AMERICA REQUIREMENTS:** Construction contracts shall assure compliance with Section 165 of the Surface Transportation Assistance Act of 1982, Section 337 of the Surface Transportation and Uniform Relocation Assistance Act of 1987, and 23 CFR 635.410 regarding Buy America provisions on the procurement of foreign products and materials. On all contracts involving Federal-aid, all products of iron, steel, or a coating of steel which are incorporated into the work must have been manufactured in the United States. The Contracting Authority may allow minimal amounts of these materials from foreign sources, provided the cost does not exceed 0.1 percent of the contract sum or \$2,500, whichever is greater. The Contractor certifies that these materials are of domestic origin. Additional information regarding the "Buy America" requirements can be found at:

<http://www.fhwa.dot.gov/programadmin/contracts/b-amquck.cfm>

(16) **FEDERAL AND STATE INSPECTION:** The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate State or Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

(17) **PREVAILING WAGE (STATE ONLY):** This contract requires payment of the prevailing hourly rate of wages for each craft or type of worker required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations. The applicable State Wage Rates for this contract are detailed in "Annual Wage Order No. 22, that is attached to this bidding document. These supplemental bidding documents have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

(18) **WORKER ELIGIBILITY REQUIREMENTS:** Execution of the construction contract for this project is dependent upon the awarded bidder providing an Affidavit of Compliance AND E-Verify Memorandum-of-Understanding (MOU) between the bidder and Department of Homeland Security to the Contracting Authority as required by section 285.530 RSMo. **The cover page and signature page of the E-Verify MOU and the Affidavit must be submitted with the bid.** A sample Affidavit of Compliance can be found at the Missouri Attorney General's website at the following link:

http://ago.mo.gov/forms/Affidavit_of_Compliance.pdf

All bidders must also be enrolled in the E-Verify Program, and include their MOU prior to contract execution. Bidders who are not enrolled will need to go to the following website link and select "Enroll in the Program" to get started. After completing the program, they will receive their E-Verify MOU with Department of Homeland Security. This document will need to be printed out and kept on file so that a copy can be attached to the Affidavit of Compliance.

http://www.dhs.gov/files/programs/gc_1185221678150.shtm

This requirement also applies to subcontractors and contract labor, but this contract only requires submittal of the verification documents for the prime contractor. It is the prime contractor's responsibility to verify the worker eligibility of their subcontractors in order to protect their own company from liability as required by section 285.530 RSMo.

BIDDER'S INITIALS INDICATING UNDERSTANDING AND ACCEPTANCE_____

- (19) **ANTIDISCRIMINATION:** The Contracting Authority hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, businesses owned and controlled by socially and economically disadvantaged individuals will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, religion, creed, sex, age, ancestry, or national origin in consideration for an award.
- (20) **OSHA TEN HOUR TRAINING REQUIREMENTS:** Missouri Law, 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 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 292.675 RSMO.
- (21) **TRAINEES:** By submitting this bid, the bidder certifies that the bidder is familiar with the Training Provision in the Missouri Highways and Transportation Commission's "General Provisions and Supplement Specifications" which are available on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business with MoDOT" "Standards and Specifications". The number of trainee hours provided under this contract will be 0 slots at 1000 hours per slot or 0 hours.
- (22) **ADDENDUM ACKNOWLEDGEMENT:** An addendum, if issued, will be posted on the County's website (Jeffcomo.org in same location as these specifications), and will be emailed to the provided contact on the "Plan Holder Information Request" form. Bidder must submit the plan holder form with a valid contact to receive any addenda. By submitting a bid, the bidder acknowledges he or she was afforded equal opportunity to gain access and knowledge of any addenda. The County shall not be held liable for a bidder's failure to provide contact information leading to the failure to be aware of any contract modifications. The undersigned states that all addenda (if applicable) have been received, acknowledged and incorporated into their bid, prior to submittal. For paper bids, staple addenda to the bid in the appropriate part of the bid.
- No Addenda ☐ I have checked the County's website for addenda and acknowledge there are no addenda
- Addenda ☐ I have checked the County's website for addenda and acknowledge the contract modifications

BIDDER'S INITIALS INDICATING UNDERSTANDING AND ACCEPTANCE_____

(THIS SPACE INTENTIONALLY LEFT BLANK)

(23) SIGNATURE AND IDENTITY OF BIDDER: The undersigned states that the following provided information is correct and that (if not signing with the intention to bind themselves to become the responsible and sole bidder) they are the agent of, and they are signing and executing this, as the bid of

_____, which is the correct LEGAL NAME as stated on the contractor questionnaire (if applicable).

a) The organization submitting this bid is a(n) (1) individual bidder, (2) partnership, (3) joint venturer (whether individuals or corporations, and whether doing business under a fictitious name), or (4) corporation. Indicate by marking the appropriate box below.

☐ sole individual

☐ partnership

☐ joint venture

☐ corporation, incorporated under laws of state of _____.

b) If the bidder is doing business under a fictitious name, indicate below by filling in the fictitious name

Executed by bidder this _____ day of _____ 20____.

THE BIDDER CERTIFIES THAT THE BIDDER AND ITS OFFICIALS, AGENTS, AND EMPLOYEES HAVE NEITHER DIRECTLY NOR INDIRECTLY ENTERED INTO ANY AGREEMENT, PARTICIPATED IN ANY COLLUSION, OR OTHERWISE TAKEN ANY ACTION IN RESTRAINT OF FREE COMPETITIVE BIDDING IN CONNECTION WITH THIS BID, AND THAT THE BIDDER INTENDS TO PERFORM THE WORK WITH ITS OWN BONAFIDE EMPLOYEES AND SUBCONTRACTORS, AND DID NOT BID FOR THE BENEFIT OF ANOTHER CONTRACTOR.

THE BIDDER ACKNOWLEDGES THAT THIS IS AN UNSWORN DECLARATION, EXECUTED UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES AND/OR FALSE DECLARATION UNDER THE LAWS OF MISSOURI, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS. THE FAILURE TO PROVIDE THIS CERTIFICATION IN THIS BID MAY MAKE THIS BID NON-RESPONSIVE, AND CAUSE IT TO BE REJECTED.

THE BIDDER CERTIFIES THAT THE BIDDER'S COMPANY KNOWINGLY EMPLOYS ONLY INDIVIDUALS WHO ARE AUTHORIZED TO WORK IN THE UNITED STATES IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND ALL PROVISIONS OF MISSOURI EXECUTIVE ORDER NO. 07-13 FOR CONTRACTS WITH THE CONTRACTING AUTHORITY.

☐ Check this box ONLY if the bidder REFUSES to make any or all of these certifications. The bidder may provide an explanation for the refusal(s) with this submittal.

Signature of Bidder's Owner, Officer, Partner or Authorized Agent

Please print or type name and title of person signing here

Attest:

Secretary of Corporation if Bidder is a Corporation

Affix Corporate Seal (If Bidder is a Corporation)

NOTE: If bidder is doing business under a fictitious name, the bid shall be executed in the legal name of the individual, partners, joint ventures, or corporation, and registration of fictitious name filed with the secretary of state, as required by sections 417.200 to 417.230 RSMo. If the bidder is a corporation not organized under the laws of Missouri, it shall procure a certificate of authority to do business in Missouri, as required by section 351.572 et seq RSMo. A certified copy of such registration of fictitious name or certificate of authority to do business in Missouri shall be filed with the Missouri Highways and Transportation Commission, as required by the standard specifications.

- (24) MODIFICATION AND WITHDRAWAL OF BIDS:** Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

If, within twenty-four hours after Bids are opened, any Bidder files a duly signed written notice with the County and promptly thereafter demonstrates to the reasonable satisfaction of the County that there was a material and substantial mistake in the preparation of his Bid, that Bidder may withdraw his bid. Thereafter, that Bidder will be disqualified from further bidding on the Work.

- (25) OPENING OF BIDS:** Bids will be opened publicly. All Bids shall remain open for sixty days after the day of the Bid opening, but the County may at their sole discretion, release any Bid and return the Bid Security prior to that date. The County reserves the right to reject any and all bids, to waive any and all informalities, and the right to reject non-responsive bids with MoDOT concurrence. In evaluating Bids, the County shall require Bidders to be on MoDOT's approved contractor listing at least 7 days before the day of the bid opening, and consider whether the Bid meets all requirements of the advertisement and proposal, and any alternates and all unit prices requested in the Bid forms are provided.

- (26) AWARD OF CONTRACT:** This project will be awarded to the lowest, responsive, responsible bidder.

The County may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work as to which the identity of Subcontractors and other persons and organizations must be submitted as provided. Operating costs, maintenance considerations, performance data and guarantees of materials and equipment may also be considered by the County. The County may conduct such investigations as they deem necessary to assist in the evaluation of whether any Bid is responsive in accordance with the Contract Documents to the County's satisfaction within the prescribed time. If the contract is to be awarded, the County will give the Successful Bidder a Notice of Award within sixty days after the date of the Bid opening.

Section 39 of the General Provisions set forth the County's requirements as to performance and other Bonds. When the Successful Bidder delivers the executed Agreement to the County it shall be accompanied by the required Contract Security.

When the County gives a Notice of Award to the Successful Bidder, it will be accompanied by at least four unsigned counterparts of the Agreement and all other Contract Documents. Within fifteen days thereafter Contractor shall sign and deliver at least four counterparts of the Agreement to the County with all other Contract Documents attached. The County will return one executed Contract Agreement to the Contractor.

- (27) FAILURE TO EXECUTE AGREEMENT:** Failure to execute the agreement and to file the acceptable contract bonds within 15 days after the unexecuted agreement has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the bid guaranty. A bidder failing to file an acceptable bid or contract bond from an approved surety or failing to execute the agreement within the time provided, resulting in a cancellation of the award to that bidder, disqualifies that bidder, and any other firm having common ownership or control with that bidder, from performing any work on the County project or projects which are the subject of that bid, as a prime contractor, a subcontractor or a supplier

BIDDER'S INITIALS INDICATING UNDERSTANDING AND ACCEPTANCE _____

(THIS SPACE INTENTIONALLY LEFT BLANK)

(28) **ITEMIZED BID:** Bid Forms must be completed in ink or by typewriter. The Bidder shall indicate, in figures, a unit price for each item on the form, the product of the respective quantities and unit prices in the column provided, the subtotal for each item group, and the gross sum (Total Bid).

In case of discrepancy between the gross sum shown on the bid and that obtained by adding the products of the quantities of work and the unit prices, the bidder agrees that the unit prices shall govern, and any errors found in said products and gross sum may be corrected by the County.

Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

The address, phone number, and email to which communications regarding the Bid are to be directed must be shown.

Bids shall be submitted, in triplicate, at time and place indicated in the Invitation to Bid and shall be included in an opaque sealed envelope, marked with the Project title and name and address of the Bidder and accompanied by the other required documents.

If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "**BID ENCLOSED**" on the face thereof

Failure to submit the following required documents prior to the bid opening will make the bid non-responsive and not eligible for award consideration:

- a. Complete and Submit Plan Holder's List Form prior to bid submittal (email before bid opening)
- b. Bid Submittal Cover Sheet with bidder's name printed or typed
- c. Instructions and Notices to Contractors initialed on each page, all spaces filled, signed.
- d. Balanced Bid Form, complete, signed, and embossed (if corporation), **addenda acknowledged and attached**
- e. Bid Guaranty/Bid Bond (Assurance Company's form is valid substitute to generic form herein)
- f. Bidder's Acknowledgement completed and signed
- g. Affidavit of Federal Employment Authorization (Annual Worker Eligibility Verification Affidavit)
- h. Disadvantaged Business Enterprise (DBE) Identification (within 3 days of bid opening)
- i. Certification Regarding Anti-collusion (see notice 12 above)
- j. Certification Regarding Use of Contract Funds for Lobbying (see notice 12 above)
- k. Certification Regarding Debarment and Suspension (see notice 12 above)
- l. Certification Regarding Affirmative Action and Equal Opportunity (see notice 12 above)
- m. Bid to be submitted in ink with proper signatures with no white out or initialed changes
- n. Enclose Certificate of Insurance

IN ORDER TO BE CONSIDERED A RESPONSIVE, RESPONSIBLE BIDDER, THE CONTRACTOR MUST READ, UNDERSTAND, COMPLETE AND SUBMIT 3 COPIES OF ALL FORMS WITHIN THIS BID SUBMITTAL PACKAGE, ALONG WITH OTHER SUBMITTAL REQUIREMENTS AS STATED ABOVE AND ON THE BIDDER CHECKLIST.

The County does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

The bidder should complete the following section in accordance with Sec 102.7. The bidder proposes to furnish all labor, materials, equipment, services, etc. required for the performance and completion of the work, as follows:

BID FORM

TO: JEFFERSON COUNTY, MISSOURI
BID FOR: STROUP ROAD BRIDGE
FEDERAL PROJECT NO. STP-5403 (656)

1. The undersigned BIDDER proposes and agrees, if this BID is accepted, to enter into an Agreement with the County in the form included in the Contract Documents to complete all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the Contract Documents.
2. BIDDER accepts all of the terms and conditions of the Instructions to Bidders. This Bid will remain open for sixty days after the day of Bid opening. BIDDER will sign the Agreement and submit all documents required within fifteen (15) days after the COUNTY'S Notice of Award.
3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:
 - (a) BIDDER has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as BIDDER deems necessary; and
 - (b) This Bid is genuine and not made in the interest of or on 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; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or a corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for himself any advantage over any other Bidder or over the County.
4. Bidder will complete project for the following unit prices. It is understood that the quantities given for the following bid items are not guaranteed by the Jefferson County Public Works Department and are used solely for the purpose of comparing bids and awarding the contract, and may or may not represent the actual quantities encountered on the job, and that the sum of quantities listed below, multiplied by the unit price shall constitute the gross sum bid:

(Enter Unit Prices Beginning on Next Sheet Below)

BID ITEMS:

Stroup Road Bridge – STP-5403 (656)

ROADWAY ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
2013000	Clearing & Grubbing	ACRE	1.2		
2022010	Removal of Improvements	LS	1		
2031000	Class A Excavation	CUYD	762		
2036000	Compacting Embankment	CUYD	762		
2059999	Subgrade Repair	SQYD	550		
2063000	Class 3 Excavation	CUYD	77		
2072000	Linear Grading, Class 2	STA	4.0		
2142000	Furnishing Rock Fill	CUYD	923		
2143000	Placing Rock Fill	CUYD	923		
3040143	Type 1 Aggregate for Base (4" Thick)	SQYD	1946		
4011209	Bituminous Pavement Mixture Surface (BP-1)	TON	314.2		
4013000	Bituminous Pavement Mixture (Base)	TON	515.4		
4071005	Tack Coat	GAL	80.0		
5041000	Concrete Approach Pavement	SQYD	274.4		
6061010	Guardrail Type A	LF	88		
6061050	Guardrail Type E, 3 ft.-1.5 in spacing	LF	38		
6062100	Bridge Anchor Section (Curb Type)	EA	3		
6062303	Asymetrical Transition Section, 6.5 Ft. Post	EA	4		
6063015	Type A Crashworthy End Terminal	EA	3		
6119905	Riprap Bedding	SQYD	1687.0		
6119907	Riprap	CUYD	1687		
6161005	Construction Signs	SQFT	253		
6161098	Changeable message sign, Contractor Furn & Contractor Retained.	EA	2		
6181000	Mobilization	LS	1		
6274000	Contractor Furnished Surveying and Staking	LS	1		
7250318A	18" Pipe Group B	LF	56		
7250324A	24" Pipe Group B	LF	37		
7250348A	48" Pipe Group B	LF	32		
7320018A	18" or Allowed Substitute Group B Flared End Section	EA	4		
7320024A	24" or Allowed Substitute Group B Flared End Section	EA	2		
7320048A	48" or Allowed Substitute Group B Flared End Section	EA	2		
8061005	Rock Ditch Check	EA	2		
8061019	Silt Fence	LF	1700		

ROADWAY ITEMS =

LANDSCAPING ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
8051000	Seeding	AC	1.5		
LANDSCAPING ITEMS =					

STRIPING ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
6206000C	4" White Acrylic Waterborne Pavement Marking Paint, Type P Beads	LF	1400		
6206001C	4" Yellow Acrylic Waterborne Pavement Marking Paint, Type P Beads	LF	1400		
6208065	Temporary Raised Pavement Marker, Type 2	EA	20		
STRIPING ITEMS =					

BRIDGE ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
2061000	Class 1 Excavation	CUYD	41.0		
2160500	Removal of Bridges	LS	1		
5031010	Bridge Approach Slab (Bridge)	SQYD	167		
7011105	Drilled Shafts (3 ft 6 in)	LF	48.0		
7011201	Rock Sockets (3 ft 0 in)	LF	48.0		
7011300	Supplementary Television Camera Inspection	EA	6		
7011400	Foundation Inspection Holes	LF	108.0		
7011500	Concrete Coring	LF	102.0		
7011600	Sonic Logging Testing	EA	6		
7021012	Structural Steel Piles (12 in)	LF	487		
7026000	Pre-Bore for Piling	LF	418		
7029902	Setting Piles in Rock	EA	5.0		
7032003	Class B Concrete (SubStructure)	CUYD	212		
7034213	Slab on Concrete I-Girder	SQYD	630		
7034215	Safety Barrier Curb	LF	446		
7056001	Type 4 (45") Prestressed Concrete I-Girder	LF	656		
7061060	Reinforcing Steel (Bridges)	LB	31010		
7123301	Steel Intermediate Diaphragm for P/S Concrete Girders	EA	3		
7123610	Slab Drain	EA	7		
7151001	Vertical Drain at End Bents	EA	2		
7161003	Laminated Neoprene Bearing Pad Assembly (Tapered)	EA	24		
BRIDGE ITEMS =					

PROJECT TOTAL = _____

NOTICE TO BIDDER- Bidders must complete the submitted section in its entirety.

5. BIDDER agrees that the work will be completed within **90 Working Days** or the CONTRACTOR shall pay the COUNTY, not as a penalty but as **liquidated damages**, a sum equal to **One Thousand One Hundred Dollars (\$1,100.00)** for each day, as defined by Sec 108 of the 2011 Edition of the "Missouri Standard Specifications for Highway Construction", elapsing between the expiration of such time limit plus such extensions as may be necessary to cover contingencies beyond the CONTRACTOR'S control and the date of the full completion.

The County reserves the right to negotiate additional terms for the time of completion with the successful bidder.

6. Communications concerning this Bid shall be addressed to the following:

Name: _____ Title: _____ Phone () -

Email: _____ Address: _____

7. The terms used in this Bid which are defined in the General Provisions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Provisions.

8. **CERTIFICATIONS FOR FEDERAL JOBS:** By signing and submitting this bid, the bidder makes the certifications appearing in Sec. 102.18.1 (reg affirmative action and equal opportunity), Sec. 102.18.2 (regarding disbarment, eligibility, indictments, convictions, or civil judgments), Sec. 102.18.3 (regarding anti-collusion), and Sec. 102.18.4 (regarding lobbying activities). Any necessary documentation is to accompany the bid submission, as required by these sections. As provided in Sec. 108.13, the contracting authority may terminate the contract for acts of misconduct, which includes but is not limited to fraud, dishonesty, and material misrepresentation or omission of fact within the bid submission.

9. BIDDER has examined copies of all the Contract Documents including but not limited to the Bidder's Checklist, Bid Notice, Instructions and Notices to Contractors, and the following Addenda, if applicable. Bidder must acknowledge all addenda to be considered responsive.

NO.	Date Released	Bidder's Initials	Initial Above if No Addenda is Acknowledged
1	/ /2016		
2	/ /2016		
3	/ /2016		
4	/ /2016		

COMPLETE BID SUBMITTED on _____, 2016

By _____
(Corporation Name)

(State of Incorporation)

(dba Name if Applicable)

By _____
(Typed Name of Person Authorized to Sign)

x _____
(Signature of Authorized Person)

(Title)

(Affix Corporate Seal)

Attest _____
(Typed Name of Secretary)

x _____
(Signature of Secretary)

Business Phone: () -

Business Address: _____

BID BOND

Suitable bid security in the amount of:

(\$_____) Dollars and equal to five (5%) percent as called for in the advertisement for bids which accompanies this proposal. This sum is to be forfeited to the County of Jefferson if the party or parties making the proposal fail to enter into a contract with the approved securities within fifteen (15) days after the Notice of Award has been made. The undersigned has examined the Plans and Specifications for the work to be done and has satisfied himself as to the work to be done and the conditions under which it must be carried out.

The Contractor shall commence work within three (3) days after the date of a written Notice to Proceed from the County and shall fully complete all work under this proposal within the scheduled time established by the Contract Documents. This proposal shall be equally binding to all heirs, administrators, executors, successors and assigns.

FIRM NAME _____

BY _____

TITLE _____

ATTEST _____

TITLE _____

ADDRESS _____

TELEPHONE _____

BIDDER'S ACKNOWLEDGMENT

(Complete and fill out all parts applicable, and strike out all parts not applicable)

STATE OF _____)
) SS.
COUNTY OF _____)

On this _____ day of _____ 20_____, before me appeared _____ to me personally known, who, being by me first duly sworn, did say that he executed the forgoing Proposal with full knowledge and understanding of all its terms and provisions and of the plans and specifications; that the correct legal name and address of the Bidder (including those of all partners or joint ventures) is fully and correctly set out above; that all statements made therein by or for the Bidder are true; and

(if a sole individual) acknowledged that he executed the same as his free act and deed.

(if a partnership or joint venture) acknowledged that he executed the same, with written authority from, and as the free act and deed of, all said partners or joint venturers.

(if a corporation) that he is the _____
(President or other agent)

of _____; that the above Proposal was signed and sealed in behalf of said corporation by authority of its board of directors; and he acknowledged said proposal to be the free act and deed of said corporation.

Witness my hand and seal at _____,
The day and year first above written.

(SEAL)

Notary Public

My commission expires _____ 20____

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

On the _____ day of _____, 20____, before me appeared _____, personally known 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 state 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 _____ of _____, and I am duly authorized, directed, and/or empowered to act officially and properly on behalf of this business entity.

• I, the Affiant, 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 the Jefferson County. 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 Jefferson County, 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 285.530, 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 not under duress.

Affiant Signature

Subscribed and sworn to before me in _____, _____, the day and year first above-written.
city (or county) state

Notary Public

My commission expires:

[documentation of enrollment/participation in a federal work authorization program attached]

DBE Submittal Forms

(6) DBE Submittal Forms: This form must be submitted by 4 p.m. three (3) business days after bid opening.

(A) DBE Contract Goal: By submitting this bid, the bidder certifies that the bidder is familiar with the DBE Program Requirements in this contract. The contract DBE goal for the amount of work to be awarded is 7% of the total federal project price. The bidder shall also complete the DBE Submittal Form in accordance with the program requirements.

(B) DBE Participation: The bidder certifies that it will utilize DBE's as follows:

% OF TOTAL FEDERAL CONTRACT

NOTE: Bidder must fill in the above blank. If no percentage is specified, the bidder certifies that it agrees to, and will comply with the contract goal. If a percentage below the contract goal is specified, then the bidder must submit complete documentation of good faith efforts to meet the DBE contract goal, immediately below.

(C) Certification of Good Faith Efforts to Obtain DBE Participation: By submitting its signed bid, the bidder certifies under penalty of perjury and other provisions of law, that the bidder took each of the following steps to try to obtain sufficient DBE participation to achieve the Commission's proposed DBE Contract Goal: (Attach additional sheets if necessary).

[illegible]

DBE Submittal Forms

Identification of Participating DBEs: The information shown on this page must be completed. If this page is submitted but not signed, it will not be cause for rejection. The apparent low and second low bidder must file this form with the **Jefferson County Public Works Department, P.O. Box 100, Hillsboro, MO 63050** by 4:00 p.m. on the third working day after the bid opening. Fax or email transmittal is permitted. The fax number is **636-797-5565** and the email address for submittal is **JJonas@jeffcomo.org**. The original copy must be mailed by overnight mail to the Local Public Agency the day of the FAX or email transmittal. Contact External Civil Rights at (573) 751-7801 for questions or assistance in completion. (Note: Submittal of this form is not required if the Contract DBE Goal is 0%)

The undersigned submits the following list of DBEs to be used in accomplishing the work of this contract. The work, supplies or services, applicable value and percent of total federal contract each DBE is to perform or furnish is as follows:

(A) DBE Name & Address	(B) Bid Item numbers (Or Line numbers)	(C) \$ Value of DBE of Work ** (Unit Price x Quantity of each item in B, or Lump Sum)	(D) % Of \$ Value Applicable to DBE Goal ** (100%, 60%)	(E) \$ Amount Applicable to DBE Goal for each item (C x D)	(F) % Of Total Contract Amount for each item (E/Total Contract Amount)
1.					
		Total		Total	Total
2.					
		Total		Total	Total
3.					
		Total		Total	Total
4.					
		Total		Total	Total
Total DBE Participation					

** Cannot exceed contract amount for given item of work.

DBE Submittal

(A) DBE Name & Address	(B) Bid Item numbers	(C) \$ Value of DBE of Work ** (Unit Price x Quantity of each item in B, or Lump Sum)	(D) % Of \$ Value Applicable to DBE Goal ** (100%, 60%)	(E) \$ Amount Applicable to DBE Goal for each item (C x D)	(F) % Of Total Contract Amount for each item (E/Total Contract Amount)
Trucking Services Only used if the DBE owns the trucks or is leasing from a DBE firm			100%		
Trucking Services Trucks are leased from non-DBE source				Only Include <u>Fees</u> for Trucking Services	
Brokered Services				Only Include <u>Fees</u> for Brokered Services	
Totals (Page 1)					
Totals (Page 2)					
Totals (additional pages if needed)					
Total DBE Participation					

** Cannot exceed contract amount for given item of work.

Company: _____ Date: _____

By: _____ Title: _____

AGREEMENT FORM

THIS AGREEMENT is dated as of _____, in the year ____ by and between JEFFERSON COUNTY, MISSOURI (hereinafter called OWNER OR COUNTY) and _____ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants herein after set forth and in the amount of _____, agree as follows:

ARTICLE 1. WORK

CONTRACTOR shall complete all work as specified or indicated in the Contract Documents for the STROUP ROAD BRIDGE. The work is generally described as follows:

The proposed work includes:

The removal of existing bridge structure and construction of new bridge structure relocated approximately 100 ft upstream with associated road improvements on Stroup Road. The work in general will consist of bridge replacement, excavation, placing fill, bituminous surfacing, guardrail installation, and rock blanket. The total length of project is approximately 646 feet.

ARTICLE 2. ENGINEER

The County has designated the Director of Public Works, who is hereinafter called ENGINEER and who has the authority assigned to OWNER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3. CONTRACT TIME

3.1 The work will be completed and ready for final payment in accordance with Section 30 of the General Provisions within **90 Working Days** after the date when the Contract Time commences to run. Allowances will be made for weather conditions and other occurrences beyond the control of the CONTRACTOR.

If the CONTRACTOR is unable to begin work as required, the ENGINEER shall be notified in writing. Unless the ENGINEER gives written approval for a delay in beginning the work, calendar days will begin to be counted for liquidated damages. The count will continue until the CONTRACTOR begins full operation. The count will resume when work is suspended, or full operation is not maintained.

3.2 Liquidated Damages. The Contractor agrees that should he fail to complete work in the time specified or such additional time as may be allowed by the Owner under this contract, the Contractor shall pay the County, not as a penalty but as **liquidated damages**, a sum equal to **One Thousand One Hundred Dollars (\$1,100.00)** for each day, as defined by Sec 108 of the 2011 Edition of the "Missouri Standard Specifications for Highway Construction", elapsing between the expiration of such time limit plus such extensions as may be necessary to cover contingencies beyond the CONTRACTOR'S control and the date of the full completion.

ARTICLE 4. CONTRACT PRICE

4.1 Owner shall pay Contractor for performance of the work in accordance with the contract documents in current funds.

BID ITEMS:

Stroup Road Bridge – STP-5403 (656)					
ROADWAY ITEMS:					
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
2013000	Clearing & Grubbing	ACRE	1.2		
2022010	Removal of Improvements	LS	1		
2031000	Class A Excavation	CUYD	762		
2036000	Compacting Embankment	CUYD	762		
2059999	Subgrade Repair	SQYD	550		
2063000	Class 3 Excavation	CUYD	77		
2072000	Linear Grading, Class 2	STA	4.0		
2142000	Furnishing Rock Fill	CUYD	923		
2143000	Placing Rock Fill	CUYD	923		
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4011209	Bituminous Pavement Mixture Surface (BP-1)	TON	314.2		
4013000	Bituminous Pavement Mixture (Base)	TON	515.4		
4071005	Tack Coat	GAL	80.0		
5041000	Concrete Approach Pavement	SQYD	274.4		
6061010	Guardrail Type A	LF	88		
6061050	Guardrail Type E, 3 ft.-1.5 in spacing	LF	38		
6062100	Bridge Anchor Section (Curb Type)	EA	3		
6062303	Asymetrical Transition Section, 6.5 Ft. Post	EA	4		
6063015	Type A Crashworthy End Terminal	EA	3		
6119905	Riprap Bedding	SQYD	1687.0		
6119907	Riprap	CUYD	1687		
6161005	Construction Signs	SQFT	253		
6161098	Changeable message sign, Contractor Furn & Contractor Retained.	EA	2		
6181000	Mobilization	LS	1		
6274000	Contractor Furnished Surveying and Staking	LS	1		
7250318A	18" Pipe Group B	LF	56		
7250324A	24" Pipe Group B	LF	37		
7250348A	48" Pipe Group B	LF	32		
7320018A	18" or Allowed Substitute Group B Flared End Section	EA	4		
7320024A	24" or Allowed Substitute Group B Flared End Section	EA	2		
7320048A	48" or Allowed Substitute Group B Flared End Section	EA	2		
8061005	Rock Ditch Check	EA	2		
8061019	Silt Fence	LF	1700		
ROADWAY ITEMS =					

LANDSCAPING ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
8051000	Seeding	AC	1.5		
LANDSCAPING ITEMS =					

STRIPING ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
6206000C	4" White Acrylic Waterborne Pavement Marking Paint, Type P Beads	LF	1400		
6206001C	4" Yellow Acrylic Waterborne Pavement Marking Paint, Type P Beads	LF	1400		
6208065	Temporary Raised Pavement Marker, Type 2	EA	20		
STRIPING ITEMS =					

BRIDGE ITEMS:

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	\$ Amount
2061000	Class 1 Excavation	CUYD	41.0		
2160500	Removal of Bridges	LS	1		
5031010	Bridge Approach Slab (Bridge)	SQYD	167		
7011105	Drilled Shafts (3 ft 6 in)	LF	48.0		
7011201	Rock Sockets (3 ft 0 in)	LF	48.0		
7011300	Supplementary Television Camera Inspection	EA	6		
7011400	Foundation Inspection Holes	LF	108.0		
7011500	Concrete Coring	LF	102.0		
7011600	Sonic Logging Testing	EA	6		
7021012	Structural Steel Piles (12 in)	LF	487		
7026000	Pre-Bore for Piling	LF	418		
7029902	Setting Piles in Rock	EA	5.0		
7032003	Class B Concrete (SubStructure)	CUYD	212		
7034213	Slab on Concrete I-Girder	SQYD	630		
7034215	Safety Barrier Curb	LF	446		
7056001	Type 4 (45") Prestressed Concrete I-Girder	LF	656		
7061060	Reinforcing Steel (Bridges)	LB	31010		
7123301	Steel Intermediate Diaphragm for P/S Concrete Girders	EA	3		
7123610	Slab Drain	EA	7		
7151001	Vertical Drain at End Bents	EA	2		
7161003	Laminated Neoprene Bearing Pad Assembly (Tapered)	EA	24		
BRIDGE ITEMS =					

PROJECT TOTAL = _____

ARTICLE 5. PAYMENT PROCEDURES

Contractor shall submit Application for Payment in accordance with Section 33 of the General Provisions. The Engineer as provided in the General Provisions will process application for Payment.

- 5.1 Progress Payment. Owner will make progress payments per the Contract Bid Price on the basis of the Contractor's Application of Payment as recommended by the Engineer, on or about the First day of each month during the construction as provided below. All progress payments will be on the basis of the Work measured on the job site according to unit of measurement as shown within the job special provisions or Missouri Standard Specifications.
- 5.1.1 The Owner may initiate withholding of retainage as provided by Section 109.9 of the Missouri Standard Specifications for Highway Construction. Release of any retained percentage shall be as provided by Section 109.9.
- 5.1.2 When the Contractor receives any payment from the Owner, the Contractor shall make prompt payment to subcontractors and suppliers as provided by Section 109.13 of the Missouri Standard Specifications for Highway Construction.
- 5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with Section 33 of the General Provisions, Owner shall pay the remainder of the Contract Price as recommended by the ENGINEER.

ARTICLE 6. CONTRACTOR'S REPRESENTATIONS

In order to induce the County to enter into this Agreement CONTRACTOR makes the following representations:

- 6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal laws, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.
- 6.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site of otherwise affecting cost, progress or performance of the Work which were relied upon by the ENGINEER in the preparation of the Drawings and Specifications. When the information is available it will either be included in the bid documents or made available at the Jefferson County Public Works Department for the Contractor's review.
- 6.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in Article 9 as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract documents; and no additional examinations, investigations, tests, reports or similar data will be required by CONTRACTOR for such purposes.
- 6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

ARTICLE 7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR are attached to this Agreement, made a part hereof and consists of the following:

- 7.1 This Agreement
- 7.2 Exhibits to this Agreement (if any)
- 7.3 Contract Performance and Payment and Materials Bonds, consisting of 3 pages.
- 7.4 Notice of Award
- 7.5 General Provisions (page 1 to 14, inclusive).
- 7.6 Specifications bearing the title PROJECT SPECIFICATIONS FOR STROUP ROAD BRIDGE, STP-5403 (656) and consisting of all pages as listed in the table of contents thereof.
- 7.7 Addenda numbers ____ to ____ , inclusive.
- 7.8 CONTRACTOR'S Bid and all attachments
- 7.9 Documentation submitted by CONTRACTOR prior to Notice of Award
- 7.10 Any Modification, including Change Orders, duly delivered after execution of agreement.

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be altered, amended or repealed by a Modification (as defined in Section 35 of the General Provisions).

ARTICLE 8. MISCELLANEOUS

- 8.1 Terms used in this Agreement which are defined in Section 1 of the General Provisions shall have the meanings indicated in the General Provisions.
- 8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 The County and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

ARTICLE 9. OTHER PROVISIONS

- 9.1 Access to records. In connection with this Contract the County shall have access to any books, documents, papers, and records of the CONTRACTOR, which are directly pertinent to this project for the purpose of making an audit, examination, excerpts, and transcriptions.

9.2 Applicable Laws and Regulations. The CONTRACTOR expressly agrees to comply with all applicable rules and regulations as set forth in the Contract Documents or as may be required by law, and further agrees to submit all certifications, notices, and affirmative action plans as may now or hereafter be required, and to place such conditions and provisions in any and all subcontracts as may be required.

9.3 Conflict of Interest. The CONTRACTOR covenants that he or she presently has not interest of any kind and shall not acquire any type of interest, direct or indirect, in the program or any property therein, which would conflict in any manner or degree with the performance of his or her services and obligation hereunder. The CONTRACTOR further covenants that in the performance of this contract, no person known to have any conflicting interest shall be knowingly employed in the performance of this Contract.

ARTICLE 10. VENUE

10.1 It is agreed by the parties that any action at law, suit in equity, or other judicial proceeding to enforce or construe this Agreement, or regarding its alleged breach, shall be instituted only in the Circuit Court of Jefferson County, Missouri.

IN WITNESS WHEREOF, the parties hereto have signed this agreement in quadruplicate. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

FOR: JEFFERSON COUNTY, MISSOURI

BY: _____ Date: _____
COUNTY EXECUTIVE

ATTEST: _____
COUNTY CLERK DEPUTY CLERK

FOR: _____

BY: _____ Date: _____
CONTRACTOR

ATTEST: _____

I hereby certify under section 50.660 RSMo there is either: (1) a balance of funds, otherwise unencumbered, to the credit of the appropriation to which the obligation contained herein is chargeable, and a cash balance otherwise unencumbered, in the treasury, to the credit of the funds from which payment is to be made, each sufficient to meet the obligation contained herein; or (2) bonds or taxes have been authorized by vote of the people and there is a sufficient unencumbered amount of the bonds yet to be sold or of the taxes levied and yet to be collected to meet the obligation in case there is not a sufficient unencumbered cash balance in the treasury.

COUNTY AUDITOR

APPROVED AS TO FORM

COUNTY COUNSELOR

CONTRACT PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the Undersigned _____

_____ of _____
(firm)

*a (corporation) duly authorized by law to do business as a construction contractor in the (partnership)

State of _____ (hereinafter called the "Contractor"), and _____

_____ (hereinafter called the "Surety"), a corporation

duly authorized to do a Surety business under the laws of the State of Missouri, are held

firmly bound unto Jefferson County, (hereinafter called the "County"), in the penal sum

of _____ Dollars (\$_____), lawful money of the United States, for the

payment of which to be made unto said County; we bind ourselves, our heirs, executors,

administrators, successors and assigns, jointly and severally, firmly by these presents as

follows:

The conditions of this obligation are such that, whereas on the ____ day
of _____, 20____, the said Principal entered into a written Agreement, which
Agreement is hereby made a part hereof, with the said County for the construction of

_____.

NOW THEREFORE, if the said Principal shall faithfully and properly perform the
foregoing Contract according to all the terms thereof, and shall, as soon as the work
contemplated by said contract is completed, pay to the proper parties all amounts due for
all labor and material required by this contract in the construction work, and all insurance
premiums for both compensation and all other kinds of insurance on said work, and for

all labor performed in such work whether by subcontractor or otherwise, then this
obligation

shall be void, otherwise it shall remain in full force and effect, and may be sued on for the use and benefit by any person furnishing material or performing labor, either as an individual

or as a subcontractor, for any contractor in the name of said County.

Every Surety on this bond shall be deemed held, any contract on the contrary notwithstanding, to consent without notice.

- a) To the extension of time to the Contractor in which to perform the contract.
- b) To changes in the plans, specifications, amount of work or contract.

IN TESTIMONY WHEREOF, the Parties hereunto have caused the execution hereof in _____ original counterparts as of the _____ day of _____, 20____.

(SEAL)

Attest:

_____ By _____

(SEAL)

Attest:

_____ By _____

PAYMENT AND MATERIALS BOND

KNOW ALL MEN BY THESE PRESENT, that we, _____
Principal and Address

_____, as Principal, and _____,
Surety and Address

as Surety, are held and firmly bond unto The County of Jefferson, Missouri, hereinafter called Obligee, in the amount of \$_____, for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators, successors, trustees, and assigns firmly by these presents.

WHEREAS, the Principal has entered into a contract with Obligee for

_____; and
describe briefly

WHEREAS, the Obligee requires that the Principal enter into a surety bond satisfying the terms of Section 107.170 R.S.Mo.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such, that if the Principal shall pay, or cause to be paid in full, the claims of all persons performing labor upon, or furnishing materials to be used in, or furnishing appliances, equipment or power contributing to such work under said contract, then this obligation shall be void; otherwise to remain in full force and effect. The total amount of surety's liability under this bond shall in no event exceed the amount hereof, and in no event shall the undertaking hereby be construed to impose liability on the surety beyond that required by the terms of Section 107.170 R.S.Mo.

Signed and sealed this _____ day of _____, 20____.

PRINCIPAL

By _____

SURETY

By _____

(ACKNOWLEDGMENT FOR PRINCIPAL)
(ACKNOWLEDGMENT AND POWER OF ATTORNEY FOR SURETY)

GENERAL PROVISIONS

- 1) **DEFINITIONS:** The following terms as used in these Contract Documents are respectively defined as follows:
- a) “Owner” - A person, firm, corporation, municipality or Government agency, by which the Contract will be awarded. Where ever the Owner is specified, it shall also be construed to mean his authorized representative.
 - b) “Consultant” - The Engineering firm responsible for the preparation of construction plans.
 - c) “Contractor” - The person, firm, or corporation to whom the contract is awarded.
 - d) “Subcontractor” - A person, firm, or corporation, performing any part of the Contractor’s obligations hereunder at the site of work excluding, however, the furnishing of standard materials, such as cement, lumber, and other materials not worked to a special design under the plans and specifications for the work.
 - e) “Contract Documents” - The agreement subscribed by the parties, the Invitation to Bidders, Information for Bidders, the Proposal, and the Plans and Specifications.
 - f) “Work” - The furnishing of all labor, materials, equipment and other incidentals necessary or convenient to the successful completion and carrying out of all duties and obligations of the Contractor under the Contract Documents.
 - g) “Days” - Except where otherwise specifically provided in the Contract Documents, calendar days including Sundays and Holidays.

- 2) **NOTICE:** Unless otherwise specified herein, any notice required under the Contract Documents shall be deemed given if deposited in the United States mail, first class postage prepaid. Notice may also be given by hand delivery to the authorized representative
- 3) **INTENT OF THE CONTRACT DOCUMENTS:** The intention of the Contract Documents is to include in the contract price the cost of all labor and materials, water, fuel, tools, plant, equipment, light, transportation and all other expense as may be necessary for the proper execution of the work.

In interpreting the Contract Documents, words describing materials of work which have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, shall be construed in accordance with such well-known meaning recognized by architects, engineers and the trade.

The work shall be executed in strict conformity with the plans and specifications.

The Contract Documents are complimentary and what is called for by any one shall be as binding as if called for by all. Anything stated in the specifications and not shown in the drawings, or shown in the drawings and not stated in the specifications, shall be of like effect as if shown or stated in both.

- 4) **PLANS / PROJECT SPECIFICATIONS:** Unless otherwise provided in the Contract Documents, the Plans, Project Specifications and subsequent addendums are available; free of charge, as a downloadable file from the Jefferson County website (<http://www.jeffcomo.org/PublicWorksProjects.aspx?nodeID=Purchasing>). The Contractor will be responsible for reproducing the plans necessary to carry out all the work.

In case of discrepancy in the plans, the matter shall be immediately submitted to the Consultant or Owner without whose decision said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

- 5) **SUPERVISION AND PERSONNEL:** The Contractor shall have at the work site at all times a job supervisor. That individual shall be capable of reading and understanding the project plans and specifications, have authority to order materials and equipment, and have authority to execute work as directed by the Owner. The Contractor shall provide the name and phone numbers of the person appointed as job supervisor prior to issuance of notice to proceed.

All workers shall have sufficient skill and experience to properly perform the work assigned to them. The owner may demand the dismissal of any person employed by the contractor in, about or upon the work who engages in misconduct, is incompetent or negligent in the due and proper performance of assigned duties, or who neglects or refuses to comply with any proper directions given. Such person shall not again be employed thereon without the written consent of the owner. Should the contractor continue to employ or re-employ any such person, the owner may suspend the work until the contractor complies with such orders.

- 6) **COMPLIANCE WITH LAWS:** The Contractor shall comply with all laws, ordinances, rules and regulations bearing in the conduct of the work and shall obtain at his expense all permits and licenses necessary for the prosecution of the work.

The Contractor shall be responsible for the payment of all Federal, State, municipal or local taxes, including but not limited to sales and use taxes, applicable to the performance of the contract and shall indemnify and hold harmless the Owner from the consequences of his failure to pay such taxes.

A sales tax exemption for construction materials is allowed by RSMo Section 144.062 RSMo, which applies to contractors for the County. Jefferson County will issue an exemption certificate to the contractors, subcontractors and suppliers for the purchase of materials used in construction.

- 7) **USE OF JOB SITE:** The Contractor shall confine his equipment, apparatus, the storage of materials and operations of his workmen to limits indicated by law, ordinance, permits, easements or plans and shall not encumber the premises with his materials.

The Contractor shall not load or permit any part of any structure to be loaded to the extent that its safety may be endangered.

- 8) **SANITARY PROVISIONS:** The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his employees as may be necessary to comply with the sanitary requirements of law or ordinance.

- 9) **SURVEYS:** The Contractor shall provide all surveys necessary to the performance of his work. All work shall be done to the lines, grades and elevations shown on the plans. Any work done without being properly located may be ordered removed and replaced at the Contractor's expense.

The Owner or Consultant may, in his sole discretion, check from time to time the reference marks, lines, grades and measurements established by the Contractor but his exercise or failure to exercise such right shall not relieve the Contractor of his obligation under the preceding paragraph.

- 10) **CONDITIONS AT THE SITE:** The Contractor shall make such investigations of conditions above or below the surface of the ground, as he may deem necessary for the proper and timely performance of his work, including but not limited to the making of borings. No oral representations by any persons respecting such conditions shall in any manner be binding upon the Owner or the Consultant.

The Owner may have, for its own use, made borings at or near the site of the work. The boring data, if collected, will be made available to the Contractor, for his own convenience, if he desires to examine it.

Any interpretations or conclusions drawn by the Contractor from such data shall be his own and the Owner makes no representation or guaranty concerning the accuracy or completeness of such data.

- 11) **UTILITIES AND OTHER OBSTRUCTIONS:** It shall be the sole responsibility of the Contractor in the performance of the contract to locate and avoid all utilities, other structures and obstructions whether located below or above the surface of the ground. For that purpose he shall employ all necessary precautions and methods to prevent damage to utilities, other structures and obstructions. In the event such damage does occur, the Contractor shall be solely liable therefore and he shall notify the affected utility and Owner immediately, make or have made all necessary repairs and bear the expense thereof and all damage caused thereby.

If the Contractor finds he cannot safely work at a location designated in the plans and specifications, either because of utilities, other structures or obstructions that may be damaged, he shall notify the Owner immediately.

Certain information relating to piping and underground utilities and structures, such as gas mains, water mains, and electric duct lines, has been gathered by the Consultant for its purposes and has been shown on the plans for the convenience of the Contractor and for such use as he may, at his own risk, desire to make of it. Any interpretations or conclusions drawn by the Contractor from such data on the plans shall be his own and the Owner and the Consultant makes no representations or guaranty concerning the accuracy or completeness of such data.

- 12) **STRUCTURES ENCOUNTERED AND PROTECTION OF LIFE AND PROPERTY:** The Contractor shall, at his own expense, support and protect all buildings, bridges, conduits, wires, water pipes, sewers, pavements, curbing, sidewalks, equipment and fixtures of all kinds and all other public or private property that may be encountered or endangered in the execution of the work herein contemplated. He shall replace, repair or to otherwise make good any damage caused to any such property to the satisfaction of the Owner thereof.

In the event the Contractor does not perform his obligations under the preceding paragraph, the Owner reserves the right at its election to make good any damage to public or private property caused by the work of the Contractor and the cost thereof shall be borne by the Contractor.

In the event the Contractor refuses or fails to pay bills therefore upon presentation, the Owner may pursue any remedies available to it or may deduct the amount thereof from any money that may be due the Contractor hereunder from time to time.

Throughout the performance of the work, the Contractor shall construct and adequately maintain suitable and safe crossings over the trenches, and such detours as are necessary to care for the public and private traffic. The material excavated from trenches shall be deposited in such manner as shall give as little inconvenience as possible to the traveling public, to adjoining property owners, to other contractors or to the Owner.

The Contractor at his own expense shall provide the necessary watchmen and sufficient warning lights and barricades and take such other precautions as are necessary to protect life and property.

The Contractor shall provide watchmen or additional watchmen at any point where they may be requested by the proper official of any municipality or governmental body affected.

Nothing in this section shall be construed as requiring the Contractor to provide a road patrol.

- 13) **PROTECTION OF WORK:** The Contractor shall provide proper facilities, take all necessary precautions and assume the entire cost for protecting the work against adverse weather conditions and for handling all storm and flood water, sewage, seepage, ice or snow that may be encountered during the performance of the contract and the manner for providing for such contingencies and for carrying on the work in freezing weather shall meet with the approval of the Owner. If the Contractor shall fail to provide such protection or in the event of emergencies, the Owner may provide such protection at the Contractor's expense.

The contractor assumes all risk of damage to or destruction of the work covered by this contract until the work is completed and accepted by the Owner and shall repair or replace at his expense any work damaged or destroyed prior to such completion and acceptance regardless of cause.

- 14) **ACCIDENT PREVENTION:** Precaution shall be exercised at all times for the protection of persons (including employees) and property. The safety provisions of applicable laws and building and construction codes shall be observed.
- 15) **BLASTING:** The Contractor shall comply with all Federal, State, County and municipal laws, rules and regulations applicable to the transportation, storage or use of explosives.

The Contractor shall assume all responsibility for any injury or damage that may be done during the transportation, storage or use of any explosives.

- 16) **OTHER CONTRACTS:** The Owner may award other contracts for additional work, and the Contractor shall fully cooperate with such other contractors, and carefully schedule and fit his own work to that work provided under the other contract. The Contractor shall not commit or permit any act, which will interfere with the performance of work by any other contractor.
- 17) **CUTTING AND PATCHING:** The Contractor shall do all cutting, fitting, or patching of his work that may be required to make its several parts connect with the work of other contractors shown upon, or reasonably implied by the plans and specifications.

The Contractor shall not endanger any work by cutting, digging, or otherwise, and shall not cut or alter the work of any other contractor.

- 18) **CLEANING UP:** The Contractor shall at all times keep the premises free from accumulation of waste material of rubbish and at the completion of the work shall remove from and about the site all his rubbish, tools, equipment, scaffolding and surplus materials and shall leave his work clean and ready for use.
- 19) **SURVEILLANCE:** The Contractor shall provide safe, sufficient and proper facilities at all times for the surveillance of work by the Consultant, the Owner, the Missouri Department of Transportation, the Federal Highway Administration, or any other governmental agency, it being agreed that these agencies have the right of entry.

The Contractor shall within 24 hours after receiving written notice from the Owner proceed to remove all materials rejected by the

Owner, whether worked or unworked, and take down all portions of the work, which shall be considered as unsound or improper, or in any way failing to conform to the plans and specifications.

Should it be considered necessary or advisable by the Owner at any time before acceptance of the entire work to make an examination of work already completed by removing or tearing out same, the Contractor shall, on written request, promptly furnish all necessary facilities, labor, and material for that purpose. If such work is found to be defective or nonconforming in any material respect, due to the fault of the Contractor or his subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the contract, an equitable adjustment shall be made in the contract price to compensate the Contractor for the additional services involved in such examination and reconstruction and, if completion of the work has been delayed thereby, he shall, in addition, be granted a suitable extension of time.

Unless otherwise provided in this contract, acceptance by the Owner shall be made as promptly as practicable after completion of all work required by this contract. Acceptance shall be final and conclusive except as regards latent defects, fraud, or gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guarantee.

- 20) MATERIALS AND WORKMANSHIP:** Unless otherwise stipulated in the specifications, all workmanship, equipment, materials and articles incorporated in the work covered by this contract are to be new and of the best grade of their respective kinds for the purpose. When required by the plans and specifications, the Contractor shall furnish the Owner or Consultant, for approval, certified copies of test results made of the materials or articles, which he contemplates incorporating in the work. Samples of materials shall be submitted for approval when so directed. Machinery, equipment, materials and articles installed or used without such approval shall be at the risk of subsequent rejection.

If not otherwise provided, material or work called for in this contract shall be furnished and performed in accordance with established practice and standards recognized by architects, engineers and the trade.

- 21) COOPERATION WITH UTILITIES:** All utility facilities and appurtenances within the project limits shall be located or relocated by the utility owner, unless otherwise specified. Locations of these utilities will be provided by the utility owners and may not be exact, particularly with regard to underground installations. The contractor shall call for locates prior to the start of any work.

The contractor shall lead the efforts to coordinate with utility owners and the engineer in the location and relocation of utility facilities to minimize effects upon the contractor's work, interruption to utility service and duplication of work by the utility owners. Facilities or appurtenances that are to remain in place during construction shall be accounted for and protected by the contractor's work procedures.

In the event utility services are interrupted as a result of damage within the project limits, the contractor shall notify the appropriate utility authorities and cooperate with the utility owners until service has been restored. Work shall not begin around fire hydrants until provisions for continued service have been made and approved by the local fire authority.

When the failure of the owners of utility facilities to cooperate and coordinate their work with that of the contractor results in actual delay to the contractor in the overall completion of the contractor's work, such delay will be considered in the count of working days or date specified for completion as contractor's sole compensation from the County, provided the contractor notified the engineer in writing of the delay at the time the delay occurred.

The contractor shall use every precaution to prevent damage to all public and private utilities. Repairs to damaged utilities caused by negligent or wrongful acts or omissions on the part of the contractor shall be corrected at the contractor's expense. Damaged facilities shall be restored to a condition similar or equal to that existing before the damage occurred. The utility will designate who shall repair the damaged facility and the contractor shall not make repairs without utility approval.

Should there be located within the right of way any public or private utility facilities that are to remain in place and which will interfere with the contractor's proposed methods of operation, the contractor, in cooperation with the engineer, shall make all necessary arrangements with the owner for any temporary or permanent removal or relocation of such facilities desired for the contractor's convenience. Any cost involved shall be at the contractor's expense.

If utility facilities or appurtenances are found that are not noted in the contract documents and could not be discovered in accordance with [Sec 102.5 of the Missouri Standard Specifications](#), the engineer shall be notified in writing as soon as possible of the conflict and will determine whether relocation of the utility is necessary to accommodate construction. If relocation is necessary, the contractor will make the necessary arrangements with the utility owner. Compensation for the relocation of utilities will be worked

out between the County and the utility owner prior to the relocation of any utility. No additional compensation will be made to the contractor for coordinating the location and/or relocation of utilities.

- 22) **“OR EQUAL CLAUSE”:** Whenever, in these specifications or in any of the Contract Documents, any article, appliance, device or material is designated by a manufacturer’s or vendor’s or proprietary or trade name and such words are not followed by the condition “or equal”, it shall be deemed that the words “or equal” do follow such designation unless the text clearly requires a contrary interpretation. Any article or material equaling the standards fixed may be used in place of that specifically mentioned by the specifications, provided that the material proposed is first submitted to and approved by the Owner or Consultant.

If by reason of the unavailability of material or equipment, a substitute item of material or equipment is approved by the Owner or Consultant, the Owner shall receive the benefit of any economy resulting from the substitution.

- 23) **SUBLETTING OR ASSIGNING THE CONTRACT:** The bidder is specifically advised that any person, firm or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the County.

Second tier subcontracting will not be permitted on this project. It will be the responsibility of the Contractor to insure that his subcontractors do not, in turn, subcontract any portion of the work.

The Contractor shall furnish to the County a signed copy of all subcontracts at or before the pre-construction meeting. This applies to Federal and local projects.

The Prime Contractor must be on MoDOT’s approved Contractor Listing unless otherwise stipulated in the contract. The Prime Contractor must also perform with it’s own organization, contract work amounting to not less than 30% of the total original contract price. This applies to Federal and local projects.

- 24) **WARRANTIES AND GUARANTEES:** Clauses that require the contractor to guarantee materials and workmanship and otherwise maintain the work for a specified period after satisfactory completion and final acceptance will not be approved. This is not even permissible as a non-participating bid item.

Routine warranties or guarantees provided by a manufacturer are valid. Contractors’ warranties or guarantees providing for satisfactory in-service operation of mechanical and electrical equipment and relates components for a period not to exceed six (6) months following project acceptance are permissible

- 25) **INSPECTION BY JEFFERSON COUNTY, MoDOT and FHWA:** The Contractor shall assure that representatives of the County, MoDOT, and FHWA shall have the opportunity at any time to inspect and review the work done by the Contractor and his subcontractors on this project and shall grant them access to all parts of the work.

- 26) **MATERIAL TESTING:** All project sampling and testing of materials shall be performed by the County or by a consultant employed by the County. The Contractor shall assure that representatives of the County, consultants employed by the County, or MoDOT, has the opportunity to sample and test materials used on this project. Acceptance testing specified to be conducted by LPA or Consultant hired by LPA. Inspector must be MoDOT Certified (EPG 136.11.17.1 and EPG 106.18). Costs associated with providing the sample materials shall be incidental to the cost of the project.

- 27) **TRAFFIC CONTROL:** The Traffic Control Plan for this overlay project must follow the Federal Highway Administration’s Manual On Uniform Traffic Control Devices (MUTCD 2009 including revision 1 and 2, May 2012) for all traffic control operations.

- 28) **STORM WATER POLLUTION PREVENTION PLAN (SWPPP):** The County’s Storm Water Pollution Prevention Plan will be as stated in this General Provision and/or as shown on the plans.

The primary purpose of this plan is to protect the public and waterways from the adverse effects of construction.

For all of Jefferson County projects, the County’s “Erosion and Sediment Control/Storm Water Management Design Manual” shall be followed. A copy of that manual is available on the Jefferson County website at:

<http://www.jeffcomo.org/StormwaterErosion.aspx?nodeID=StormwaterDivision>

For projects without a drawing showing erosion and sediment control measures, the Engineer or his representative will direct what measures are to be used and where they will be placed. Pay items for these measures will be in the table of “ESTIMATED

QUANTITIES". Any measures not covered by a pay item or not specifically addressed on the Plans or Specifications will be by negotiated price.

Maintenance of any item utilized, will be considered incidental to that pay item. Maintenance shall be considered as the repair or replacement of any measure paid for, but not properly functioning before final acceptance of the project. Maintenance shall take place at the time as directed by the Engineer.

Concrete wash down pits shall be utilized for the washing of all concrete trucks. The pits shall be of adequate size to handle all wash down water. The pits shall be lined with a plastic liner (10 mil minimum) to prevent the seepage of the water into the adjoining ground. Berms may be necessary to prevent the migration of any splash water into the streams. The hardened waste from the wash down pits shall be removed and broken into pieces no larger than one cubic foot. The waste concrete pieces may be used as revetment, but will not be considered in measurement for payment. The cost of the wash down pits, berms and disposal shall be incidental to the cost of the concrete.

Any spillage of hazardous waste shall be cleaned up by the Contractor at no additional cost to the Owner. Measures shall be taken to ensure that no hazardous waste reaches a stream or adjoining property.

Any fines assessed for not following the SWPPP, will be the sole responsibility of the Contractor. If the Owner is fined by a State or Federal agency, liquidated damages in the amount of the fine will be charged to the Contractor by the Owner. Contractor agrees that it shall remit payment for said liquidated damages immediately upon request by Owner. Failure to do so may, at the Owner's option, be considered a breach of contract thereby entitling Owner to such other damages as may result. These damages shall be in addition to the liquidated damages described in this paragraph.

29) SCHEDULE AND PROGRESS REPORTS: The Contractor shall, within 15 calendar days after date of notice to proceed, submit to the Owner five copies of a diagram covering operations in the work for the County's review and approval subject to update. The diagram will be used as a basis for review of monthly progress reports until the project is completed. At the request of the Owner, the diagram may be updated to demonstrate actual progress.

30) TIME OF COMPLETION AND LIQUIDATED DAMAGES: The parties recognize that time is of the essence of this contract and, after the Contractor receives notice to proceed from the Owner, the work to be performed hereunder shall be commenced and shall be completed within the respective number of days specified in the proposal.

If the Contractor fails to complete the work within the time specified, or any extension thereof granted hereunder, the Contractor should pay the Owner the sum specified in the Contract for each day, as defined by Sec 108 of the 2011 Edition of the "Missouri Standard Specifications for Highway Construction", the Contractor is in default. It is agreed that said daily sum is to be paid, not as a penalty, but as compensation to the Owner as liquidated damages for loss which the Owner will suffer because of such default through increased administrative and engineering costs and other tangible and intangible costs. Such damages may be at the Owner's option, be deducted from any monies held by it which are payable to the Contractor.

The completion of the work included under this Contract is defined for purposes of determining liquidated damages, as that time when all of the structures and appurtenances have been completed and tested and are, in the opinion of the Owner, ready for continuous permanent use and occupancy for the purposes intended, which includes all grading, cleaning up, or other minor work which is required to provide a completed project in accordance with the plans and specifications. The date shall be the date of a letter from the Owner to the Contractor indicating substantial completion or final acceptance.

31) EXTENSION OF TIME: The Contractor shall not be entitled to any extension of time for completion of the work as herein above specified unless the Contractor, within 10 days from the beginning of any delay, notifies the Owner in writing of such delay and the cause thereof and the Owner shall determine:

- a. That such delay arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of public enemy, acts of Government in either its sovereign or contractual capacity, acts of another contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or delays of subcontractors arising from such unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and such subcontractors; and
- b. That the Contractor cannot complete the work within the time specified solely by reason of such causes.

The Owner shall make a determination as soon as practicable after the Contractor's notice is received and shall decide the amount of additional time, if any, for completion of the work which conditions justify. Any time extensions will require approval of the Missouri Highway and Transportation Department and the Federal Highway Administration, as well as the Owner.

- 32) FORFEITURE OF CONTRACT:** Should the Contractor at any time refuse, neglect or fail to supply a sufficient number of properly skilled workmen or sufficient equipment or materials of the proper quality, or execute the work with diligence and in accordance with approved schedules, or fail in the performance of any of the covenants herein contained, the Owner may, after three days written notice to the Contractor and his bonding company, provide any such labor, equipment or materials and deduct the cost thereof from any money then due or thereafter to become due to the Contractor under this contract.

Alternatively, the Owner, may after ten days written notice to the Contractor and his bonding company, terminate the employment of the Contractor for said works and enter upon the premises and take possession of all materials, tools and equipment thereon and finish or contract with others to finish the work. The Owner and such others may use such materials, tools and equipment to finish the work. The Contractor shall not be entitled to rental or other compensation for the use of his construction tools and equipment, but shall only be entitled to the return thereof in the condition existing when possession was taken, ordinary wear and tear excepted. In case of such discontinuance of the employment of the Contractor, the Contractor shall not be entitled to receive any further payment under this Contract until the said work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this contract shall exceed the expenses incurred by the Owner to the Contractor, but if such expenses shall exceed such unpaid balance, the Contractor shall pay the difference from money then due or thereafter to become due to the Contractor under this contract. The expense incurred by the Owner as here provided for finishing the work and its cost incurred through such default shall be certified by the Consultant, whose certificate thereof shall be conclusive and binding upon the parties. The remedies of the Owner under this Article are exclusive of and in addition to any other contained in this contract, the Contractor's bonds, or provided by law.

- 33) PAYMENTS:** The Contractor shall receive as full compensation for all work hereunder a sum equal to the value of the work done based in his proposal, attached hereto and made a part of this contract.

Payment shall be made to the Contractor monthly, based upon the approved pay request. The final payment shall be paid to the Contractor, subject to approval of the final change order, within 30 days after completion and acceptance of the entire work herein contracted for, and upon receipt by the County, and approval of, all final documentation. Final documentation shall include proof of the meeting of DBE goals, and the release by materials suppliers and subcontractors of having received full payment.

By the 15th of each month the Contractor shall submit to the Owner an invoice containing an estimate of the percentage of the total work under the contract accomplished to the end of such month. The invoice shall be in such form and detail as required by the Owner.

The requirements set forth in Section 109 of the Missouri Standard Specifications For Highway Construction for payments, retained percentage, release of retained percentage, prompt payment to subcontractors and suppliers and final payment shall apply to all contracts where the Federal Government is participating in the cost of construction.

- 34) PAYMENTS NO EVIDENCE OF PERFORMANCE:** No certificate for payment made under this contract except the final certificate of final payment, shall be evidence of the performance of this contract, either wholly or in part. No Payment shall be construed to be an acceptance of defective work or improper materials.

- 35) CHANGES:** The Owner and/or the Consultant shall have the right to make changes within the scope of the work or change the quantities of the work to be performed. No such change shall be valid unless made in writing by the Owner or Consultant, and for all Federal Aid Contracts such changes shall first be approved by both the Missouri Highway and Transportation Department and the Federal Highway Administration.

In the event such changes cause an increase or decrease in the Contractor's cost of or time required for performance of the contract, the contract price and/or period of performance shall be equitably adjusted; provided, the increase or decrease in the amount of the work for which unit prices apply under the specifications shall be computed by multiplying the change in quantities (measured as provided in the contract documents) of such work by such contract prices.

In the absence of a bid price for a given item of work not provided for nor fairly included in the bid prices for other items of work, a written agreement may be made between the Owner and the Contractor to be included in the written order for such extra work.

Whenever the Contractor and the Owner are unable to agree on prices for extra work and the Owner directly or acting through the

Consultant orders the Contractor to proceed with the work by force account, the work will be paid for in the manner herein described and the compensation thus provided shall constitute full payment for said work. Payment will be determined as follows:

For all materials purchased by the Contractor and used in the force account work, he will be paid the actual cost of such materials, including sales taxes if required, and freight and delivery charges as shown by original receipted bills, to which will be added an amount equal to 15 percent of the sum thereof. The Owner or Consultant, however, reserves the right to approve or to reject the materials to be used and the sources of supply of any materials furnished by the Contractor.

For all equipment and machinery used in the force account work, the Contractor will be paid reasonable operated and maintained rental prices to which no percentages will be added.

The Contractor will be paid the cost of wages for all labor while engaged in the force account plus the actual cost chargeable to the force account work of workmen's compensation insurance, social security taxes, unemployment compensation insurance and such additional amounts as are paid by the Contractor by reason of an employment contract generally applicable to his employees, to which total sum will be added an amount equal to 15 percent of wages and other costs listed above. In evidence of the costs of labor, equipment and materials for which payment is to be made under the force account order; the Contractor shall provide a certified statement of wages actually paid, together with copies of supporting payrolls, of equipment rental charges, and of bills for materials.

Wage rates used in determining the amount of the payment will be the actual wage rates paid by the Contractor for work under this contract, except that no rate used shall exceed the rate of comparable labor currently employed on the project.

Payment for services of foremen in direct charge of the specific operation will be made. Payment for the services of superintendents, timekeepers or other overhead personnel will not be made nor will payment for services of watchmen be made unless required specifically by the force account work. The actual function performed by an employee rather than his payroll title will be the criterion used in determining the eligibility of an employee's services for payment under this provision.

The types and amounts of equipment and machinery used by the Contractor in carrying out his work under the force account order shall be in keeping with normal practice for work of a similar nature, except that the Owner or Consultant may, at his discretion, limit by specific instruction the type and amounts of equipment and machinery to be used.

In computing the hourly rental of such equipment, less than 30 minutes shall be considered $\frac{1}{2}$ hour, except when the minimum rental to be paid shall be one hour. Rental time will not be allowed while equipment is inoperative due to breakdowns. The rental time of equipment to be paid for shall be the time the equipment is in operation on the force account work being performed, and, in addition, shall include the time required to move the equipment to the work and return it to its original location. When approved in advance by the Owner or Consultant, towing or transporting costs will be allowed when the equipment is moved by means other than its own power. No payment will be made for moving time, towing or transporting the equipment if it is used at the site of the work on other than force account work. No payment will be allowed for the use of small tools and minor items of equipment, which, as used herein, are defined as individual tools or pieces of equipment having a replacement value of \$50.00 each or less.

For additional premiums paid on Performance and Labor and Materials Bonds by reason of increases in the account of work over and above that called for in the original contract due to the inclusion of the force account work, and for additional premiums paid on Public Liability and Property Damage Insurance by reason of extra hazard inherent in the force account work of the type called for in the original contract, the Contractor will, on presentation of substantiating evidence from his bonding and insurance carriers, be paid the actual costs of the increase in premium, to which no percentages will be added. Payment for the cost of additional premiums paid on Workmen's Compensation Insurance by reason of extra hazard introduced into the Contractor's operations by the inclusion of force account work is covered by the provisions above, except that any claim for additional cost based on the application, by reason of extra hazard, of a higher insurance rate to any portion of the payroll over and above that chargeable to the force account work under the provisions above, must be substantiated by evidence from the Contractor's insurance carrier.

The Contractor and Owner shall compare records of the work performed on a force account basis at the end of each day. These records shall be prepared in triplicate by the Contractor and shall be signed by both the Owner and the Contractor's representative, one copy being retained by the Contractor and two copies retained by the Owner. Payment for force account work will be included in monthly progress payments.

- 36) LIENS AND CLAIMS:** In addition to other remedies available the Owner hereunder, in all cases of non-payment by the Contractor or a subcontractor of any sums of money due for labor, materials, supplies, equipment or other items in performing in this contract, or if at any time there should be evidence of a lien or claim chargeable to the Contractor or a subcontractor for which, if established,

the Owner might become liable, the Owner is hereby authorized and empowered to retain out of any payment then due or thereafter to become due to the Contractor, an amount sufficient to indemnify the Owner against any such lien or claim.

Alternatively, without limiting other remedies and rights of the Owner under the Contract, under the Contractor's bonds or under the law, the Owner may withhold, in addition to the 10 percent retention, a sufficient amount of payments otherwise due to the Contractor to cover payments that may be past due and payable by the Contractor or his subcontractors or suppliers for just claims for labor or materials furnished in and about the performance of the work under this contract and for failure of the Contractor to make proper payments to his subcontractors. The Owner shall disburse and shall have the right to act as agent for the Contractor in disbursing such funds as have been withheld pursuant to this paragraph to the party or parties who are entitled to payment therefrom. The Owner will render the Contractor a proper accounting of all such funds disbursed in behalf of the Contractor.

Final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner a complete waiver or release by himself and his subcontractors and others of all liens and claims arising out of the work, or receipts in full lieu thereof, and if required, an affidavit that so far as he has knowledge or information the releases and receipts include all the labor and materials for which a lien could be filed.

- 37) RESPONSIBILITY:** Nothing in the Contract Documents shall be construed as placing the work under the specific direction or supervision of the Owner or the Consultant or relieving the Contractor from his liability as an independent contractor and, as such, he shall perform his work, including, but not limited to, supervision and control of his own personnel and scheduling of the work as required to ensure its proper and timely performance, and he shall be solely responsible for the exercise of due care to prevent bodily injury and damage to property in the execution of the work.

The Owner or Consultant shall have the right of entry to the site for the purpose of verifying compliance with the plans and specifications.

38) INDEMNIFICATIONS AND INSURANCE:

Responsibility for Claims for Damage or Injury:

The Contractor and surety shall indemnify and save harmless the County, and its members, agents and employees from all claims or suits made or brought for personal injury, death or property damage, caused or contributed to be caused by:

- (a) The negligence of the contractor, subcontractors, suppliers or their respective officers, agents or employees;
- (b) The creation or maintenance of a dangerous condition of or on the County's property or right of way, which condition occurred at least in part due to the acts or omissions of the contractor, subcontractors, suppliers or their respective officers, agents or employees; or
- (c) The failure of the contractor, subcontractors, suppliers of their respective officers, agents or employees, to perform the work in accordance with the plans and specifications.

Neither the County nor the Contractor, by execution of a contract, shall intend to or create a new or enlarge an existing cause of action in any third party. This provision shall not be interpreted to create any new liability which does not exist under the statutory limited waiver of sovereign immunity, or to waive or extinguish any defense which either party to this contract or their respective agents and employees may have to an action or suit by a third party.

Contractor's Responsibility for Work:

Until the County accepts the work, it shall be in the custody and under the charge and care of the Contractor. The Contractor shall restore and replace, at the Contractor's expense, any lost or stolen County-owned material in the Contractor's custody or control. Damages to any portion of the work before its completion and acceptance, caused by the action of the elements or from any other reason, shall be restored or replaced at the Contractor's expense. Issuance of a payment estimate on any part of the work done will not be considered as final acceptance of any work completed up to that time. The County may, in its discretion, make such adjustments as it considers being proper for damage to the work due to unforeseeable causes beyond the control of, and without fault or negligence on the part of the Contractor.

Liability Insurance Requirements

The Contractor shall procure and maintain at its own expense, until acceptance of the project by the County, liability insurance for all damages and losses imposed by law and assumed under the contract, of the kinds and in the amounts specified in the relevant sections shown herein. Before the Contractor commences the work, the Contractor shall require the insurance company or companies to furnish to the County evidence of such insurance showing compliance with these specifications. All insurance required herein shall be occurrence policies in a form acceptable to the County, and shall remain in force until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by its formal acceptance by the County.

Each policy or its declaration pages shall provide that the policy shall not be materially changed or canceled until the County has been given at least 30 days advance notice in writing. If any policy is canceled before the contract work is complete, a satisfactory replacement policy must be in force, with notice and evidence of insurance submitted to the County, prior to the effective date of cancellation of the former policy. All evidence of insurance and notices shall be submitted to: Director of Public Works, Jefferson County Public Works Department, 725 Maple Street, PO Box 100, Hillsboro, Missouri 63050. **The Contractor shall furnish the County with a complete copy of the policy prior to the time the Contractor commences work on the site of the project.** Failure to furnish evidence of proper insurance, or complete insurance policies will result in temporary suspension of work and may result in other claims or actions for breach of contract or otherwise, as may be recognized at law or in equity.

Workers' Compensation Liability Insurance

The Contractor shall furnish evidence to the County that, with respect to the operations it performs, it carries workers' compensation insurance, or is qualified as self-insured, sufficient to comply with all its obligations under state laws relating to worker's compensation. The Contractor shall also require each subcontractor on the project to furnish the same evidence to the County. This evidence shall be furnished to and approved by the County prior to the time the or or the subcontractor commences work on the site of the project.

Commercial General Liability Insurance

The Contractor shall obtain one or more occurrence-based policies of commercial general liability insurance (Form CG 00 01 or equivalent), which provide coverage for the contract work. The minimum limits of liability for commercial general liability insurance shall be: \$1,000,000 each bodily injury or property damage occurrence, combined single limit, \$2,000,000 general aggregate with a per project endorsement and \$1,000,000 products/completed operations aggregate. Each such policy shall be endorsed so as to cover liability arising from blasting if applicable, other inherently dangerous activities and underground property damage. Each such policy shall be endorsed to include broad form general liability, contractual liability and completed operations coverage.

Commercial Auto Liability Insurance

The Contractor shall obtain one or more occurrence-based policies of auto liability insurance, which provide for its owned, non-owned and hired vehicles of every type and description, which are used in the contract work. The minimum limits of liability for such insurance shall be \$1,000,000 combined single limit.

Additional Insureds

Each such policy of commercial general liability insurance shall name the County of Jefferson and its employees as additional insureds. Each commercial general liability insurance policy shall also contain a separation of insureds condition. The insurance afforded by the Contractor shall be primary insurance.

Subcontractor's Coverage

If any part of the contract is subcontracted, each subcontractor, or the Contractor on behalf of the subcontractor, shall obtain the same commercial general liability insurance and commercial automobile liability insurance coverage. The commercial general liability insurance shall name the same entities specified above as additional insureds, and shall have the same separation of insureds conditions.

Railroad Protective Liability Insurance

In addition to other required liability insurance, the Contractor shall provide railroad protective liability insurance if applicable, for and in behalf of the railroad as outlined in provisions for each project. The insurance policy shall be submitted to the County in original and duplicate for approval. No work will be permitted on the railroad right of way until such approval is granted.

Insurance with Other Than Missouri Companies

Any insurance policy required as specified above, if written by an insurance company organized in a state other than Missouri, shall be signed by an agent or broker licensed by the State of Missouri. In the case of policies written by companies organized in a state other than Missouri, the evidence of insurance submitted as authorized in the contract shall be signed by an agent or broker licensed by the State of Missouri. Nothing in this provision limits or waives the requirement that each insurance policy must be issued by a company authorized to issue such insurance in Missouri.

Third Party Liability

Neither the State of Missouri, the County of Jefferson nor the Contractor, by execution of the contract including these specifications, intend to create a right of action in a third party beneficiary except as specifically set out in these specifications and the contract. It is not intended by any required contractual liability in the contract or in these specifications that any third party beneficiary has a cause of action arising out of the condition of the project when completed in accordance with the plans and accepted by the County.

Personal Liability of Public Officials

There shall be no personal liability upon the County, or any member, employee or agent of the County in carrying out any of the provisions of the contract or in exercising any power or authority granted to them, it being understood that in such matters they act as agents and representatives of the County, with official and public duty doctrine immunity. If any provision of the contract appears to impose a duty on such an individual, the duty remains exclusively that of the County and is not a personal duty or obligation of the individual.

- 39) **BOND:** The Contractor at his expense shall, before commencing work hereunder, procure and deliver to the Owner a Performance Bond and a Labor and Materials Payment Bond in the amount of 100% of the contract as awarded, as security for the faithful performance of the contract and the payment of all obligations thereunder by the Contractor and his subcontractors. The Bonds shall be written in such form as may be satisfactory to the Owner and provided by a guaranty or surety company listed in the latest issue of U.S. Treasury Circular 570 and the penal sum shall be within the maximum specified for such company in said Circular 570. In substance, the condition of the obligation under said bond or bonds shall be as follows:

“The condition of this obligation is such that if the above bound Principal shall in all respects comply with the terms and conditions of said contract and his obligations thereunder, including the specifications and plans referred to therein, and such changes and alterations as may be made in said contract, specifications and plans and shall indemnify and save harmless the Owner against or from all costs, expenses, damages, injuries or losses to which the said Owner may be subjected by reason of any wrongdoing, misconduct, want of care or skill, negligence or default on the part of said Principal, his subcontractors, officers, agents or employees, in the execution of performance of said contract and shall promptly pay all just claims for damages for injury to property and for labor, equipment, materials and supplies incorporated in the work or consumed in the performance thereof incurred by said Principal, his subcontractors, officers, agents or employees, in or about the construction or improvement contracted for, then this obligation shall be void; otherwise, to remain in full force and virtue in law. The Surety hereby waives notice of any changes, alterations or modifications, including any extensions of the period of performance, in the contract, specifications and plans.”

If any surety upon any bond furnished in connection with this contract becomes unacceptable to the Owner, or if any such surety fails to furnish reports as to his financial condition from time to time as requested by the Owner, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the Owner and of persons supplying labor or materials in the prosecution of the work contemplated by this contract.

- 40) **ROYALTIES AND PATENTS:** The Contractor shall indemnify, defend and save harmless the Owner and the Consultant from all liabilities, decrees, judgments, claims or disbursements, including attorney fees and/or damages and expenses which may come against or be incurred by the Owner or the Consultant by reason of the use of any patented material, machinery, devices, equipment or processes furnished or used in the performance of the work under this contract or the use by the Owner of the completed structure or by reason of the use of patented designs furnished by the Contractor and accepted by the Owner. In the event any claim, action at law or suit in equity of any kind whatsoever is made or brought against the Owner, the Owner shall have the right, without impairment of the foregoing indemnification, to retain from the money due and to become due said Contractor a sufficient amount of money to protect itself against loss.
- 41) **SPECIFICATION CONFLICTS:** Where any provision of specifications referred to or incorporated into the Contract Documents is inconsistent or in conflict with the provisions of the Contract Documents, the provisions of the Contract Documents shall govern.

- 42) **STANDARDS:** Where materials and methods are indicated in the specifications as being in conformance with a standard specification, reference in all cases shall be to the latest edition of the specification and shall include all interim revisions, unless specifically stated otherwise.
- 43) **FEDERAL EMPLOYMENT AUTHORIZATION:** The Contractor shall comply with the requirements of the revised Statutes of the State of Missouri Chapter sections 285.525 to 285.555. If any part of the contract is subcontracted, each subcontractor shall comply with the same requirements of this specification.

No Contractor shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

As a condition for the award of the contract the Contractor 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 Contractor 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.

A Contractor may enroll and participate in a federal work authorization program and shall verify the employment eligibility of every employee in the Contractor's hire whose employment commences after the Contractor enrolls in a federal work authorization program.

A general contractor or subcontractor of any tier shall not be liable under sections 285.525 to 285.550 when such general contractor or subcontractor contracts with its direct subcontractor who violates subsection 1 of this section, if the contract binding the contractor and subcontractor affirmatively states that the direct subcontractor is not knowingly in violation of subsection 1 of this section and shall not henceforth be in such violation and the contractor or subcontractor receives a sworn affidavit under the penalty of perjury attesting to the fact that the direct subcontractor's employees are lawfully present in the United States.

- 44) **OSHA TRAINING:** The Contractor shall comply with the requirements of the revised Statutes of the State of Missouri Chapter sections 292.675. If any part of the contract is subcontracted, each subcontractor shall comply with the same requirements of this specification.

Any Contractor signing a contract to work on the construction of public works for the Owner shall provide a ten-hour Occupational Safety and Health Administration (OSHA) construction safety program for their on-site employees which includes a course in construction safety and health approved by OSHA or a similar program approved by the department which is at least as stringent as an approved OS11A program. All employees are required to complete the program within sixty (60) days of beginning work on such construction project.

Any employee found on a worksite subject to this section without documentation of the successful completion of the course required under this section shall be afforded twenty (20) days to produce such documentation before being subject to removal from the project. The contractor shall forfeit as a penalty to the Owner two thousand five hundred dollars (\$2,500) plus one hundred dollars (\$100) for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training. The penalty shall not begin to accrue until the time period in this section has elapsed.

The Owner shall withhold and retain all sums and amounts due and owing as a result of any violation of this section when making payments to the contractor under the contract. The contractor may withhold from any subcontractor, sufficient sums to cover any penalties the Owner has withheld from the contractor resulting from the subcontractor's failure to comply with the terms of this section. If the payment has been made to the subcontractor without withholding, the contractor may recover the amount of the penalty resulting from the fault of the subcontractor in an action maintained in the circuit court in the county in which the public works project is located from the subcontractor.

In determining whether a violation of this section has occurred, and whether the penalty of this section shall be imposed, the Department of Labor and Industrial Relations shall investigate any claim of violation. Upon completing such investigation, the Department shall notify the Owner and any party found to be in violation of this section of its findings and whether a penalty shall be assessed. Determinations under this section may be appealed in the circuit court in the county in which the public works project is located. The Department may establish rules and regulations for the purpose of implementing the provisions of this section.

This section shall take effect on June 20, 2015.

END OF GENERAL PROVISIONS

Technical Specifications

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JOB SPECIAL PROVISIONS

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A. GOVERNING SPECIFICATIONS AND DEFINITION CHANGES

The general requirements, provisions and technical specifications governing the completion of the work contemplated shall be the Missouri Standard Specifications for Highway Construction, 2011 Edition, supplemental revisions most recent edition, and are made part of this contract, although not reproduced herein.

The Job Special provisions, General Special provisions and other State requirements are contained within these Job Specifications.

The Job Special provisions, General Special Provisions and the Construction Drawings shall take preference over all other documents whenever any disagreement exists.

All reference to the "Commission" made in the Missouri Standard Specifications for Highway Construction, 2011 Edition shall be interpreted as the Jefferson County Public Works Department, Jefferson County, Missouri.

All reference to the "Engineer" made in the above standard specifications, shall be interpreted as the County Director of Public Works/Highway Engineer, Jefferson County Public Works Department, Hillsboro, Missouri.

All reference to the "State" made in the above standard specifications shall be interpreted as Jefferson County, Missouri.

B. SECTION 801 - FERTILIZING

Description. Fertilizing shall conform to Section 801, and application criteria shall be as follows:

Complete fertilizer of neural character, with some elements derived from organic sources, containing not less than 12 percent (12%) phosphoric acid, 12 percent (12%) potassium, and 12 percent (12%) nitrogen. Provide nitrogen in form that will be available during initial period of growth.

C. SECTION 805 - SEEDING

Description: In accordance with Section 805.2.2, the following seed mixture shall be applied at the rate specified.

Pounds of Pure	
<u>Seed Name</u>	<u>Live Seed/Acre</u>
Tall Fescue	30
Orchard Grass	10
Annual Rye	10

D. PREVAILING WAGE RATE

The Federal Government is participating in the cost of construction of this project. This contract requires payment of the prevailing hourly rate of wages for each craft or type of worker required to execute the contract as determined by the State Wage Rates.

These documents can be obtained when ordering bidding documents and have important legal consequences. It shall be conclusively presumed that they are in the BIDDER'S possession at the time any bid is submitted.

E. DISPOSAL OF EXCESS MATERIAL

The Missouri Solid Waste Management Law and its ancillary regulations, 10 CSR 80-1 through 9, provide for the proper disposal of solid waste. The CONTRACTOR must comply with the provision of applicable regulations during highway and bridge construction activities. These activities oftentimes involve the generation of "excess material", which in many instances can also be considered "solid waste" under the definitions of the Department of Natural Resources (DNR) Solid Waste Management Program.

Many types of excess material are not regulated by the DNR's Solid Waste Management Program. Such "clean fill" includes uncontaminated soil, rock, sand, gravel, concrete, minimal amounts of woods and metal and inert solids as approved by rule or policy by DNR's Solid Waste Management Program.

These materials are basically not considered solid waste, and may be disposed of without prior approval from DNR's Solid Waste Management Program. Other substances which are not included in this list of materials may require special approval by the DNR's Solid Waste Management Program prior to disposal in areas other than approved landfills.

Disposal of any other material' which does not fit this "clean fill" definition must be in accordance with DNR's (or local) regulations and it shall be the CONTRACTOR's responsibility to provide appropriate documentation (i.e. landfill receipts or a private OWNER waiver letter or statement from DNR) that the disposal will not violate applicable laws or regulations.

No direct payment will be made for any expense incurred by the CONTRACTOR by reason of his compliance with these requirements.

F. **SUBGRADE REPAIR**

Description:

During compaction of the prepared subgrade, the Contractor shall record and report all soft or uncompactable areas to the Engineer.

Where the Engineer deems subgrade material to be unsatisfactory, over-excavate below subgrade will be required to a depth of one foot below design subgrade as needed to remove unsatisfactory subgrade material.

1. The excavated material shall be disposed of at a Contractor-furnished offsite disposal site.

Backfill the excavated areas with subgrade repair material.

2. Cover over excavated area with an integrally formed polypropylene biaxial geogrid having a positive mechanical interlock load transfer mechanism with the properties listed below:

	MD Values ¹	XMD ¹
• Aperture Dimensions ²	1.0 in	1.3 in
• Minimum Rib Thickness ²	0.03 in	0.03 in
• Tensile Strength 2% Strain ³	280 lb/ft	450 lb/ft
• Tensile Strength @ 5% Strain ³	580 lb/ft	920 lb/ft
• Ultimate Tensile Strength ³	850 lb/ft	1,300 lb/ft
• Junction Efficiency ⁴		93%
• Flexural Stiffness ⁵		250,000 mg-cm
• Aperture Stability ⁶		32 m-N/deg
• Resistance to Installation Damage ⁷	95%SC / 93%SW / 90%GP	
• Resistance to long Term Degradation ⁸	100%	
• Resistance to UV Degradation ⁹	100%	

Notes:

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
2. Nominal dimensions.
3. True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637-01 without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement so as to overstate tensile properties.

4. Load transfer capability determined in accordance with GRI-GG2-05 and expressed as a percentage of ultimate tensile strength.
 5. Resistance to bending force determined in accordance with ASTM D5732-01, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs (as a "ladder"), and of length sufficiently long to enable measurement of the overhang dimension, The overall Flexural Stiffness is calculated as the square root of the product of MD and XMD Flexural Stiffness values.
 6. Resistance to in-plane rotational movement measured by applying a 20 kg- cm (2 rn-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity.
 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818-06 and load capacity shall be determined in accordance with ASTM D6637-01.
 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
 9. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.
3. Place 2 inch minus crushed stone backfill in compacted lifts 4 inches in thickness to subgrade.

If the excavation below subgrade is required because of negligence on the part of the Contractor, the necessary excavation, backfilling and compaction required to restore the subgrade satisfactorily shall be at the Contactor's sole expense.

Method of Measurement:

Measurement will include subgrade repair material furnished, placed, and compacted during Subgrade Repair and during Proof rolling as specified herein.

Measurement will be based upon measurement under this item.

Basis of Payment:

Payment for this item will be based on the unit price per square yard stated in the Proposal.

Payment for this item shall constitute full compensation for all material, labor, equipment, and incidentals necessary for excavation of designated areas, furnishing materials including rock stabilization fabric, placing and compaction of materials, and re-compaction of the subgrade. Disposal of excavated material is also included in this payment item.

This item is to provide for the repair of the subgrade in the process of the work and shall be used only under the direction of the Engineer.

G. RIPRAP BEDDING & RIPRAP

Description. Furnishing and Placing Riprap Bedding and Riprap shall be in accordance with Section 611 with the following:

Deleted Section 611.30.2 and substitute the following:

611.30.2 Material. The material for riprap bedding shall be in accordance with Section 1002.2 Course Aggregate and shall be the gradation as specified on the plans. Riprap shall be durable stone or broken concrete and shall be the gradation as specified on the plans. Acceptance of quality and size of material will be made by visual inspection at the job site.

Delete Section 611.30.3 and substitute the following:

611.30.3 Construction Requirements. The bed for the riprap shall be excavated to allow the finished surface to conform to the lines specified. At the toe of the slope, the riprap shall commence on a continuation of the slope after excavation to accommodate the full depth of fabric, bedding lift, and riprap.

611.30.2.1 Placing. No riprap shall be placed until the preparation has been approved by the Engineer. Installation of permanent erosion control geotextile and bedding material will be required. The geotextile shall be installed according to the plans and Section 624. The placement of material shall begin at the lower elevations, progressing up the slope. Bedding material shall be spread uniformly on the geotextile to the lines specified. Placing of material by methods which will tend to segregate particle sizes within the bedding will not be permitted. Any damage to the surface of the bedding material or the geotextile during placing of the bedding shall be repaired before proceeding with the work.

Compaction of the bedding material will not be required; but it shall be finished to present a reasonably even surface, free from mounds, windrows, or depressions.

Stone riprap shall be placed to the lines and grades shown on the plans. All tapers between minimum thickness and any high points shall be at a uniform rate. There shall be no abrupt changes in the riprap surface.

The riprap shall be placed to its full course thickness in one operation and in such a manner as to avoid displacing the bedding material. The riprap shall not be placed or dropped from a height of more than 1 ft. Placing riprap by dumping into chutes or by similar methods likely to cause segregation of the various sizes will not be permitted.

The finished riprap shall be reasonably well graded with a minimum of voids. The desired distribution of the various sizes of stones shall be obtained by selective loading of the material at the source, by controlled dumping of successive loads during final placing, or by other methods of placement which will produce the specified results. Rearranging of individual stones by mechanical equipment or by hand will be required to the extent necessary to obtain a reasonably well-graded distribution of stone sizes as specified.

Delete Section 611.30.4 and substitute the following:

611.30.4 Method of Measurement. Measurement for Riprap Bedding will be made to the nearest Square Yard for the thickness specified. Riprap will be made to the nearest Cubic Yard of material in place.

Delete Section 611.30.5 and substitute the following:

611.30.5 Basis of Payment. The accepted quantity of Riprap Bedding and Riprap will be paid for at the contract unit price.

H. REQUIRED CLEARANCES FOR BORROW CLEARANCES

The necessary clearances for disturbed areas such as borrow sites, haul roads; burn pits, staging areas, and spoil sites shall be obtained prior to using these areas for the project. The contractor is encouraged to consider using material from previously disturbed locations (substantial disturbance) or disturbed areas that have previously been cleared, precluding the need to address most, if not all, of the issues described below. The contractor should include the federal project number on all correspondence. The following addresses the primary environmental issues related to clearance of disturbed areas such as borrow sites:

The Endangered Species Act

The Federal Endangered Species Act protects rare species and their habitats. The Act is administered by the US. Fish and Wildlife Service (FWS). Violations of this act can result in extensive project delays and severe fines. To determine whether an activity will impact any rare species or their habitats, contact the Missouri Department of Conservation's Policy and Coordination Section at (573) 751-4115 to request a query of the MDC Heritage Database. All queries must be accompanied by a good quality map illustrating the location of the proposed site and a description of the activity. Allow at least three weeks for a response to all requests.

If there are no known records of rare species or sensitive habitats at the proposed site and it is unlikely that any will be impacted by the activity, the contractor will be given clearance to proceed. However, if rare species are known or likely to occur at the site or known critical habitat exists, further coordination with MDC and the FWS will be necessary. Written clearance from the US. Fish and Wildlife Service may be required before the project can proceed.

Missouri Department of Conservation (MDC)
Planning Division
P.O. Box 180
Jefferson City MO 65102-0180
Telephone (573) 751-4115 or FAX (573) 751-4495

U.S. Fish and Wildlife Service (FWS)
Columbia Field Office
608 East Cherry Street
Columbia MO 65201
Telephone (573) 876-1911 or FAX (573) 876-1914

Floodplain / Regulatory Floodway

An evaluation of floodplain impacts is mandated by Executive Order 11988, Floodplain Management, and subsequent federal floodplain management guidelines. When available, flood hazard boundary maps (National Flood Insurance Program) and flood insurance studies for the project area are used to determine the limits of the base (100-year) floodplain and the extent of encroachment.

The Federal Emergency Management Agency (FEMA) and Federal Highway Administration (FHWA) guidelines 23 CFR 650 have identified the base (100-year) flood as the flood having a one-percent probability of being equaled or exceeded in any given year. The base floodplain is the area of 100-year flood hazard within a county or community. The regulatory floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a specified amount. FEMA has mandated that projects can cause no rise in the regulatory floodway and a one-foot cumulative rise for all projects in the base (100-year) floodplain. For projects that involve the state of Missouri, the State Emergency Management Agency (SEMA) issues floodplain development permits. In the case of projects proposed within regulatory floodways, a “no-rise” certificate, if applicable, should be obtained prior to issuance of a permit.

Questions regarding floodplain and regulatory floodway should be addressed to:

SEMA
P.O. Box 116
Jefferson City MO
65102
Telephone (573) 526-9141

Documentation of consultation with SEMA regarding the presence of 100-year floodplain/regulatory floodway should be included in the final collection of information to be submitted to MoDOT staff.

Federal Emergency Management Agency (FEMA) Buyout Lands

The Flood Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grant Program (HMGP), including the acquisition and relocation of flood-damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to “buy out” flood damaged property that had been affected by the Great Flood of 1993.

There are numerous restrictions on these FEMA buyout properties. No structures or improvements may be erected on these properties unless they are open on all sides. The site shall be used only for open space purposes and shall stay in public ownership. These conditions and restrictions (among others), along with the right to enforce same, are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving these properties should take into consideration that 2—3 years is necessary to process an exemption from FEMA to utilize this parcel. This exemption would likely be a permanent easement rather than a transfer of property. If any proposed site is located on a FEMA buyout property, an alternative site should be chosen.

Farmland Protection

In order to comply with the Farmland Protection Policy Act, which has the purpose of minimizing federal programs’ contributions to the unnecessary and irreversible conversion of farmland caused by nonagricultural uses, the Form AD1006 will need to be completed. This can be accomplished through coordination with United States Department of Agricultural (USDA)-Natural Resources Conservation Service (NRCS) and the completion of Form AD-1006. To receive the Form AD-1006, call the NRCS State office in Columbia at (573) 876-9411. An aerial map of the site or sites will also be required with the area to be disturbed identified on the map. This aerial map can be obtained from the local NRCS office. In some areas of the state this office may be located in an adjoining county.

The contractor will need to complete Parts I and III on the Form AD-1006. The form should then be sent to the NRCS State Office for completion of Parts II, IV, and V. The NRCS State Office address is:

Mr. Dennis Potter
State Soil Scientist
Natural Resource Conservation Service
601 Business Loop 70 West
Parkade Center, Suite 250
Columbia, MO 65203
Telephone (573) 876-9411

After the NRCS office returns the form, the contractor will complete remaining Parts VI and VII. The contractor will provide a copy of the completed form to the MoDOT district contact to document compliance with the Farmland Protection Policy Act.

Wetlands

Federal executive order has decreed a national policy of “no net loss of wetlands.” Under this policy, impacts to wetlands must be avoided if at all practical. Where wetlands are impacted, these impacts must be mitigated by construction or enhancement of a like quantity and quality of new wetlands. For these reasons, avoiding impacts to wetlands is a primary goal.

To determine whether wetlands occur on a farmland site, contact the USDA NRCS. The NRCS has identified and mapped wetlands as a requirement under the Food Security Act. These maps are available from county NRCS offices, usually located in the county seat. For all other (non-farmland) sites, consult the FWS Wetlands Mapper at

<http://wetlandsfws.er.usgs.gov/wetlandsfws.er.usgs.gov/wetlands/launch.html>. If wetlands are identified on either Food Security Act wetland maps or the FWS wetlands mapper, a site visit may be needed to confirm the location of wetlands. If there are no wetland impacts, no other action need be taken.

If there are any questions about the extent of wetlands in the event that wetlands cannot be avoided, contact the U.S. Army Corps of Engineers (COE). If wetlands cannot be avoided, a COE Section 404 permit would be processed through the appropriate COE district. There are five COE districts in Missouri. Information about COE district locations, addresses, and phone numbers is available on the COE website at <http://www.usace.army.mil/ContactUs.html>.

Water Quality / Land Disturbance

The National Pollutant Discharge Elimination Systems (NPDES) program regulates construction activities where 1 acre or more of land is disturbed. If the project proponent has a general NPDES permit for all of their construction activities, this is adequate. If the project proponent does not have a valid general permit and the site to be disturbed is greater than 1 acre in size, a project-specific NPDES permit from DNR is required. If the project is entirely within MoDOT right of way, the sponsor may use MoDOT's general permit. In either case, the sponsor will need to develop a site-specific storm water pollution prevention plan for the project. The sponsor shall contact the Missouri Department of Natural Resources (DNR) NPDES Storm Water Program office at (573) 751-1300 or (800) 361-4827 for further directions. A few cities (Kansas City, Columbia, and others) and counties have obtained their own land disturbance permits from DNR for generic land disturbance purposes: see additional discussion on storm water and erosion control in Section 4.

Hazardous Waste Sites

More than likely, areas to be disturbed will be located in rural areas that have been used for agriculture or similar purposes. Hazardous wastes are most typically associated with commercial or previously industrial properties.

If the proposed area is basically farmland or pasture and has not been used for any commercial activity or dumping, hazardous wastes are unlikely. The contractor should simply document the existing and historic land use of the parcel and tell how this assessment was obtained.

In non-rural, suburban, or commercial areas a nonintrusive investigation may be used to “diagnose” the environmental conditions of a selected site. The following is a list of suggested items, but not inclusive, for a cursory nonintrusive investigation.

- Examine any noticeable contamination in the form of surface staining, oil sheen, odors, stressed vegetation, spills, leaks, illegal dumping, etc.
- Conduct interviews of local citizens and current owners to identify past land use practices and hazardous waste management practices.
- Consult with local and state [Missouri Department of Natural Resources, Hazardous Waste Program, (573) 751-3176] environmental regulatory agencies to identify whether any past problems (complaints, citations, etc.) have occurred at the site, whether any permits/licenses have been filed for the site, or whether enforcement actions have occurred.

If the above analyses produce negative results, the contractor should provide documentation to the MoDOT district contact as to who was contacted and the results of the contact. However, if potential problems are identified through the search for information described above, it would be wise to locate another site.

The potential to encounter wastes from sites that are unknown should always be a consideration. Any unknown sites that are found will be handled in accordance with federal and state laws and regulations.

Historic Preservation

All jobs requiring environmental clearance for historic preservation (archaeological sites and structures) must be reviewed and approved by the State Historic Preservation office (SHPO), Department of Natural Resources. To initiate SHPO's review and clearance for a proposed site for cultural resources a "Section 106 Project Information Form" must be completed and submitted to SHPO along with a copy of a United States Geological Survey (USGS) topographic map indicating the location of the project. In addition, photographs of any structures that will be impacted must be provided. The Section 106 Project Information Form can be obtained from the SHPO website at <http://www.dnr.mo.gov/shpo/sectionrev.htm> or requested from the SHPO by telephone (573) 751-7858 or mail:

Missouri Department of Natural Resources
State Historic Preservation Office
Attn: Section 106 Review
P.O. Box 176
Jefferson City, MO, 65102-0176

Based on the information supplied, SHPO may clear the project at that time or request that the contractor acquire the services of an archaeological consultant to conduct a historic preservation survey of the proposed area. A listing of currently acceptable and available archaeological consultants who can complete a survey if required can be viewed at the SHPO's website at

<http://www.dnr.mo.gov/shpo/profqualifications.htm>. Any questions can be directed to the Design Division-Historic Preservation Section, at (573) 751-0473.

Public Land

If borrow sites are proposed on any publicly owned land, contact the MoDOT district representative before proceeding. Section 4(f) of the Department of Transportation Act of 1966 (now codified as 49 U.S.C. 303 and 23 U.S.C. 138) protects certain public lands. Section 4(f) requires that all U.S. DOT-funded transportation projects must avoid impacts to public parkland and wildlife refuges (and cultural resources deemed eligible for the National Register of Historic Places), unless it is successfully demonstrated that no feasible and prudent alternative exists that avoids "use" or impacts to the park or refuge. It is strongly recommended that public lands not be considered as potential borrow sites.

Once the contractor has obtained all of the above information, it should be provided to the MoDOT district contact. The transmittal letter must include County, Route, and Job Number of the project, along with a map depicting the location and limits of the site(s).

No direct payment will be made for obtaining the required clearances for borrow areas. An adjustment in contract time will be considered for any delay caused by receiving the required clearances.

I. INSPECTION WAIVER

This is not a bid item.

The County requires inspection of materials and products and requires certifications from the manufactures or suppliers for compliance with the specifications. Supplier's material certification shall be required for the following items:

- a. Prestressed Concrete Beams — Prestressed strands
 Concrete
 Reinforced Steel
 Bearing Pads
- b. Guardrail — Steel and Galvanizing
- c. Asphalt — Mix design required
 Weight tickets
 Prime
- d. Class B, B-1 or B-2 Concrete — Mix Design
- e. Reinforced Steel — Mill Certification
- f. Pipe and Flared End Sections

Submittal — Contractor shall submit certifications, signed by the material suppliers and the Contractor, that all materials meet specification requirements. Mix designs of asphalt mixes shall be submitted to the Engineer for approval, prior to placement of material. Certified weight tickets shall be provided for verification of quantity for asphalt. The Contractor shall provide the materials for field-testing at no additional payment.

The County will be responsible for the following job control testing:

- a. Concrete (cylinders, air, and slump)
- b. Grading and Base Compaction
- c. Asphalt (extraction and compaction)

J. SECTION 216- REMOVALS FOR BRIDGE STRUCTURES

Modify Section 216.10.2 to include the following:

The Contractor has the option of removing the existing bridge by whatever method he may choose subject to the approval of the Public Works Director. The use of explosives will not be permitted on this project. The Contractor shall accept full responsibility for the safety and feasibility of his operation and approval of the Public Works Director shall not relieve the Contractor of this responsibility.

Whatever methods is selected, the Contractor shall submit his proposed method and plan of bridge removal to the Public Works Director for review within two weeks after award of the contract and a minimum of 14 days before commencing such activities. Said plan shall include his proposed method of removing and dismantling the existing superstructure as well as his proposed method of demolishing and removing the substructure, Included shall be his proposed method of disposal.

K. CONCRETE SLAB

Description. This work shall consist of the construction of a concrete bridge slab by pre-cast pre-stressed panel as permanent structural forms interacting with a reinforced cast-in-place concrete topping between the exterior girders. Conventional forming shall be used for the overhang of the exterior girders or other limitations as shown on plans

General. The concrete slab shall be constructed in accordance with the Standard Specifications, these specifications and in conformity with lines, grades, thicknesses and typical cross sections shown on the bridge plans.

The slab will be bid per square yard of slab area complete, including prestressed panels and all slab concrete and reinforcing steel, plain and epoxy coated.

Construction Method. The slab shall be constructed in accordance with Section 703 of the Standard Specifications and these Special Provisions.

The reinforced concrete slab shall be constructed of Class B-2 concrete and Grade 60 reinforcing.

1. Dimensional Tolerances: For dimensional tolerances, see Missouri Standard Specification, Section 1029 Table III.
2. Splicing of Strands: One approved splice per pretensioning strand will be permitted provided the splices are so positioned that none occur within a member. Strands which are being spliced shall have the same "twist" or "lay." Allowance shall be made for slippage of the splice in computing strand elongation.
3. Wire Failure: Failure of one wire in a seven-wire pre-tensioning strand may be accepted, provided that, it is not more than two percent of the total area of the strands.
4. AI Concrete: Concrete for the prestressed panels shall conform to all requirements of Class AI (5000 psi) concrete. The use of Type I or Type III cement will be optional with the contractor, unless otherwise specified.
5. Preparation of Panel: The top surface of the panel shall receive a roughened finish to facilitate bond with cast-in-place deck. The scoring shall be perpendicular to the pre-stressing strands in the panel and shall be 1/8 inch in depth.

Just prior to placing concrete, the panels shall be cleaned by high pressure water. There shall be no free water standing on the U panels when concrete is placed. If this method of cleaning does not appear sufficient to remove laitance or other foreign matter, sandblasting these areas will be required followed again by high pressure water cleaning prior to concrete placement

6. Bedding Material:

Bedding material for pre-cast units shall meet the requirements of Section 1057.2.5 for preformed fiber joint material or the following requirements for expanded or extruded polystyrene:

Property	Value	Test Requirements
Compression - Strength-	60 psi Minimum	ASTM D-1621 Procedure A-10% Yield
Water Absorption	2% by Vol. Maximum	ASTM D-2842
Oxygen Index	24 Minimum	ASTM D-2863

Method of Measurement: The area of the concrete slab is based on the dimensions as shown in the plans and computed to the nearest square yard. This area is measured transversely from out-to-out of slab and longitudinally from fill face to fill face.

The table of Estimated Quantities for Slab on Concrete I-Girder represents the quantities used by the County in preparing the cost estimate for concrete slabs. Variations may be encountered in these estimated quantities, but these variations cannot be used for an adjustment in the contract unit price per square yard of Slab on Concrete I-Girder. Each bidder is urged to prepare their own estimate of quantities before submitting their bid. The Notes For Estimated Quantities, as shown in the plans, describes all the quantities which are included in the Estimated Quantities for Slab on Concrete I-Girder.

Final measurement will not be made, except for authorized changes during construction or where appreciable errors are found in the contract quantity per square yard. The revision or correction will be computed and added to or deducted from the contract quantity.

In the use of prestressed pre-cast panel forms, the contractor is responsible for determining the lengths and number of S Bars in the lower mat of reinforcing when square end panels are used on skewed structures.

Basis of Payment: The amount of completed and accepted work, measured as provided above, will be paid for at the contract unit price per square yard for Slab-on-Concrete I-Girder which will include full compensation for furnishing and placing all forms and any surface preparation required, furnishing and placing all concrete and reinforcing steel for the concrete slab, haunches and all integral diaphragms, all labor, equipment's, tools and incidentals necessary to complete the work.

If an error or omission occurs that results in additional steel being required, the following unit prices will apply as full compensation for all costs related to the completed installation of that reinforcing steel.

Plain reinforcing steel, 1.35 per lbs.

Epoxy coated reinforcing steel, 1.50 per lbs.

Payment will be made under the applicable item listed below:

703-42.13 Slab-on-Concrete I-Girder, per Square Yard.

L. CLASS 2 PENETRATING CONCRETE SEALER

Description. This work shall consist of preparing and treating the concrete bridge deck, approach slabs, roadway face and top of barrier curb surfaces with a class 2 penetrating concrete sealer meeting this specification. This type of sealer shall be used in lieu of the normal surface sealing for concrete in accordance with Sec 703.

Materials. The sealer shall meet the requirements of this job special provision. The sealer selected by the contractor shall be submitted to the engineer for approval 30 days before application and shall be listed on MoDOT's Pre-Qualified Product List. The submittal shall include certified test data from an independent test laboratory and the concrete mix design and curing procedure on the test specimens in which sealer was tested.

The sealer shall be a solvent-free 100% solids isobutyltrialkoxysilane, with low oligomer and polymer compound content. The chemical composition shall meet the following requirements:

Property	Specification
Purity	98% minimum monomer by weight
Solvent	Less than 0.1% by weight
Siloxan or polymer Residue	Less than 0.1% by weight
Chloride Ion Content	Less than 40 PPM
Density	ASTM D2111: 7.2 to 7.4 pounds per gallon
Flash Point	ASTM D93: greater than 145 degrees F
Dry Time	ASTM D7539: less than one hour

The sealer shall meet the following performance criteria based on a single application at the manufacturer's recommended application rate. All test specimens shall be produced using MoDOT Class B-2 concrete in accordance with Section 501.

Test	Test Method	Duration	Max Absorption / Cl ⁻
Water Immersion	ASTM C 642	48 hours	0.5 percent by weight (mass)
Water Immersion	ASTM C 642	50 days	1.5 percent by weight (mass)
Salt Water Ponding (based on non-abraded specimen)	AASHTO T 259	90 days	0.50 lbs/cu yd (0.30 kg/m ³) Cl ⁻ Depth: (1/2 to 1") (13 to 25 mm)

Absorption. The absorption of the treated concrete under total immersion shall not exceed 0.5 percent after 48 hours or 1.5 percent after 50 days per ASTM C 642 as modified below for non-air entrained concrete.

In addition to ASTM C 642 section 4.1, one 4-inch (10 cm) diameter by 4 inch (10 cm) long core shall be retrieved from the surface of a Portland cement concrete to which sealer has been applied. The core shall be oven dried as designated by ASTM C 642 section 5.1. The core shall be sealed with a rapid setting two part epoxy on the sides and bottom. The epoxy shall overlap the top edge of the core 1/8" (3mm). The core shall be weighed to determine the oven dry weight (mass) of the core and coating. The weight (mass) shall be designated as "A".

The core, processed in accordance with section 2.2.1.1 of this job special provision, shall be immersed in a suitable receptacle and covered with tap water. The procedure as designated by ASTM C 642 section 5.2 shall be followed to determine the soaked surface dry weight (mass) of the core and coating. This weight (mass) shall be designated as "B".

The percent moisture absorption of the core shall be determined by ASTM C 642 section 6.1, equation (1). ASTM C 642 sections 5.3, 5.4, 6.1 and equations (2) through (7) shall not apply.

Salt water ponding. After 90 days ponding of 3 percent NaCl solution per ASSHTO T 259, the chloride ion content of the concrete shall not exceed 0.5 pounds per cubic yard (0.30 kg/m³) at ½ to 1 inch (13 to 25 mm) depth.

The sealer shall not permanently stain, discolor or darken the concrete. Application of the sealer shall not alter the surface texture or form a coating on the concrete surfaces. Treated concrete shall be surface dry within 60 minutes after application.

The sealer shall be tinted with a fugitive dye to enable the coating to be visible on the treated concrete surface for at least 4 hours after application. The fugitive dye shall not be conspicuous more than 7 days after application when exposed to direct sunlight.

The sealer shall be delivered to the project in unopened containers with the manufacturer's label identifying the product and with the seal(s) intact. Each container shall be clearly marked by the manufacturer with the following information:

- Manufacturer's name and address.
- Product name.
- Date of manufacture and expiration date.
- Lot identification.
- Storage requirements.

Construction Requirements.

Equipment. Application equipment shall be as recommended by the manufacturer. The spray equipment, tanks, hoses, brooms, rollers, coaters, squeegees, etc. shall be thoroughly clean, dry, and free of foreign matter, oil residue and water prior to applying the treatment.

Cleaning and Surface Preparation. Surfaces which are to be treated shall meet the approved product's requirements for surface condition. Sealing shall not be done until all concrete construction or repair has been completed and cured to the requirements of the manufacturer. A minimum of a 7 day wet cure and 5 day drying period are required. The contractor shall furnish the engineer with written instructions for the surface preparation requirements and a representative of the manufacturer shall be present to assure that the surface conditions meet the manufacturer's requirements.

Sealing shall be done after the bridge deck has been textured.

At a minimum, the surface shall be thoroughly cleaned to remove dust, dirt, oil, and wax, curing components, efflorescence, laitance, coatings and other foreign materials. The manufacturer or manufacturer's representative shall approve the use of chemicals and other cleaning compounds to facilitate the removal of these foreign materials before use. The treatment shall be applied within 48 hours following surface preparation.

Cleaning equipment shall be fitted with suitable traps, filters, drip pans and other devices to prevent oil and other foreign material from being deposited on the surface.

Test Application. Prior to final application, the contractor shall treat a measured test coverage area on horizontal and vertical surfaces of the different components of the structure to be treated for the purpose of demonstrating the desired physical and visual effect on an application or of obtaining a visual illustration of the absorption necessary to achieve the specified coverage rate. In the latter case, the applicator shall use at least ½ gallon (1.9 liter) of treatment following the manufacturer's recommended method of application for the total of the test surfaces. Horizontal test surfaces shall be located on the deck and on the curb or sidewalk, and vertical test surfaces shall be located on a parapet or safety barrier curb so that the different textures are displayed.

Application. The sealer shall be applied by thoroughly saturating the concrete surfaces at an application rate of 175 square feet per gallon or the rate designated on the plans.

The concrete surface temperature shall be above 35°F (2°C).

Allow concrete to dry a minimum of 48 hours after any measurable precipitation.

The treatment shall be spread from puddles to dry areas.

If the applicator is unable to complete the entire application continuously, the location where the application was stopped shall be noted and clearly marked.

Protection of Adjoining Surfaces and the Public.

When applying the sealer, the contractor shall protect adjoining surfaces of the structure that are not to be sealed by masking off or by other means. Sealer shall not leave residue on glass, painted metal or automobiles. The contractor shall also make provision to protect the public when sealing the fascia of a bridge that spans an area used by the public.

Asphalt and mastic type surfaces shall be protected from spillage and heavy overspray. Joint sealants, traffic paints and asphalt overlays may be applied to the treated surfaces 48 hours after the treatment has been applied. Adjoining and nearby surfaces of aluminum or glass shall be covered where there is possibility of the treatment being deposited on the surfaces. Plants and vegetation shall be protected from overspray by covering with drop cloths. Precautions shall be followed as indicated on the manufacturer's product and material safety data sheet.

Opening to Traffic. Traffic shall be allowed on a deck only after a treated area is visibly dry. Dried coating shall not leave residue on glass, painted metal or automobiles.

Method of Measurement. No direct measurement will be made.

Basis of Payment. Payment for the above described work shall be considered completely covered by the contract unit price for other items included in the contract.

M. ACCEPTANCE OF PRECAST DOUBLE TEE, I-GIRDER AND SLAB PANELS

The following procedures have been established for the acceptance of precast double tee, 1-girder, box-girder and slab panels. Shop drawings shall be submitted to the local agency's engineer for review and approval. The approval is expected to cover only the general design features, and in no case shall this approval be considered to cover errors or omissions in the shop drawings. The local agency or their consultant has the option of inspecting the precast units during fabrication or requiring the fabricator to furnish a certification of contract compliance and substantiating test reports. In addition, the following reports will be required

1. Certified mill test reports, including results of physical tests on the prestressed strands, and reinforcement as required.
2. Test reports on concrete cylinder breaks.

The local agency or consultant must verify and document that dimensions of the units were checked at the job and found to be in compliance with the shop drawings.

N. SETTING PILES IN ROCK

This work shall consist of making shaft excavations through soil and rock, setting piles in rock and backfilling the shaft excavation for the detached wing at End Bent 4.

The excavations for each pile shall be made by drilling through the overburden soils and into rock to satisfy the diameter and embedment depth in rock as indicated on the plans. All excavated material shall be disposed of by the Contractor.

The actual top of rock will be considered as the point where rock, defined as bedded deposits and conglomerate deposits exhibiting the physical characteristics and difficulty of rock removal as determined by the Engineer, is encountered which cannot be drilled with earth augers and/or under reaming tools configured to be effective in the soils indicated in the contract documents, and requires the use of special rock augers, core barrels, air tools, blasting, or other methods of hand excavation. When the top of rock encountered is above or below the estimated elevation indicated on the plans, the piles shall be cut or spliced to satisfy the required embedment in rock.

The Contractor shall be responsible for hole stability by using accepted drilling methods and temporary casing where site conditions warrant, no permanent casings or side forms will be allowed. All loose rock, earth, debris and water shall be removed from the hole prior to placing concrete. If the flow of water into the hole is excessive or if pumping operations are likely to cause hole instability, the level of water in the hole shall be allowed to stabilize and the concrete placed by tremie methods.

The bottom of each hole shall be filled with Class B-1 Concrete to a depth of at least 6 inches and then the piles shall be placed in the hole and properly located. The piles shall be securely braced and held in position prior to and during the placing and curing of the remainder of the Class B-1 Concrete until test specimens show a compressive strength of 3000 psi has been attained. Any operations that might

damage the concrete around the piles shall be deferred until the concrete attains the required strength. The hole shall be filled with Class B-1 Concrete up to the level of the rock.

This work will be paid for at the contract unit price each for SETTING PILES IN ROCK. The Class B-1 Concrete and any porous granular embankment backfilled around each pile shall not be paid for separately but shall be included in this item. The furnishing of piles is not included in this item but will be paid for elsewhere in this contract.

REVISIONS TO MODOT STANDARD SPECIFICATIONS

Rev. 11/24/15

Modifications to the 2011 Missouri Standard Specifications for Highway Construction shall be as listed herein.

SECTION 102

BIDDING REQUIREMENTS AND CONDITIONS

All references to submitting electronic bids in Section 102 shall be deleted. Please refer to the "Bid Notice" for directions to submit bids on County projects.

Delete Section **102.3 Bidding** – in its entirety and replace it with the following:

102.3 Bidding Documents. Upon request, the Commission will furnish the bidding documents to the prospective bidder. The documents will state the location, description and requirements of the contemplated construction and will show the estimate of the various quantities and kinds of work to be performed or material to be furnished, and will have a schedule of items for which unit bid prices are invited. The bidding documents will state the time in which the work shall be completed, the amount of the bid guaranty, and the date, time and place of the opening of bids.

102.3.1 All papers bound with or attached to or referenced in the bidding documents are considered a part thereof and must not be detached or altered when the bid is submitted.

102.3.2 The prospective bidder will be required to pay the Commission the sum stated in the notice of bid opening for each copy of a project's bidding documents. The *Missouri Standard Specifications for Highway Construction*, *Missouri Standard Plans for Highway Construction*, including all revisions of these documents, and other items referenced in the bidding documents, whether attached or not, will be considered a part of the bid. A prospective bidder will be expected to separately purchase the current edition of the *Missouri Standard Specifications for Highway Construction* and the *Missouri Standard Plans for Highway Construction*, including all revisions of these documents.

102.3.3 It will be conclusively presumed that all of the bidding documents are in the bidder's possession and that these documents have been reviewed and used by the bidder in the preparation of any bid submitted. The effective dates of the *General Provision & Supplemental Specifications* and the *Supplemental Plans for Highway Construction* will be specified in the contract documents. A copy of the latest version of these documents is available on MoDOT's web site.

Delete Section **102.7 Preparation of Bidding Documents** – in its entirety and replace it with the following:

102.7 Preparation of Bidding Documents. All bids shall be properly signed, sealed and submitted in accordance with Sec 102.10. Each bidder shall specify in the bid, in figures, a unit price for each of the separate items listed in the bidding documents, except a unit price entry will not be necessary for those items having a quantity of one and only the amount for that item need be entered. Zero will be considered a valid bid. The bidder shall not enter zero in any "Unit Price" field unless zero is the intended bid for that item. A unit price left blank, with or without an extension, other than items having a quantity of one, will be considered as zero by the Commission. In case of alternate items, unit prices shall be entered for only one alternate, unless otherwise specified in the bidding documents. A unit price shall not exceed two decimal places. Bids shall not contain interlineations, alterations or erasures except as noted in Sec 102.7.1. The bidder shall show the products of the respective unit prices and quantities in the amount column provided for that purpose. The extension of each line item shall be rounded to the nearest second decimal place value, with half cents rounded up. These extensions shall be totaled and in case of errors or discrepancies in extensions, the unit prices shall govern. All entries in the bid shall be in ink or typewritten. If, in the sole discretion of the engineer, an obvious and apparent clerical error exists in the unit price listed for an item due to a misplaced decimal, but the extension appears to be correct and as intended in all respects, the engineer may correct the unit price bid in accordance with the extension listed. All errors in extensions or totals will be corrected by the engineer and such corrected extensions and totals will be used in comparing bids.

102.7.1 A bidder may alter or correct a unit price, lump sum bid or extension entered on the paper bid form or the computer-generated itemized paper bid form by crossing out the figure with ink and entering a new unit price, lump sum bid or extension above or below in ink, with the bidder's initials.

102.7.2 A bidder may submit a separate bid on any or all projects, except that bids shall be submitted for all projects in a required combination. Bidders not having the ability to simultaneously execute all contracts for bids submitted during a bid opening may state, in one of the bids, the maximum total value of contract awards the bidder is willing to accept for that bid opening. Only one statement of "Maximum Monetary Value of Awards Accepted this Bid Opening" shall be completed per bid opening. In the event a bidder submits multiple statements of maximum award, the lowest value stated will be used. The Commission reserves the right to select and award the combination of bids, not exceeding this maximum, that will be to the best interest of the State, provided these bids are in conformance with the requests for bids. Any corrected bid that exceeds the lowest specified maximum award may be declared non-responsive.

102.7.3 The bid of an individual, including those doing business under a fictitious name, shall include the signature and address of the individual. The signature shall be exactly the same as that appearing on the contractor questionnaire.

102.7.4 The bid by a partnership or joint venture, including individuals doing business under fictitious names or corporations, shall be executed by at least one of the partners followed by the title "Partner" or one of the joint venturers followed by the title "Joint Venturer" and the business address of the partnership or joint venturer shown. The true legal name and address of each partner and joint venturer shall also be shown and shall appear exactly the same as that shown on the contractor questionnaire.

102.7.5 The bid by a corporation, whether acting alone or as a joint venturer, shall show the address and name of the corporation exactly as shown on the contractor questionnaire, and shall include the signature or digital ID and title of a person authorized by its board of directors to bind the corporation.

102.7.6 Each bidder shall submit with each bid a sworn statement, executed by or on behalf of the bidder to whom a contract may be awarded, certifying that the bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with the bid or any contract that may result from its acceptance.

102.7.7 A bid will not be accepted or considered if the bid is the product of collusion among bidders, if the bidder is disqualified or determined not responsible or if the bid is irregular in accordance with Sec 102.8.

SECTION 105

CONTROL OF WORK

Delete Section 105.1- Authority and Duties of Commission in Contract Administration - items (a) through (h) that pertain exclusively to MoDOT and not to the County of Jefferson.

Revise Section 105.4 - Coordination of Contract Documents. - such that the governing ranking will be as follows:

- (a) Job Special Provisions
- (b) Project Specific Drawings
- (c) General Provisions
- (d) Revisions to MoDOT Standard Specifications
- (e) General Special Provisions
- (f) Supplemental Specifications
- (g) Standard Specifications
- (h) Standard Drawings
- (i) Bid Items or Quantities

SECTION 106

CONTROL OF MATERIAL

Delete Section 106.12 - Pre-Acceptance List of Material and Sources - in its entirety.

SECTION 107

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Add Section 107.5.3.1 – Except for those driveways and entrances shown to be reconstructed within the project limits, the contractor, subcontractors, and suppliers shall not utilize any private driveways or entrances for equipment turn around

purposes, unless proper prior arrangements and permissions are obtained from the affected property owners. The contractor shall be held fully responsible for any property damages to the driveways and entrances arising from these arrangements.

Add Section 107.10.1.1 – Projects that have been issued a Corps of Engineers 404 Permit shall have the provisions of that permit hold precedence over any conflicting requirements of Section 107.10.

SECTION 109

MEASUREMENT AND PAYMENT

Delete Section 109.9.1.2 of Division 109.9 - Retained Percentage - in its entirety.

Delete Section 109.14 – Price Adjustment for Fuel - in its entirety.

SECTION 201

CLEARING AND GRUBBING

Add the following to Section **201.2.2 .1 Clearing**:

(e) Areas obtained for utility easement corridor.

Add the following after Section **201.2.2.3 Selective Clearing and Grubbing**:

201.2.2.3.1 Selective Clearing. Remove all sound tree branches that extend over the roadway and hang within 20 feet of finished grade. Remove all dead or broken branches that extend over the roadway and hang within 30 feet of finished grade. Cut off branches close to the tree trunk for all trees designated to remain in the right of way and/or easement limits. Branches cut from trees that have trunks outside the right of way and/or easement limits shall be trimmed using generally accepted horticultural practices.

SECTION 203

ROADWAY AND DRAINAGE EXCAVATION, EMBANKMENT AND COMPACTION

Modify Section 203.3.1 of Section 203.3 – Borrow – as follows:

Replace the first sentence with the following: Borrow will consist of approved material required for the construction of embankment or for other portions of the work, and shall be obtained from borrow areas shown on the plans, from areas designated by the engineer, or from other approved sources.

Modify Section 203.4 as follows:

Delete the reference in Section 203.4.1 that states, “Finishing by hand methods will not be required”: Replace with the following:

Hand raking or fine grading by mechanical means of the disturbed areas shall be required to remove debris and stones. The soil shall be tilled to a depth of 4” and graded to a reasonably smooth surface.

Replace Section 203.4.1.1 with the following:

Field Stone. Before final project acceptance, the removal and disposal requirements of all loose field stones shall be guided by the following table:

<u>Location - limits</u>	<u>Limits</u>	<u>Maximum Stone Size</u>
Residential and business where lawns are maintained	All disturbed areas	Relatively free of stones – ½” maximum
Foreslopes, roadside ditches and backslopes outside of maintained lawn areas	Right of way	1” maximum
Rock cut sections	All disturbed areas	As directed by the Engineer

SECTION 206

EXCAVATION FOR STRUCTURES

Replace Section 206.4.13 – Excavation Classification – with the following: “Unless otherwise shown on the plans, excavation for structures will be classified as Class 1 Excavation, Class 1 Excavation in Rock, Class 2 Excavation, Class 2 Excavation in Rock, Class 3 Excavation, Class 3 Excavation in Rock, Class 4 Excavation and Class 4 Excavation in Rock. In general, Class 1 Excavation and Class 2 Excavation will apply to excavation for bridges and large retaining walls. Class 3 Excavation will apply to excavation for pipe culvert installations, utilities, retrofit pipe culverts, drop inlets, and manholes. Class 4 Excavation will apply to excavation for box culverts, small retaining walls and other miscellaneous structures. Class 1 Excavation will include all excavation above a specified elevation indicated on the plans while Class 2 Excavation will include all excavation below this specified elevation. The classification of excavation for all structures will be shown on the plans.

Replace Section 206.5.2 – with the following: “Final measurement of Class 3 Excavation for pipe culverts, utilities, retrofit pipe culverts, drop inlets or manholes will be made to reflect the actual computed quantity established from field measurements. The plan quantities were estimated based on the random boring data and visual observations of the adjacent existing ditch lines. The revision or correction will be computed and added to or deducted from the contract quantity. Measurement of Class 3 Excavation will be made to the nearest cubic yard for each structure of that volume of material actually removed from within the area bounded by vertical planes of 12 inch minimum to 18 inches maximum outside of the outer walls of the structure. The upper limits of the volume measured, will be the existing ground line, or the lower limits of the roadway excavation, whichever is lower. The lower limits of the volume measured will include excavation necessary for pipe bedding.

SECTION 304

BASES AND AGGREGATE SURFACES

Delete Section 304.3.5 - Substitutions for Aggregate Base - in its entirety.

Modify Section 304.5 – Method of Measurement – as follows:

Final measurement of the completed aggregate base course will be based on actual field measurements to the nearest square yard.

Replace Section 304.6 - Basis of Payment – with the following: “The accepted quantities of aggregate base course of the thickness and type specified will be paid for at the contract unit price for each of the pay items included in the contract. Payment will be considered full compensation for water used in performing this work.”

SECTION 401

PLANT MIX BITUMINOUS BASE AND PAVEMENT

Section 401.4 Job Mix Formula – The County may waive submission of representative mixture samples. The Contractor, at the time he submits his job mix formula, shall request in writing whether samples are required. The County will respond in writing and if samples are required, they shall be submitted within ten working days of receipt of the County’s letter.

Section 401.4.1 Mixture Design – Modify this paragraph as follows:

The mix design shall be submitted to the County for approval at least seven (7) days prior to mixture production. A mix design shall be submitted for all County projects. The composition of the mixture shall conform to the following limits by weight:

Total Mineral Aggregate	94.0-96.5 %
Asphalt Binder	3.5-6.0 %

Add the following item to Section 401.4.2 – Required Information:

(q) Unit weight of combined mixture.

Modify Section 401.4.3 Mixture Approval so that “the County” is substituted where it presently reads “Construction and Materials”.

Delete Section 401.4.6 Time Limit – in its entirety.

Delete Section 401.5.2 Substitutions - in its entirety.

Delete Section 401.6 Field Laboratory – in its entirety.

Delete Section 401.7.1 and replace with the following:

401.7.1 Weather Limitations. Bituminous mixtures shall not be placed (1) when either the air temperature or the temperature of the surface on which the mixture is to be placed is below 40 F (5 C), (2) on any wet or frozen surface, or (3) when weather conditions prevent the proper handling or finishing of the mixture. Temperatures are to be obtained in accordance with MoDOT Test Method TM20.

If a rainfall event occurs (with rain duration lasting more than 5 min.) before 10am on any given workday, then paving operation shall be cancelled for the balance of that workday and the contractor is not charged for the workday. Once a rainfall event begins the contractor is to immediately shut down plant mix operation. No pavement materials will be accepted at the construction site until further notice from engineer. At the contractor’s request, the engineer may waive these requirements on an individual basis.

401.7.5.1 Irregularities. Add a sentence preceding the sentence “The outside edge alignment shall be uniform” as follows: The outside edges of the pavement shall be constructed to an angle of approximately 45 degrees with the surface of the roadbed and rolled with a hand roller for a smooth appearance.

Replace Section 401.8 Quality Control with the following:

The Contractor shall maintain equipment and qualified personnel or retain the services of a qualified testing laboratory to perform QC field inspection, sampling and testing in accordance with applicable portions of Section 403. The testing service shall be a firm different than the one retained by the County for testing services on that project. The Contractor shall notify the Engineer at the preconstruction meeting who he intends to use for testing services, the name of a contact person and his or her telephone number. A proposed third party testing service for dispute resolution shall be included with the mix design submittal.

Replace the last sentence in Section 401.8.4 Pavement Testing with the following:

The Contractor shall restore the surface from which samples have been taken immediately with the mixture under production or with a non-shrink concrete grout. A cold patch mixture will not be acceptable.

Replace Section 401.13 Method of Measurement with the following:

Measurement will be in accordance with Sec 403.22 and as modified by the job special provisions.

SECTION 402

PLANT MIX BITUMINOUS SURFACE LEVELING

Delete Section 402.2.2 – in its entirety.

Replace Section 402.3 Composition of Mixture with the following:

Mixture shall meet the requirements of the asphalt type specified in the contract and/or bidding documents. The mixture shall be in accordance with Sec 401.3.

Section 402.4 – Replace with the following:

402.4 Job Mix Formula. The mixture shall be in accordance with Sec 401.4 and shall conform to the following limits by weight:

Total Mineral Aggregate	92.0-96.5 %
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Asphalt Binder 3.5-8.0 %

Delete Section 402.9 - in its entirety.

SECTION 403

ASPHALTIC CONCRETE PAVEMENT

Delete Section 403.4.1 – in its entirety.

Replace “Construction and Materials” in Section 403.4.3 with “the Engineer”.

Section 403.6 – Delete the first sentence in its entirety. Revise the fourth sentence to read: “The gyratory compactor shall be one from MoDOT’s Construction and Materials approved list.”

Delete Section 403.10.2 Substitutions – in its entirety.

Section 403.11.1 Field Mix Redesign – Replace “Central Laboratory” with “Engineer”.

Section 403.11.1.1 Approval – replace “Construction and Materials” with “the Engineer”. Delete the second sentence in this section.

Modify the first sentence of 403.17.1 Quality Control Operations – to read “The Contractor shall maintain or retain equipment and qualified personnel to perform all QC field inspection, sampling and testing as required by this specification.” Add the following sentence: “The personnel, if from an independent testing laboratory, shall be different than the company retained by the County for QC purposes.”

Section 403.17.2 Bituminous Quality Control Plan – Change “Construction and Materials” to “the Engineer”.

Revise the last sentence of 403.22.4.2 Surface Restoration to read: “If bituminous construction has been completed, the surface from which samples have been taken shall be restored within 48 hours with an approved commercial mixture or with an approved non-shrink concrete grout. Cold mix is not an acceptable patch.

Delete Sections 403.23.5 through 403.23.7.3 inclusive.

SECTION 407

TACK COAT

Revise the first sentence of Section 407.3 Equipment. - as follows:

“The Contractor shall provide a system for heating and applying the bituminous material and for applying blotter material.”

Add Section 407.4.1.1 Weather Limitations. Tack coat shall not be applied when either the air temperature or the temperature of the surface to be tacked is below 40 F. Temperatures are to be obtained in accordance with MoDOT Test Method TM20.

SECTION 408

PRIME COAT

Add Section 408.4.1.1 Weather Limitations. Bituminous material shall not be applied (1) when either the air temperature or the temperature of the surface to be primed is below 60 F or (2) when weather conditions prevent the proper construction of the prime coat. Temperatures are to be obtained in accordance with MoDOT Test Method TM20.

SECTION 413

SURFACE TREATMENTS

Replace “Construction and Materials” in Section 413.30.3 with “the Engineer”.

Replace “Construction and Materials” in Section 413.30.3.1 with “the Engineer”.

Revise Section 413.30.6.1 as follows: **Quality Control Operations.** Quality control shall be conducted in accordance with Sec 403.17 as modified herein by the “**REVISIONS TO MODOT STANDARD SPECIFICATIONS**”, except as follows.

SECTION 501

CONCRETE

Delete Section 501.2.2 - in its entirety.

Section 501.3 Mix Design. – Change the last sentence to read:

“The Contractor may be required to submit representative samples of each ingredient to the Engineer for laboratory testing.”

Revise Section 501.8.2 (e), the fifth sentence, “The Engineer may allow the use of the test concrete for appropriate incidental construction”, shall be deleted. In its place add the following sentence – “Test concrete shall not be used in construction”.

Revise Section 501.8.10 to delete the Type 1 field laboratory at the proportioning plant.

SECTION 502

PORTLAND CEMENT CONCRETE BASE AND PAVEMENT

Delete Section 502.3.7 - in its entirety.

Revise the first sentence in Section 502.11.1 to read, “Prior to approval of concrete mix designs by the engineer, the contractor shall submit a QCP to the County.”

Delete Section 502.15.3 Smoothness Adjustment – in its entirety.

Delete Section 502.15.3.1 Incentives – in its entirety.

Table I shall be revised so that “Percent of Contract Price” does not exceed 100.

Delete Sections 502.15.6 Width, 502.15.7 Pay Factors, and 502.15.11 PWL Determination Table in their entirety.

SECTION 601

FIELD LABORATORIES

Delete this Section in its entirety.

SECTION 603

WATER LINE INSTALLATION

Revise Section 603.2 - Material. To include the following sentence after the table:

Materials other than those shown may be specified by the Engineer and shall meet AWWA, ASTM, ANSI and NSF specifications.

Revise Section 603.3.4 - Abandoned Water Mains. To include the following at the end of this section:

8” and larger abandoned water mains remaining under the completed road and or shoulder shall be abandoned by grout filling the line. Grout shall consist of Mortar for Grout as specified in Section 1066. The cost of the grout, plugs, labor, fuel and equipment shall be included in the lump sum unit cost for “Removal of Improvements”. Smaller water mains shall be abandoned as noted above by capping and covering the cap with concrete. PVC water mains may be capped with caps made of the same material, glued in place.

SECTION 605
UNDERDRAINAGE

Delete Sections 605.10.2.5 through 605.10.2.5.3 in their entirety. Video inspection of edge drains will not be required.

SECTION 620
PAVEMENT MARKING

Replace the second through fourth sentences of Section 620.2.3.1, with “The engineer will visually inspect the pavement markings for reflectivity. The inspection will take place no sooner than seven days after application. The contractor may clean any pavement markings at the contractor’s expense prior to the visual reflectivity inspection.

Replace Section 620.2.4.1 with the following:

620.2.4.1 Retroreflectivity inspection will be performed visually. Spotty or lack of reflectivity when driven during a nighttime visual inspection will be cause for reapplying the pavement marking at no additional cost to the County.

Revised Section 620.10.5.1 to read:

Final measurements of pavement markings of the type specified will be based on actual field measurements to the nearest lineal foot. Revisions or corrections will be computed and added or deducted from the contract quantity.

SECTION 622
PAVEMENT AND BRIDGE SURFACE REMOVAL AND TEXTURING

Revised Section 622.10.4 to read:

Final measurements of coldmilling of the type specified will be based on actual field measurements and computed the nearest square yard. Revisions or corrections will be computed and added or deducted from the contract quantity.

SECTION 627
CONTRACTOR SURVEYING AND STAKING

Add the following to the end of Section 627.2.1:

In addition, the Contractor shall protect and carefully preserve all official survey monuments, property marks, section markers and Geological Survey Monuments, or other similar monuments. The Contractor shall notify the Engineer of the presence of any such survey or property monuments as soon as they are discovered.

Revised Section 627.2.3 to read:

The engineer shall furnish and set control points with known coordinates. The engineer will furnish all coordinate data to lay out the job and locate benchmarks as shown on the plans. Except as specified herein, the contractor shall provide all other staking, including but not limited to, centerline stakes, right of way stakes, additional lines, connections, ramps, slope stakes, grade stakes, construction benchmarks and reference stakes locating all drainage, roadway and bridge structures, and utilities necessary for the successful prosecution of the work. Centerline staking shall be done before construction begins and shall be established at all PIs, PCs, PTs and at 100 foot intervals within the proposed project limits, including any temporary transition lengths outside the projects limits. Right of way staking shall be a maximum of 200 feet apart on tangents, at angle changes in the right of way and a maximum of 50 feet apart in horizontal curves, on both sides of the road, at all parcel property lines, and shall be done at the initial start of the project to facilitate relocation of utilities. Right of way stakes shall indicate cuts and fills to final grade for help in determination of utility placement. The contractor shall maintain construction stakes for the duration of the project at no additional cost to the County. All alignment control established by the contractor shall be referenced, and a copy of the references shall be furnished to the engineer.

Revised Section 627.2.4 to read:

Any surveying or measurements necessary for computing pay quantities, except for earthwork pay items which quantities are based on cross sections measurements, will be performed by the engineer. The contractor shall notify the engineer at least two working days prior to disturbing any areas used to calculate pay items.

Earthwork pay items which quantities are based on cross section measurements shall have “before” and “after” cross sections performed by the contractor. The contractor shall notify the engineer prior to surveying the cross sections so that a field representative, designated by the engineer, can be present to witness and record and/or verify the readings. The contractor shall cooperate with the designated field representative in coordinating the surveying activities.

Add the following to the end of Section 627.4:

Should it be necessary to disturb any survey or property monument (grading, install structure), a Missouri Professional licensed surveyor shall witness and reference their location, and reset such monument after construction work is completed and before final acceptance of project. The cost to protect, preserve and provide any surveying work to reset survey or property monuments will not be paid for separately, but shall be considered as included in the cost of the project, and no additional compensation shall be allowed.

SECTION 703

CONCRETE MASONRY CONSTRUCTION

Add a sentence to the end of Section 703.3.8 -Surface Sealing for Concrete – that reads: “Surface sealing shall not be applied until after all defects in the bridge deck surface have been patched per the Engineer’s requirements.”

SECTION 706

REINFORCING STEEL FOR CONCRETE STRUCTURES

Delete the last sentence in Section 706.2.2 that allows flame cutting of uncoated reinforcement. Reinforcement shall be saw cut or sheared.

Delete the sentence in Section 706.3.1 that reads: “At other locations, the bars shall be firmly tied at alternate crossings or closer.” Replace this sentence with: “All reinforcement, including superstructure and substructure, shall be tied at 100% of crossing locations.”

SECTION 712

STRUCTURAL STEEL CONSTRUCTION

Delete the sentence in Section 712.3 that reads: “Any material that has become bent shall be straightened before being assembled or shall be replaced, if necessary.” Replace it with the following: “Any material that has become bent from the intended shape shall be replaced at no cost to the County.”

The County will not issue qualification cards as stated in Section 712.6.3, but will require proof of the welder’s certification from an accredited AWS Certified Welder Program. Welding will not be allowed on County projects without a copy of the welder’s certification being delivered to the County prior to the beginning of welding. The welder shall not weld for any process and in the positions for which he is not certified.

SECTION 720

MECHANICALLY STABILIZED EARTH WALL SYSTEMS

Delete Section 720.3.1 - in its entirety and replace with the following:

The Contractor shall submit product information on the type of mechanically stabilized earth wall system he is proposing. The wall shall be in conformance with the Plans and Job Special Provisions. Shop drawings and design calculations shall be submitted and shall be signed and sealed by a Professional Engineer registered in the state of Missouri.

SECTION 724

PIPE CULVERTS

Revise Section 724.1.1 to read as follows:

The contract will specify the type of pipe to be used. Substitution of pipe types is not permissible.
Replace Section 724.1.2 with the following:

Metal pipe shall be constructed in accordance with Sec 725. Reinforced concrete pipe shall be constructed in accordance with Sec 726.

Revise Section 724.3.1 to read:

Inspection of pipe and pipe placement will be performed visually by the County during construction.

Delete Sections 724.3.2, 724.3.3, 724.3.4, 724.3.4.1, 724.3.5, 724.3.5.1, 724.3.6, 724.3.7, and 724.3.8.

Revise Section 724.4.1 to read:

Final measurements of pipe culverts of the type specified will be based on actual field measurements to the nearest lineal foot along the geometric center of the pipe. Revisions or corrections will be computed and added or deducted from the contract quantity.

Delete Section 724.4.4.

SECTION 725

METAL PIPE AND PIPE ARCH CULVERTS

Revise the first sentence of Section 725.1.2 to read: "If the contract specifies corrugated metallic-coated steel pipe or corrugated aluminum alloy pipe, the thickness of metal and size of corrugation for the respective pipe size shall be as shown on the plans unless otherwise specified.

Revise Section 725.4 to read:

Backfill material for metal culverts shall consist of crushed stone.

Revise Section 725.4.1 to read:

Crushed stone shall consist of a mixture of stone in accordance with Section 1009, Grade 4, Gradation B. For all pipe culverts under roadways or sidewalks crushed stone backfill shall be used for full depth of the trench, and to the subgrade of the road, and to a point two feet on either side of the pavement width. For backfill under grass areas, the granular backfill shall be brought to one foot above the top of the pipe, then completed with earthen backfill to the required grade. Bedding material shall be the same as that specified above for backfill.

SECTION 726

RIGID PIPE CULVERTS

Revise 726.1.1 to read:

If the contract specifies reinforced concrete pipe, the type of installation and the class of pipe shall be in accordance with the plans for the applicable allowable overfill height.

Delete Section 726.1.2.

Modify the sixth sentence in Section 726.3.1 to read:

All joints shall be sealed with an approved plastic compound, tubular joint seal, an external wrap, cement mortar or other approved methods to create a soil tight condition.

Modify 726.3.2 to read:

Bedding for reinforced concrete pipe shall consist of a mixture of stone in accordance with Section 1009, Grade 4, Gradation B.

Section 726.3.4 - Insert the following after the second sentence:

For all pipe culverts under roadways or sidewalks crushed stone backfill, meeting the requirements of Section 1009, Grade 4, Gradation B, shall be used for full depth of the trench, and to the subgrade of the road, and to a point two feet on either

side of the pavement width. For backfill under grass areas, the granular backfill shall be brought to one foot above the top of the pipe, then completed with earthen backfill to the required grade.

SECTION 727

STRUCTURAL PLATE PIPE AND STRUCTURAL PLATE PIPE-ARCH CULVERTS

Delete 727.3.3 Bedding and Backfill material and replace with the following:

727.3.3 Bedding and Backfill Material. Bedding for structural plate pipe and structural plate pipe-arch culverts shall consist of a mixture of stone in accordance with Section 1009, Grade 4, Gradation B, except if rock is encountered, the trench shall be excavated to a minimum depth of 8 inches below the bottom of the culvert.

Delete Section 727.3.4.1 and Section 727.3.4.2 and replace with the following:

Backfill shall be with crushed stone consisting of a mixture of stone in accordance with Section 1009, Grade 4, Gradation B. Stone backfill shall be used for full depth of the trench, and to the subgrade of the road, and to a point two feet on either side of the pavement width. Layers of backfill shall be carefully tamped in place and shall be kept at approximately the same elevation on opposite sides of the structure at all times during the progress of work in order to equalize the loading.

SECTION 730

THERMOPLASTIC CULVERT PIPE

Delete this section – thermoplastic culvert pipe will not be used for County road projects.

SECTION 731

PRECAST REINFORCED CONCRETE MANHOLES AND DROP INLETS

Revise Section 731.4.1 to read:

Final measurements of precast concrete manholes and drop inlets will be based on actual field measurements to the nearest lineal foot along the geometric center of the manhole/drop inlet. Revisions or corrections will be computed and added or deducted from the contract quantity. The depth of the structure will be the vertical distance from the top of the uppermost precast section to the invert flowline.

SECTION 732

FLARED END SECTIONS

Delete Section 732.1.2.

Delete reference to HDPE and PVC in Section 732.1.3.

Delete the second sentence in Section 732.5 that reads:

When two different diameters of pipe are shown on the plans for a given location for Group B or Group C pipe, the contract unit price for the flared end section or safety slope end section that would be required for the larger diameter pipe will be used for payment purposes.

SECTION 801

LIME AND FERTILIZER

Revise the third sentence in Section 801.4.1 to read:

The soil shall be thoroughly broken up, worked, tilled and loosened to a minimum depth of 4 inches.

Revise the second sentence of 801.4.2 to read:

After application, the lime and fertilizer shall be thoroughly mixed into the soil to a minimum depth of 4 inches, except when applied hydraulically on slopes steeper than 2:1.

SECTION 803 **SODDING**

Add the following to Section 803.3 Construction Requirements:

Sodding placed at the downstream end of a flared end section or the downstream end of a pipe without a flared end section shall be securely fastened with metal clips. The sod shall be placed slightly lower than the flowline of the flared end section or the flowline of the culvert. Sod washed away by flows through the culvert shall be cleaned up, disposed of and replaced by the Contractor at no additional charge to the County.

SECTION 804 **TOPSOIL**

Add Section 804.3.3 The Contractor shall be responsible for obtaining all necessary permits for removal of topsoil from an area. This shall include but not be limited to land disturbance, stormwater discharge, endangered species, farmland protection, wetlands, hazardous waste and cultural resources. Contact agencies for most of these are listed on MoDOT's website under Local Public Agency Manual.

SECTION 805 **SEEDING**

Revise the third sentence of Section 805.4 to read:

Permanent stabilization of an erodible seeded area shall be defined as a minimum uniform 70% perennial vegetative cover.

Add section 805.3.4 Seeding application methods shall be as follows:

Drop seeding shall only be allowed in small disturbed areas as approved by the engineer; Drill seeding shall be allowed for flat areas and slopes up to 3(H):1(V); and Hydro seeding shall be required on slopes 3(H):1(V) or steeper.

SECTION 806 **POLLUTION, EROSION AND SEDIMENT CONTROL**

Revise 806.4.4 to read as follows:

Erosion control features shall be in place prior to any clearing and grubbing of the construction site. Additional erosion control features may need to be installed as the project continues and problem areas become exposed. Until the site is stabilized, all erosion and sedimentation control BMPs must be maintained properly. Maintenance must include inspections of all erosion and sedimentation control BMPs after each rainfall event and on a weekly basis. A written inspection report by the contractor shall be submitted to the engineer after every inspection. The report shall state a summary of the site conditions, status of the erosion and sediment control BMPs, date, time and name of inspector. The Contractor shall maintain all erosion control features by removing silt buildup so that the erosion control feature is fully effective. Any erosion control features knocked down during construction shall be reinstalled at no additional cost to the County.

Add a paragraph to 806.80.3 as follows:

The Contractor shall maintain the temporary pipes throughout the length of the project. Pipes, backfill and road surface washed out shall be replaced at no additional cost to the County.

Add the following sentence to 806.100.3.2:

The Contractor shall maintain the temporary stream crossing throughout the length of the project. Pipes, backfill and road surface washed out shall be replaced at no additional cost to the County.

END OF "REVISIONS TO MODOT STANDARD SPECIFICATIONS"

General Contract Provisions

(see Table of Contents for documents and page numbers)

AFFIDAVIT COMPLIANCE WITH THE PREVAILING WAGE LAW

Before me, the undersigned Notary Public, in and for the County of _____, State of _____, personally came and appeared _____

(Name)

_____ of _____

(Title)

(Company Name)

(a corporation)(a partnership)(a proprietorship) and after being duly sworn did depose and say that all provisions and requirements set out in Chapter 290, Sections 290.210 through and including 290.340, Missouri Revised Statutes, pertaining to the payment of wages to workers employed on public works projects have been fully satisfied and there has been no exception to the full and complete compliance with said provisions and requirements with Wage Determination No. _____ or Annual Wage Order No. _____ issued by the Division of Labor Standards on project _____,

(Job Number)

(Route or location, if building construction)

_____ County, Missouri, and completed on the ____ day of _____, 20____.

Signature

Subscribed and sworn to me this ____ day of _____, 20____.

My commission expires _____, 20____.

Notary Public

(Revised 03-23-00)

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

'It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training.'

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: 'An Equal Opportunity Employer.' All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment

Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

FEDERAL AID PROVISIONS

December 1980

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidders attention is called to the "Equal Opportunity Clause" and the Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth therein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:
3. Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their covered construction work, such contractors are required to comply with the following goals:

Goals for Female participation for each trade

AREA COVERED

Goals for women apply nationwide

GOALS AND TIMETABLES

Goals

Timetable	(Percent)
From April 1, 1978 until March 31, 1979	3.1
From April 1, 1979 until March 31, 1980	5.1
From April 1, 1980 until March 31, 1981	6.9

Goals for Minority Participation for Each Trade

<u>County</u>	<u>Goal (Percent)</u>	<u>County</u>	<u>Goal (Percent)</u>
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Adair	4	Linn	4
Andrew	3.2	Livingston	10
Atchison	10	McDonald	2.3
Audrain	4	Macon	4
Barry	2.3	Madison	11.4
Barton	2.3	Maries	11.4
Bates	10	Marion	3.1
Benton	10	Mercer	10
Bollinger	11.4	Miller	4
Boone	6.3	Mississippi	11.4
Buchanan	3.2	Moniteau	4
Butler	11.4	Monroe	4
Caldwell	10	Montgomery	11.4
Callaway	4	Morgan	4
Camden	4	New Madrid	26.5
Cape Girardeau	11.4	Newton	2.3
Carroll	10	Nodaway	10
Carter	11.4	Oregon	2.3
Cass	12.7	Osage	4

Cedar	2.3	Ozark	2.3
Chariton	4	Pemiscot	26.5
Christian	2	Perry	11.4
Clark	3.4	Pettis	10
Clay	12.7	Phelps	11.4
Clinton	10	Pike	3.1
Cole	4	Platte	12.7
Cooper	4	Polk	2.3
Crawford	11.4	Pulaski	2.3
Dade	2.3	Putnam	4
Dallas	2.3	Ralls	3.1
Daviess	10	Randolph	4
DeKalb	10	Ray	12.7
Dent	11.4	Reynolds	11.4
Douglas	2.3	Ripley	11.4
Dunklin	26.5	St. Charles	14.7
Franklin	14.7	St. Clair	2.3
Gasconade	11.4	St. Francois	11.4
Gentry	10	Ste. Genevieve	11.4
Greene	2	St. Louis City	14.7
Grundy	10	St. Louis County	14.7
Harrison	10	Saline	10
Henry	10	Schuyler	4
Hickory	2.3	Scotland	4
Holt	10	Scott	11.4
Howard	4	Shannon	2.3
Howell	2.3	Shelby	4
Iron	11.4	Stoddard	11.4
Jackson	12.7	Stone	2.3
Jasper	2.3	Sullivan	4
Jefferson	14.7	Taney	2.3
Johnson	10	Texas	2.3
Knox	4	Vernon	2.3
Laclede	2.3	Warren	11.4
Lafayette	10	Washington	11.4
Lawrence	2.3	Wayne	11.4
Lewis	3.1	Webster	2.3
Lincoln	11.4	Worth	10
		Wright	2.3

These goals are applicable to all of the contractor's construction work (whether or not is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on Its Implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority, or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

4. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
5. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" of the county, route and limits described in the proposal for the work.

July 1986

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation which this contract resulted.
 - b. "Director" mean Director, Office of Federal Contract Compliance Programs, United States Department of labor, or any person to who the Director delegates authority;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's quarterly Federal Tax Return, U.S. Treasury Department Form 941;
 - d. "Minority" includes;
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and pacific islander (all persons having origins in any of the original peoples of the Far East, southeast Asia, the Indian Subcontinent, or the Pacific Islands; and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintain identifiable affiliations through membership and participation or community identifications.
2. Whenever the Contractor, or any Subcontractor at any tier, subcontractors a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contract is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through the association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with the Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligation under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractors' failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or

federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with who the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours or apprentices and trainees to be counted in meeting the goal, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be used its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and all facilities at which the Contractor's employees are assigned to work. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred not employed by the contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has as collective bargaining agreement has not referred to the contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant of the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources complied under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement by publicizing it in the company newspaper, annual report, etc., by specific review of the policy with all management personnel and with all minority and female employees at least one a year; and by posting the company

EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, General foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, person attending, subject matter discussed, and the disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media and providing written notification to and discussing the contractor's EEO policy with other Contractors and Subcontractors with who the Contractor does or anticipates doing business.
 - i. Direct is a recruitment effort, both oral and written, to minority female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance or applicants for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and test to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer vacations employment to minority and female youth both on the site and in other areas or contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc. such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligation under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations or offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling anyone or more of its obligations under 7a through 7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the executive order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contract pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Direct shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status, (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be constructed as a limitation upon the application of other laws which establish different standard of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Action of 1977 and the Community Development Block Grant Program).

OPERATING POLICY STATEMENT

The contractor shall accept as his operating policy the following statement, or one of equal coverage, which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program.

“It is the policy of this company to assure that applicants are employed, and that employees are treated during employment without regard to their race, religion, sex, color, or national origin. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training.”

SUPPLEMENTAL REPORTING REQUIREMENTS

- A. The Contractor will keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate the number of minority and non-minority group members and women employed in each work classification on the project.
- B. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway Agency and the Federal Highway Administration.
- C. The contractor and each covered subcontractor will submit to the State Highway Agency, for the month of July, for the duration of the project, a report (Form PR-1391) "Federal-Aid Highway Construction Contractors Annual EEO Report", indicating the number of minority, women and non-minority group employees currently engaged in each work classification required by the contract work.

NONDISCRIMINATION IN EMPLOYMENT

July 1990

The following provisions are added by the State to the Required Contract Provisions of Federal-Aid Contracts.

The contractor is advised that the exemptions referred to in the Required Contract Provisions, Federal-Aid contracts under Section II, Nondiscrimination, Paragraph 3g, with respect to contracts and subcontracts, are substantial and are to be found in Chapter 60, Office of Federal Contract Compliance, Equal Employment Opportunity, Department of Labor (33 Federal Register 7804-7812, May 28, 1968, effective July 1, 1968, Chapter 60, Title 41, Code of Federal Regulations), by which contracts and subcontracts of \$10,000 or less and certain contracts and subcontracts for indefinite quantities are exempt.

The two pertinent exemption clauses are as follows:

60-1.5 Exemptions

- (a) General – (1) Transactions of \$10,000 or under. Contracts and Subcontractors not exceeding \$10,000, other than Government bills of lading, and other than contract and subcontracts with depositories of Federal funds in any amount and with financial institutions which are issuing and paying agents for U.S. savings bonds and savings notes, are exempt from the requirements of the equal opportunity clause. In determining the applicability of this exemption to any federally assisted construction contract, or subcontract thereunder, the amount of such contract or subcontract rather than the amount of the Federal financial assistance shall govern. No agency, contractor, or subcontractor shall procure supplies or services in a manner so as to avoid applicability of the equal opportunity clause: Provided, that where a contractor has contracts or subcontracts with the Government in any 12-month period which have an aggregate total value (or can reasonably be expected to have an aggregate total value) exceeding \$10,000, the \$10,000 or under exemption does not apply, and the contracts are subject to the order and the regulation issued pursuant thereto regardless of whether any single contracts exceeds \$10,000.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM REQUIREMENTS FOR LOCAL PROGRAMS

1.0 Disadvantaged Business Enterprise (DBE) Program Requirements. The subsequent Sections will apply only to contracts involving U.S. Department of Transportation (USDOT) federal-aid or federal financial participation. Federal-aid or federal financial participation includes, but is not limited to, any funds directly or indirectly received by MoDOT, or authorized for distribution to or through MoDOT, by the USDOT or any operating administration within the USDOT. These provisions will not apply to Commission contracts funded exclusively with state funds, or state and local funds. Any contractor, subcontractor, supplier, DBE firm, and contract surety involved in the performance of a federal-aid contract shall be aware of and fully understand the terms and conditions of the USDOT DBE Program, as the terms appear in Title 49 CFR Part 26 (as amended), the USDOT DBE Program regulations; Title 7 CSR Division 10, Chapter 8 (as amended), the Commission's DBE Program rules.

2.0 DBE Program Distinguished From Other Affirmative Action Programs. The USDOT DBE Program established by the U.S. Congress is not the same as, and does not involve or utilize, any of the elements or authority of other state or local affirmative action programs, nor does the program rely upon state legislation or gubernatorial executive orders for implementation or authorization, other than the general authority given the Commission in Section 226.150, RSMo. The USDOT DBE Program is implemented by the Commission and MoDOT, through and in conjunction with the FHWA, FTA and FAA, as a "recipient" defined in Title 49 CFR 26.5.

3.0 Policy Regarding DBE Firms. It is the policy of the U. S. Department of Transportation and MoDOT that businesses owned by socially and economically disadvantaged individuals have an opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Consequently, the requirements of 49 CFR Part 26 (as amended) and the Commission's implementing state regulations in Title 7 CSR Division 10, Chapter 8, "Disadvantaged Business Enterprise Program", will apply to any contract with federal funds.

4.0 Opportunity for DBEs to Participate. Each contractor, subcontractor and supplier working on a contract financed in whole or in part with federal funds shall take all necessary and reasonable steps to ensure that DBEs have an opportunity to compete for, and participate in performance on project contracts and subcontracts.

5.0 Required Contract Provision. The federal-aid contract will include the following provision, as mandated by USDOT at Title 49 CFR 26.13(b):

(a) The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of the contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of the contract, which may result in the termination of the contract or such other remedy, as the recipient deems appropriate. In this provision, "contractor" will be defined as the contractor on the contract; "subrecipient" will be defined as any subcontractor performing the work. For the purposes of any federal-aid contract awarded by the Commission, "the recipient" will be defined as either the Commission, or MoDOT, or both. The contractor shall include this same contract provision in every supply contract or subcontract the contractor makes or executes with a subrecipient.

6.0 Bank Services. The contractor, and each subrecipient on a federal-aid contract, is encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals. Such banking services, and the fees charged for services, typically will not be eligible for DBE Program contract goal credit. Any questions on this subject should be directed to the MoDOT External Civil Rights Director. See [Sec 7.0](#).

7.0 DBE Program Information. DBE Program information may be obtained from the MoDOT External Civil Rights Director, P.O. Box 270, Jefferson City, Missouri 65102-0270. Phone (573) 751-4309, Fax (573) 526-0558, E-Mail: dbc@modot.mo.gov. It will be the duty of each contractor, for the contractor and for the contractor's subrecipients and surety, to take the steps necessary to determine the legal obligations and limitations under the DBE Program, as an element of responsibility. It will be the duty of each certified DBE firm to know, understand and comply with the DBE firm's legal obligations and limitations under the DBE Program, as a requirement of program participation. A surety providing a bid or contract bond will be bound by those bonds to the duties of the surety's principal.

8.0 DBE Certification, and the Missouri Unified Certification Program. The Missouri Department of Transportation and other certifying agencies within Missouri have partnered to form the Missouri Regional Certification Committee (MRCC) and developed a Unified Certification Program (UCP) pursuant to 49 CFR 26.81 and 7 CSR 10-8.061. Only DBE

firms certified by the MRCC are eligible to perform work on a federal-aid contract for DBE contract goal credit. It is the contractor's responsibility to ensure firms identified for participation are approved certified DBE firms.

The MRCC DBE Directory can be found at the following link:

http://www.modot.mo.gov/business/contractor_resources/External_Civil_Rights/DBE_program.htm

9.0 DBE Program-Related Certifications Made By Bidders and Contractors. If the bidder makes a written, express disclaimer of one or more certifications or assurances in the bid, the bid will be considered non-responsive. By submitting a bid on any call involving USDOT federal financial participation, and by entering into any contract on the basis of that bid, the contractor makes each of the following DBE Program-related certifications and assurances to USDOT, to the Commission, and to MoDOT:

(a) The bidder certifies that management and bidding officers have reviewed and understand the bidding and project construction and administration obligations of the SDOT DBE Program regulations at Title 49 CFR Part 26 (as amended), the USDOT DBE Program regulations; Title 7 CSR Division 10, Chapter 8 (as amended), and the commission's DBE Program rules. The bidder further certifies that the contractors management personnel on the project understand and are familiar with the requirements of these federal and state DBE Program regulations; and if the bidder was not familiar with or did not understand the requirements of these regulations, they have contacted the External Civil Rights Division of MoDOT and have been informed as to their duties and obligations under the DBE Program regulations by MoDOT staff and/or by USDOT DBE Program staff.

(b) The bidder certifies that the bidder has complied with the federal and state DBE Program requirements in submitting the bid, and will comply fully with these requirements in performing any federal-aid contract awarded on the basis of that bid.

(c) The bidder agrees to ensure that certified DBE firms have a full and fair opportunity to participate in the performance of the contract financed in whole or in part with federal funds. The bidder certifies that all necessary and reasonable steps were taken to ensure that DBE firms have an opportunity to compete for, and perform work on the contract. The bidder further certifies that the bidder not discriminate on the basis of race, color, age, national origin or sex in the performance of the contract, or in the award of any subcontract.

(d) The bidder certifies, under penalty of perjury and other applicable penal laws that if awarded the federal-aid contract, the contractor will make a good faith effort to utilize certified DBE firms to perform DBE work at or above the amount or percentage of the dollar value specified in the bidding documents. The bidder further certifies the bidder's understanding that the bidder may not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract, in whole or in any part, with another DBE, any non-DBE firm or with the contractor's own forces or those of an affiliate of the contractor, without the prior written consent of MoDOT as set out below.

(e) The bidder certifies, under penalty of perjury and other applicable penal laws that a good faith effort was made to obtain DBE participation in the contract, at or above the DBE participation contract goal. The bidder further certifies, under penalty of perjury and other applicable penal laws, that if the bidder is not able to meet the Commission's DBE contract goal, and if the bidder is not able to meet that DBE contract goal by the time the proposed DBE participation information must be submitted, within three business days after bid opening, the bidder has submitted with and as a part of the bid, a true, accurate, complete and detailed written explanation of good faith efforts to meet the DBE Contract Goal.

(f) The bidder understands and agrees that if awarded the contract the contractor is legally responsible to ensure that the contractor and each DBE subcontractor and supplier, comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the contract fully perform the designated tasks, with the DBE's own forces and equipment, under the DBE's own direct supervision and management. The bidder certifies, under penalty of perjury and other applicable penal laws, that if it awarded the contract and if MoDOT or the Commission determine that the contractor, a DBE or any other firm retained by the contractor has failed to comply with the DBE Program requirements or federal or state DBE Program regulations, the Commission, through MoDOT, shall have the sole authority and discretion to determine the extent of the monetary value to which the DBE contract goals have not been met, and to assess against and withhold monetary damages from the contractor in the full amount of that breach. The Commission, through MoDOT, may impose any other remedies available at law or provided in the contract in the event of a contract breach. The bidder further understands and agrees that this clause authorizes the Commission, through MoDOT, to determine and fix the extent of the damages caused by a breach of any contractual or regulatory DBE Program requirement and that the damage assessment will be enforced in addition to, and not in lieu of, any other general liquidated damages clause in the

contract. By submitting a bid for a federal-aid contract, and by entering into a contract, the bidder irrevocably agrees to such an assessment of liquidated damages for DBE Program purposes, and authorizes the Commission and MoDOT to make such an assessment of liquidated damages against the contractor, and to collect that assessment from any sums due the contractor under the contract, or any other contract, or by other legal process. The bidder makes this certification, agreement and authorization on behalf of itself, its subcontractors and suppliers, and the bid bond and contract bond sureties, for each federal-aid contract.

(g) The surety upon any bid or contract bond acknowledges the surety is held and firmly bound to the Local Agency for each and every duty of the surety's principal provided in any bid or contract regarding the DBE program.

10.0 Designation of DBE firms to perform on contract The bidder states and certifies, under penalty of perjury or other applicable penal laws, that the DBE participation information submitted in the bid or within the stated time thereafter is true, correct and complete and that the information provided includes the names of all DBE firms that will participate in the contract, the specific line item (s) that each DBE firm will perform, and the creditable dollar amounts of the participation of each DBE. The specific line item must reference the MoDOT line number and item number contained in the proposal. The bidder further states and certifies that the bidder has committed to use each DBE firm listed for the work shown to meet the DBE contract goal and that each DBE firm listed has clearly confirmed that the DBE firm will participate in and perform the work, with the DBE's own forces. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR 26.53.

(a) The bidder certifies the bidder's understanding that as the contractor on a contract funded in whole or in part by USDOT federal funds, the bidder may not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract, in whole or in any part, with another DBE, any non-DBE firm or with the contractor's own forces or those of an affiliate, without the prior written consent of MoDOT. The bidder understands it must receive approval in writing from MoDOT for the termination of a DBE firm, or the substitution or replacement of a DBE before any substitute or replacement firm may begin work on the project in lieu of the DBE firm participation information listed in the executed contract,

(1) The bidder further certifies understanding, that if a DBE firm listed in the bid or approved in the executed contract documents ceases to be certified at any time during the performance of the contract work, and a contract or subcontract with that firm has not yet been executed by the prime and subcontractor, the contractor can not count any work performed by that firm after the date of the firm's loss of eligibility toward meeting the DBE contract goal. However, if the contractor has executed a subcontract with the firm before the DBE lost eligibility and ceased to be a certified DBE, the contractor may continue to receive credit toward the DBE contract goal for that firm's work.

(2) The bidder further certifies understanding, that if a DBE subcontractor is terminated, or fails, refuses or is unable to complete the work on the contract for any reason, the contractor must promptly request authority to substitute or replace that firm. The request shall include written documentation that the DBE firm is unwilling or unable to perform the specified contract work. The contractor shall make good faith efforts to find another DBE subcontractor to substitute or replace the dollar amount of the work that was to have been performed by the DBE firm. The good faith efforts shall be directed at finding another DBE to perform the same, or more, dollar amount of work that the DBE firm that was terminated was to have performed under the executed contract. The substitute or replacement DBE firm may be retained to perform the same or different contract work from that which the terminated firm was to have performed. The contractor shall obtain approval from MoDOT in writing before the replacement or termination of one firm with another before the work will count toward the project DBE goal.

(3) The bidder further certifies the bidder's understanding, that the dollar value of any work completed by a DBE firm prior to approval of the DBE's substitution or replacement, in writing, by MoDOT will not be credited toward meeting the DBE contract goal. The contractor will remain subject to appropriate administrative remedies, including but not limited to, liquidated damages for the full dollar amount that the DBE contract goal is not met. Liquidated damages will also be assessed against the contractor if the original, substitute or replacement DBE firms perform the required contract work, but are not paid in full for some or all of that work by the contractor, including back charges. No credit toward the DBE goal will be given for any amount withheld from payment to the DBE or "back charged" against monies owed to the DBE, regardless of the purpose or asserted debt.

11.0 Good Faith Effort to Secure DBE Services. The bidder shall make a good faith effort to seek DBEs in a reasonable geographic area to where the solicitation for subcontracts and material is made. If the bidder cannot meet the goals using

DBEs from that geographic area, the bidder shall, as a part of the effort to meet the goal, expand the search to a wider geographic area.

11.1 Bidding Procedure. The following bidding procedure shall apply to the contract, for DBE program compliance purposes.

11.2 Contract Goal, Good Faith Efforts Specified. The bidder may submit the completed “DBE Identification Submittal” information in the bid documents at the same time as, and within the sealed bid, at the time the bid is submitted. However, if that information is not completed and submitted with the initial sealed bid, then as a matter of responsiveness and responsibility, the apparent low and second low bidder shall file the completed “DBE Identification Submittal” pages to the Local Agency on or before 4:00 p.m. of the third business day after the bid opening date. The Local Agency may permit telefax transmittal. The complete and signed original documents shall be mailed to the Local Agency no later than the day of the telefax transmission. No extension of time will be allowed for any reason. The means of transmittal and the risk of timely receipt of the information shall be the bidder’s.

The bidder is responsible to ensure that all submittals are checked for accuracy. Any and all omissions, deletions, and/or errors that may affect the end result of the bid package are the sole liabilities of the bidders. The bid may be found non-responsive if the submittal is not complete and/or accurate.

11.3 Bid Rejection, Bid Security Disposition. The failure of either the apparent low bidder or the second low bidder to file the completed and executed “DBE Identification Submittal”, listing actual, committed DBE participation equal to or greater than the DBE contract goal percentage specified in the bid by 4:00 p.m. on the third business day after the bid opening, will be cause for rejection of that bid, and the bid surety bond or bid guaranty of that bidder will be forfeited to and become the property of the Local Agency upon demand.

(a) Any bidder rejected for failure to submit the completed and executed “DBE Identification Submittal” information in the bidding documents, with full documentation of sufficient DBE participation to satisfy the DBE contract goal cannot submit a bid on the same, or substantially similar, project, when and if the project is re-advertised for bids. By submitting a bid on a federal-aid project, the bidder accepts and agrees to this provision, and the disposition of the bidders bid bond or guaranty, on behalf of the bidder and the bidders bid surety or guaranty.

(b) The surety separately acknowledges the surety to be held and firmly bound to the Local Agency to immediately upon demand pay the face amount of the bid bond.

11.4 Good Faith Efforts Described. Good faith efforts to meet the DBE contract goal may include, but are not limited to, the following:

(a) Attending a pre-bid meeting, if any, scheduled by the department to inform DBEs of contracting and subcontracting opportunities;

(b) Advertising in general circulation trade association and socially and economically disadvantaged business directed media concerning subcontracting opportunities.

(c) Providing written notice to a reasonable number of specific DBEs so that the DBE’s interest in the contract are solicited in sufficient time to allow the firm to participate effectively;

(d) Following-up on initial written notice or solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested.

(e) Maintaining documentation of responses received in the effort to solicit DBE participation.

(f) Selecting portions of work to be performed by DBEs to increase the likelihood of meeting the DBE goal, including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation.

(g) Providing interested DBEs adequate information about plans, specifications and requirements of the contract.

(h) Negotiating in good faith with interested DBEs, not rejecting DBEs as unqualified without sound business reasons based on a thorough investigation of the DBE’s capabilities.

(i) Making efforts to assist interested DBEs in obtaining bonding, lines of credit or insurance required by the Local Agency or by the bidder.

(j) Making effective use of available disadvantaged business organizations, minority bidders' groups, local, state and federal disadvantaged business assistance offices, MoDOT and other organizations that provide assistance in the recruitment and placement of DBEs.

11.5 Documentation, and Administrative Reconsideration of the Bidder's Good Faith

Efforts. In the bidding documents, the bidder has the opportunity and responsibility to provide certified written documentation as to whether the bidder made a good faith effort to meet the DBE contract goal as proposed by MoDOT. Any bidder that has not met the Commission's proposed DBE contract goal at the time of bid opening must submit the completed "Certification of Good Faith Efforts to Obtain DBE Participation". The certification should be included in the bidding documents, fully and in detail, at the time its sealed bid is submitted, however, if that information is not completed and submitted with the initial sealed bid, the bidder must submit the documentation to the Local Agency on or before 4:00 p.m. of the third business day after the bid opening date. The Local Agency may permit telefax transmittal. The complete and signed original documents shall be mailed to the Local Agency no later than the day of the telefax transmission. No extension of time will be allowed for any reason. The means of transmittal and the risk of timely receipt of the information shall be the bidder's responsibility. The bidder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain certified DBE firm participation in the proposed contract work. If the apparent low bidder appears to have failed to adequately document in the bid that the bidder made a good faith effort to achieve sufficient DBE participation in the contract work, that firm will be offered the opportunity for administrative reconsideration upon written request, before the Local Agency and MoDOT reject that bid as non-responsive. However, regardless of the DBE contract goal participation level proposed by the bidder, or the extent of good faith efforts shown, the apparent low and second low bidders shall each timely and separately file their completed and executed "DBE Identification Submittal" or face potential sanctions and the bid bond or guaranty, as specified in [Sec 10.0](#) of these provisions may become the property of the Local Agency subject to the Local Agency's demand.

12.0 DBE Participation for Contract Goal Credit. DBE participation on the contract will count toward meeting the DBE contract goal as follows:

(a) The applicable percentage of the total dollar value of the contract or subcontract awarded to the DBE will be counted toward meeting the DBE contract goal, only if that firm is certified by the MRCC as a DBE at the time the contract or subcontract is executed, and only for the value of the work, goods or services that are actually performed, or provided, by the DBE firm itself.

(b) When a DBE performs work as a participant in a joint venture, the contractor may count toward the DBE goal only that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the contract work that the DBE has performed with the DBE's own forces. The MoDOT External Civil Rights Director shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to review and approve the contractor's organizational structure and proposed operation. When a DBE subcontracts part of the work of the contract to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE's subcontractor at a lower tier is a MoDOT certified DBE. Work that a DBE subcontracts to a non-DBE firm will not count toward the DBE contract goal. The cost of supplies and equipment a DBE subcontractor purchases or leases from the prime contractor or the prime's affiliated firms, or from another non-DBE subcontractor, will not count toward the DBE contract goal.

(c) The contractor may count expenditures to a DBE subrecipient toward the DBE contract goal only if the DBE performs a commercially useful function (CUF) on that contract.

(d) A contractor may not count the participation of a DBE subcontractor toward the contractor's final compliance with the contractor's DBE contract goal obligations until the amount being counted has actually been paid to the DBE. A contractor may count 60 percent of the contractor's expenditures actually paid for material and supplies obtained from a DBE certified by MoDOT as a regular dealer, and 100 percent of such expenditures actually paid for materials and supplies obtained from a certified DBE manufacturer.

(1) A regular dealer will be defined as a firm that owns, operates, or maintains a store, warehouse or other establishment in which the material, supplies, articles or equipment required and used under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the DBE firm shall

be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.

(2) A DBE firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone or asphalt, without owning, operating or maintaining a place of business where it keeps such items in stock, if the DBE both owns and operates distribution equipment for the products it sells and provides for the contract work. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement, and not on an ad hoc or contract-by-contract basis.

(3) If a DBE regular dealer is used for DBE contract goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the regular dealer, who shall be responsible for their distribution.

(4) A manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises, the material, supplies, articles or equipment required under the contract and of the general character described by the project specifications. A manufacturer will include firms that produce finished goods or products from raw or unfinished material, or that purchases and substantially alters goods and materials to make them suitable for construction use before reselling them.

(e) A contractor may count toward the DBE contract goal the following expenditures to certified DBE firms that are not "regular dealers" or "manufacturers" for DBE program purposes:

(1) The contractor may count toward the DBE contract goal the entire amount of fees or commissions charged by a certified DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive, compared with fees customarily charged for similar services.

(2) The contractor may count toward the DBE contract goal the entire amount of that portion of the construction contract that is performed by the DBE's own forces and equipment, under the DBE's supervision. This includes the cost of supplies and material ordered and paid for by the DBE for contract work, including supplies purchased or equipment leased by the DBE except supplies and equipment a DBE subcontractor purchases or leases from the prime contractor or its affiliates.

(f) A contractor may count toward the DBE contract goal 100 percent of the fees paid to a certified DBE trucker or hauler for delivery of material and supplies required on a job site, but not for the cost of those materials or supplies themselves, or for the removal or relocation of excess material from or at the job site, when the DBE certified trucking company is not also the manufacturer of or a regular dealer in those material and supplies, provided that the trucking or hauling fee is determined by MoDOT to be reasonable as compared with fees customarily charged by non-DBE firms for similar services. The certified DBE trucking firm shall also perform a CUF on the project and not operate merely as a pass through for the purposes of gaining credit toward the contract DBE goal. Prior to submitting a bid, the contractor shall determine, or contact the MoDOT External Civil Rights Director for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project.

(g) The contractor will receive DBE contract goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases or other project work or service arrangements, provided that those fees are determined by MoDOT to be reasonable and not excessive, as compared with fees customarily charged by non-DBE firms for similar services. A broker will be defined as a person or firm that does not own or operate the delivery equipment necessary to transport materials, supplies or equipment to or from a job site; a broker typically will not purchase or pay for the material, supplies or equipment, and if the broker does purchase or pay for those items, those costs will be reimbursed in full. In most instances, the broker is merely the entity making arrangements for delivery of material, supplies, equipment, or arranging project services. To receive DBE contract goal credit, MoDOT must determine that the DBE broker has performed a CUF in providing the contract work or service.

13.0 Performing a Commercially Useful Function (CUF). No credit toward the DBE contract goal will be allowed for contract payments or expenditures to a DBE firm, if that DBE firm does not perform a CUF on that contract. A DBE performs a CUF when the DBE is solely responsible for execution of a distinct element of the contract work, and the DBE actually

performs, manages and supervises the work involved with the firm's own forces. To perform a CUF, the DBE alone shall be responsible, and alone must bear the risk, for the material and supplies used on the contract, selecting a supplier or dealer from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the DBE's own forces and equipment and paying for those materials and supplies. The amount the DBE firm is to be paid under the contract shall be commensurate with the work the DBE actually performs and the DBE credit claimed for the DBE's performance.

13.1 Contractor's Obligation to Monitor CUF Performance. It shall be solely the contractor's responsibility to ensure that all DBE firms perform a CUF. Further, the contractor is responsible to, and shall ensure that each DBE firm fully performs the DBE's designated tasks, with the DBE's own forces and equipment, under the DBE's own direct supervision and management. MoDOT is under no obligation to warn the contractor that a DBE's participation may not count toward the goal, other than through official notification with an opportunity for administrative reconsideration at the conclusion of the contract work.

13.2 DBEs Must Perform a Useful and Necessary Role in Contract Completion. A DBE does not perform a commercially useful function if the DBE's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

13.3 DBEs Must Perform The Contract Work With Their Own Workforces. If a DBE does not perform and exercise responsibility for at least 30 percent of the total cost of the DBE's contract with the DBE's own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, MoDOT will presume that the DBE is not performing a commercially useful function.

13.4 Factors Used to Determine if a DBE Trucking Firm is Performing a CUF. The following factors will be used to determine whether a DBE trucking company is performing a commercially useful function (CUF):

(a) To perform a CUF, the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation that the DBE is being paid for on the contract work. There shall not be contrived arrangement, including but not limited to, any arrangement that would not customarily exist under regular construction project subcontracting practices for the purpose of meeting the DBE contract goal.

(b) The DBE must own and operate at least one fully licensed, insured and operational truck used in performance of the contract work. This does not include a supervisor's pickup truck or a similar vehicle that is not suitable for hauling the necessary materials or supplies.

(c) The DBE receives 100 percent contract goal credit for the total reasonable amount the DBE is paid for the transportation services provided on the contract using trucks the DBE owns, insures and operates, using drivers that the DBE employs.

(d) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE will receive credit for the total fair market value actually paid for of the transportation services the lessee DBE firm provides on the contract.

(e) The DBE may also lease trucks from a non-DBE firm, including an owner-operator. However, the DBE who leases trucks from a non-DBE is entitled to DBE contract goal credit only for the brokerage fee or commission the DBE receives as a result of the lease arrangement. The DBE will not receive credit for the total value of the transportation services provided by the non-DBE lessee. Furthermore, no DBE contract goal credit will be allowed, even for brokerage fees or commissions, where the DBE leases the trucks from the contractor on the project or a firm owned, controlled by, or affiliated by ownership or control to, the contractor.

(f) For purposes of this section, the lease shall indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks shall display the name and identification number of the DBE firm that has leased the truck at all times during the life of that lease.

13.5 MoDOT Makes Final Determination On Whether a CUF Is Performed. MoDOT and the Commission will have the final authority to determine whether a DBE firm has performed a CUF on a federal aid contract. To determine whether

a DBE is performing or has performed a CUF, MoDOT will evaluate the amount of work subcontracted by that DBE firm or performed by other firms, and the other firms forces and equipment. Any DBE work performed by the contractor, or by employees or equipment of the contractor will be subject to disallowance under the DBE Program, unless the independent validity and need is demonstrated.

14.0 Use of Joint Checks

Request for joint checks must be made to MoDOT by the contractor. Prior approval must be given before the use of joint checks is allowed. Contact External Civil Rights Division at 573-751-4309 or dbe@modot.mo.gov to request a Joint Check Request Form.

15.0 Verification of DBE Participation, Liquidated Damages.

15.1 Prior to final payment by the Local Agency, the contractor shall file with the Local Agency a detailed list showing each DBE used on the contract work, and the work performed by each DBE. The list shall show the actual dollar amount paid to each DBE for the creditable work on the contract, less any rebates, kickbacks, deductions, withholdings or other repayments made. The list shall be certified under penalty of perjury, or other law, to be accurate and complete. MoDOT and the Commission will use this certification and other information available to determine if the contractor and the contractor's DBEs satisfied the DBE contract goal percentage specified in the contract and the extent to which the DBEs were fully paid for that work. The contractor shall acknowledge, by the act of filing the detailed list, that the information is supplied to obtain payment regarding a federal participation contract.

15.2 Failure on the part of the contractor to achieve the DBE participation to which the contractor committed in the contract may result in liquidated damages being imposed on the contractor by the Commission for breach of contract and for non-compliance. If the contract was awarded with less than the original DBE contract goal proposed by the Commission, the revised lower amount shall become the final DBE contract goal, and that goal will be used to determine any liquidated damages to be assessed. Additionally, the Commission or MoDOT may impose any other administrative sanctions or remedies available at law or provided by the contract in the event of breach by the contractor by failing to satisfy the contractor's DBE contract goal commitment. However, no liquidated damages will be assessed, and no other administrative sanctions or remedies will be imposed when, for reasons beyond the control of the contractor and despite the good faith efforts made by the contractor, the final DBE contract goal participation percentage was not achieved. The contractor will be offered the opportunity for administrative reconsideration of any assessment of liquidated damages, upon written request. The administrative reconsideration officer may consider all facts presented, including the legitimacy or business reason for back charges assessed against a DBE firm, in determining the final amount of liquidated damages.

16.0 Prompt Payment Requirements. In accordance with Title 49 CFR 26.29, the contractor shall comply with the prompt payment requirements of that regulation, Section 34.057, RSMo., the provisions of the Commission's rule 7 CSR 10-8.111 and the contract. By bidding on a federal-aid contract, and by accepting and executing that contract, the contractor agrees to assume these contractual obligations, and to bind the contractor's subrecipients contractually to those prompt payment requirements at the contractor's expense.

17.0 Miscellaneous DBE Program Requirements. In accordance with Title 49 CFR Part 26 and the Commission's DBE Program rules in Title 7 CSR Division 10, Chapter 8, the contractor, for both the contractor and for the contractor's subcontractors and suppliers, whether DBE firms or not, shall commit to comply fully with the auditing, record keeping, confidentiality, cooperation and anti-intimidation or retaliation provisions contained in those federal and state DBE Program regulations. By bidding on a federal-aid contract, and by accepting and executing that contract, the contractor agrees to assume these contractual obligations, and to bind the contractor's subrecipients contractually, at the contractor's expense.

DBE PROGRAM-Monitoring and Enforcement

Commercially Useful Function

One of the key requirements of the DBE Program is that a **commercially useful function** be performed. This is defined as:

"Being responsible for execution of a contract or a distinct element of the work by actually performing, managing, and supervising the work involved."

MoDOT personnel monitor the performance of work to be performed by DBE firms on all federal aid projects. MoDOT personnel review all elements of the work to be performed, including supervision of employees, employee payroll, and equipment used by the DBE firm. Contractors, DBEs, local public agencies, and all employees are required to cooperate with MoDOT personnel conducting investigations.

Failure of a DBE firm to perform a commercially useful function will result in the dollar amount of the work not being credited toward the DBE goal on the project. This can result in MoDOT withholding payment from the prime contractor, or agency, for that amount, or could result in removal of eligibility of the DBE. In cases of deliberate attempts to circumvent the intent of the DBE program, or fraud, these actions may lead to criminal prosecution of both the prime contractor and the DBE firm.

Red Flag situations which may result in an investigation include, but are not limited to, shared employees, supervision of DBE employees by another contractor, use of the prime's equipment, use of other equipment by the DBE without a long-term lease, materials for the DBE ordered, or paid for, by the prime contractor, or an item of work being done jointly by the DBE firm and another contractor.

Management

The DBE must manage the work that has been contracted. Management includes, but is not limited to, scheduling work operations, ordering equipment and materials, preparing and submitting certified payrolls, and hiring and firing employees. The DBE owner must supervise daily operations, either personally or with a full time, skilled, and knowledgeable superintendent. The superintendent must be under the DBE owner's direct supervision. The DBE owner must make all operational and managerial decisions of the firm. Mere performance of administrative duties is not supervision of daily operations.

Materials

The DBE shall negotiate the cost, arrange delivery, and pay for the materials and supplies for the project. MoDOT will review invoices to verify billing and payment. The DBE must prepare the estimate, quantity of material, and be responsible for the quality of materials.

Two-party checks for payment may be made to the DBE and the supplier **only** if approved by MoDOT in advance. **No** credit toward the DBE goal will be given for the cost of materials or supplies paid directly by the prime for the DBE firm.

Employees

In order to be considered an independent business, DBE firms must keep a regular workforce. DBE firms cannot "share" employees with non-DBE contractors, particularly the prime contractor. All work must be performed with a workforce the DBE firm controls, with a minimum of 30% of the work to be performed by the DBE firm's regular employees, or those hired by the DBE firm for the project from a source **other** than the prime contractor.

If a DBE firm does not perform or exercise responsibility for at least thirty (30) percent of the total cost of its contract or subcontract with its own work force, or the DBE subcontracts a greater portion of the work of a contract or subcontract than would be expected on the basis of normal industry practice for the type of work involved, MoDOT shall presume that the DBE is not performing a commercially useful function.

Sanctions

The failure of a DBE firm to perform a commercially useful function (CUF) will result in the dollar value of that DBE firm's work not being credited toward the contractor's DBE goal for that contract. This may result in MoDOT withholding payment from the prime contractor of the entire amount not credited, if this results in the contractor's failure to achieve the DBE participation goal for that contract.

Deliberate conduct or indifference to the CUF requirements can also lead to the DBE firm's removal of eligibility. In any and all cases of deliberate attempts by the contractor, a DBE firm, or other firms to circumvent the requirements of the USDOT or MoDOT DBE Program, or their related contract requirements, or fraud of any kind, these actions may lead to suspension or debarment of the firms and their affiliates by MoDOT and may result in criminal prosecution and sanctions, plus civil and contractual liability, of any firm or person involved.

Fraud

MoDOT will notify the USDOT of any suspected false, fraudulent, or dishonest conduct in connection with the DBE program, in order for the USDOT to take the steps (e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules) provided in §26.109. MoDOT will also consider similar action under Missouri legal authorities, including responsibility determinations in future contracts.

Termination, Removal, Or Substitution Of DBE Firm

A contractor cannot terminate, release, or substitute any DBE firm without the written consent of MoDOT. The contractor must provide documentation to the Resident Engineer that the DBE firm is **unwilling or unable to perform** within 5 working days of notice of the inability to perform by the DBE firm. The Resident Engineer will forward the notice to the External Civil Rights Administrator for approval. If removal of a DBE firm is approved, or a DBE firm withdraws, the contractor must make a good faith effort to find a replacement DBE firm. The contractor must make efforts to replace the dollar value of work to be performed not merely finding a replacement for the work that was to be performed by the DBE firm being replaced. If substitution of a DBE firm is approved, the prime contractor must provide the Resident Engineer and External Civil Rights Administrator copies of new or amended subcontracts.

DBE Participation

DBE credit will count toward the contractual goal only for work actually performed by the DBE firm and within the Standard Industry Classification (SIC) code approved for that firm. The credit will be counted in the following manner:

Manufacturer

Credit is given for 100 percent of the value paid for materials furnished which become a permanent part of the project. A manufacturer is a firm that owns and operates the facilities to produce a product required by the project and purchased by the contractor.

Supplier

Credit is given for 60 percent of the value paid for materials furnished which becomes a permanent part of the project. A supplier sells goods to the general public and maintains an inventory at an owned or leased warehouse or store. Bulk items such as steel, petroleum products, or rock do not have to be maintained in an on-site inventory. Credit will not be given for the cost of the materials and separate credit for the hauling of those same materials. Transportation of the materials is deemed part of the total cost.

Broker

Credit is given for 100 percent of the **fees** or **commission** received by the DBE firm for materials purchased, services provided, or equipment secured and resold to the contractor. Fees or commissions are defined as the difference between what the DBE firm paid for the materials purchased, services provided, or equipment secured and the price paid by the contractor to the DBE firm for those items. A broker does not manufacture or supply on a regular basis.

Trucker

Credit is given for 100 percent of the amount paid to the DBE trucker if the majority of the trucking is performed by the DBE, with employees of the DBE, using equipment owned or long-term leased by the DBE. However, if the DBE firm uses leased trucks, at least one truck owned by the firm **must** be used on the project.

Full credit will not be given for leased trucks unless they are leased from another DBE firm, DBE owner

operators, or a recognized commercial leasing operation. Firms licensed by the Missouri Division of Motor Carrier and Railroad Safety as leasing agents qualify as a recognized leasing operation. Lease of trucks from the prime contractor will not be credited toward the DBE goal other than the fees and commissions. This type of relationship will be subject to strict scrutiny.

All trucks used must be labeled clearly and visibly with a sign indicating the firm owning or leasing the vehicle. MoDOT will require submittal of a truck roster report, including ownership and vehicle identification information, on a regular basis. MoDOT project office personnel will review the rosters for verification and will monitor the trucks operating on the project. MoDOT will conduct random verification and report any irregularities to the External Civil Rights Unit for review.

If the DBE firm uses owner-operators to supplement their owned trucks, the DBE must be responsible for management and supervision of the entire trucking operation. The trucking arrangement or contract **cannot** be a contrived arrangement to meet the DBE goal. The DBE will be considered a broker, and only fees or commissions received will count toward the goal, if the DBE is not in full control, or does not have employees or trucks on the project.

In order for the use of a DBE trucker to be credited for the delivered price of materials/ supplies, the trucker must be certified as a supplier or manufacturer of the material, responsible for the quality standards of the material, negotiating the material price, payment, and select the source.

Contractor

Credit is given for 100 percent of the amount of paid to a DBE contractor for labor and materials provided to perform a defined and clearly measurable portion of the contract. 30 percent of the work must be performed by the DBE's **own** employees and the DBE must order and pay for all supplies and materials.

Verification

MoDOT, through Jefferson County, requires submittal of an affidavit of final payment for all DBE firms prior to release of final payment and retainage to the prime contractor. The final original items to be performed, change orders, final quantities, and payments are then reviewed to determine if the contractor has complied with the contractual DBE goal. If the prime does not comply with the goal, MoDOT withholds the amount the contractor failed to achieve as the administrative remedy for non-compliance.

Guidelines for Obtaining Environmental Clearances

This article provides guidelines for obtaining environmental clearances for disturbed areas such as:

Borrow Sites, Haul Roads, Burn Pits, Staging Areas and Spoil Sites at project-specific locations.

The necessary clearances for disturbed areas such as those referenced above shall be obtained prior to using these areas for projects. The contractor is encouraged to consider using material from previously disturbed locations (substantial disturbance) or disturbed areas that have previously been cleared, precluding the need to address most, if not all, of the issues described below. The contractor should include the federal project number on all correspondence. Once the contractor has obtained all required documentation, it should be provided to Jefferson County & MODOT District contact. The following addresses the primary environmental issues related to clearance of disturbed areas such as borrow sites:

1. The Endangered Species Act

The Federal Endangered Species Act protects rare species and their habitats. The U.S. Fish and Wildlife Service (USFWS) administers the Act. Violations of this act can result in extensive project delays and severe fines. To determine if an activity will impact any rare species or their habitats, contact the Missouri Department of Conservation's Policy and Coordination Section at (573) 751-4115 to request a query of the MDC Heritage Database. All queries must be accompanied by a good quality map illustrating the location of the proposed site with a description of the activity. Allow at least three weeks for a response to all requests.

If there are no known records of rare species or sensitive habitats at the proposed site, and it is unlikely that any will be impacted by the activity, the contractor will be given clearance to proceed. However, if rare species are known or likely to occur at the site, or known critical habitat exists, further coordination with MDC and the USFWS will be necessary. Written clearance from the U.S. Fish and Wildlife Service may be required before the project can proceed.

Missouri Department of Conservation (MDC)
Planning Division
P.O. Box 180
Jefferson City MO 65102-0180
Telephone Number (573) 751-4115 or FAX (573) 751-4495

U.S. Fish and Wildlife Service (FWS)
Columbia Field Office
101 Park DeVille Drive - Suite A
Columbia, MO 65203-0057
Telephone Number (573) 234-2131 or Fax (573) 234-2182

2. Floodplain/Regulatory Floodway

An evaluation of floodplain impacts is mandated by Executive Order 11988, Floodplain Management, and subsequent federal floodplain management guidelines. When available, flood hazard boundary maps ([National Flood Insurance Program](#)) and flood insurance studies for the project area are used to determine the limits of the base (100-year) floodplain and the extent of encroachment.

The Federal Emergency Management Agency (FEMA) and Federal Highway Administration (FHWA) guidelines 23 CFR 650 have identified the base (100-year) flood as the flood having a one percent probability of being equaled or exceeded in any given year. The base floodplain is the area of 100-year flood hazard within a county or community. The [regulatory floodway](#) is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a specified amount. FEMA has mandated that projects can cause no rise in the regulatory floodway, and a one-foot cumulative rise for all projects in the base (100-year) floodplain. For projects that involve the state of Missouri, the State Emergency Management Agency (SEMA) issues [floodplain development permits](#). In the case of projects proposed within regulatory floodways, a ["No-Rise" Certification](#), if applicable, should be obtained prior to issuance of a permit.

Questions regarding floodplain and regulatory floodway should be addressed to:

SEMA
P.O. Box 116
Jefferson City, MO 65102
(573) 526-9141

Documentation of consultation with SEMA regarding the presence of 100-year floodplain/regulatory floodway should be included in the final collection of information to be submitted to MoDOT staff.

3. Federal Emergency Management Agency (FEMA) Buyout Lands

The Flood Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grand Program (HMGP), including the acquisition and relocation of flood damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to "buy out" flood damaged property, which had been affected by the Great Flood of 1993.

There are numerous restrictions on these FEMA buyout properties. No structures or improvements may be erected on these properties unless they are open on all sides. The site shall be used only for open space purposes, and shall stay in public ownership. These conditions and restrictions (among others), along with the right to enforce same, are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving these properties should take into consideration that 2-3 years is necessary to process an exemption from FEMA to utilize this parcel. This exemption would likely be a permanent easement rather than a transfer of property. If any proposed site is located on a FEMA buyout property, an alternative site should be chosen.

4. Farmland Protection

In order to comply with the Farmland Protection Policy Act, which has the purpose of minimizing Federal programs' contributions to the unnecessary and irreversible conversion of farmland caused by nonagricultural uses, the Form AD-1006 will need to be completed. This can be accomplished through coordination with United States Department of Agricultural (USDA)-Natural Resources Conservation Service (NRCS), and the completion of Form AD-1006. To receive the Form AD-1006, call the NRCS State office in Columbia at (573) 876-9411. An aerial map of the site or sites will also be required with the area to be disturbed identified on the map. This aerial map can be obtained from the local SCS office. In some areas of the state this office may be located in an adjoining county.

The contractor will need to complete Parts I and III of Form AD-1006. The form should then be sent to the NRCS State Office for completion of Parts II, IV and V. The address for NRCS State Office is:

Mr. Dennis Potter
State Soil Scientist
Natural Resource Conservation Service
601 Business Loop 70 West
Parkade Center, Suite 250
Columbia, MO 65203
1-573-876-9411

After the NRCS office returns the form, the contractor will complete remaining Parts VI and VII. The contractor will provide a copy of the completed form to the MoDOT district contact to document compliance with the Farmland Protection Policy Act.

5. Wetlands

Federal executive order has decreed a national policy of "no net loss of wetlands." Under this policy, impacts to wetlands must be avoided if at all practical. Where wetlands are impacted, these impacts must be mitigated by construction or enhancement of a like quantity **and** quality of new wetlands. For these reasons, avoiding impacts to wetlands is a primary goal.

To determine whether wetlands occur on a site, contact the USDA, NRCS. The NRCS has identified and mapped wetlands as a requirement under the Food Security Act. These maps are available from county NRCS offices, usually located in the county seat. For all other non-farmland sites, consult the [US Fish and Wildlife Service's Wetlands Map](#). If wetlands are identified on Food Security Act wetland maps, a site visit may be needed to confirm the location of wetlands. If there are no wetland impacts, no other action need be taken.

If there are any questions about the extent of wetlands in the event that wetlands cannot be avoided, contact the U.S. Army Corps of Engineers (COE). If wetlands cannot be avoided, a COE Section 404 permit would be processed through the appropriate COE district. There are five COE districts in Missouri. Information about COE district locations, addresses and phone numbers is available on [the COE website](#).

6. Water Quality/Land Disturbance

The National Pollutant Discharge Elimination Systems (NPDES) program regulates construction activities where 1 acre or more of land is disturbed. If the project proponent has a general NPDES permit for all of their construction activities, this is adequate. If the project proponent does not have a valid general permit and the site to be disturbed is greater than 1 acre in size, a project-specific NPDES permit from DNR is required. If the project is entirely within MoDOT right of way, the sponsor may use MoDOT's general permit. In either case, the sponsor will need to develop a site-specific stormwater pollution prevention plan for the project. The sponsor shall contact the Missouri Department of Natural Resources (DNR) NPDES Storm Water Program office at (573) 751-1300 or (800) 361-4827 for further directions. A few cities (Kansas City, Columbia, and others) and counties have obtained their own land disturbance permits from DNR for generic land disturbance purposes; see additional discussion on stormwater and erosion control in 136.4 Environmental and Cultural Requirements of the LPA Policy.

7. Hazardous Waste Sites

More than likely, areas to be disturbed will be located in rural areas that have been used for agriculture or similar purposes. Hazardous wastes are most typically associated with commercial or previous industrial properties.

If the proposed area is basically farmland or pasture, and has not been used for any commercial activity or dumping, hazardous wastes are unlikely. The contractor should simply document the existing and historic land use of the parcel and tell how this assessment was obtained.

In nonrural, suburban or commercial areas a nonintrusive investigation may be used to "diagnose" the environmental conditions of a selected site. The following is a list of suggested items, but not inclusive, for a cursory nonintrusive investigation.

- Examine any noticeable contamination in the form of surface staining, oil sheen, odors, stressed vegetation, spills, leaks, illegal dumping, etc.
- Conduct interviews of local citizens and current owners to identify past land use practices and hazardous waste management practices.
- Consult with local and state (Missouri Department of Natural Resources, Hazardous Waste Program, 573-751-3176) environmental regulatory agencies to identify if any past problems (complaints, citations, etc.) have occurred at the site, if any permits/licenses have been filed for the site, or if enforcement actions have occurred.

If the above analyses produce negative results, the contractor should provide documentation to the MoDOT Design Division-Environmental Section as to who was contacted and the results of the contact. However, if through the search for information described above, potential problems are identified, it would be wise to locate another site.

The potential to encounter wastes from sites that are unknown should always be a consideration. Any unknown sites that are found will be handled in accordance with Federal and State Laws and Regulations.

8. Historic Preservation

All jobs requiring environmental clearance for historic preservation (archaeological sites, buildings, and structures) must be reviewed and approved by the State Historic Preservation office (SHPO), Department of Natural Resources. To initiate SHPO's review and clearance of a proposed site for cultural resources, a "Section 106 Project Information Form" must be completed and submitted to SHPO along with a copy of a United States Geological Survey (USGS) topographic map indicating the location of the project. In addition, photographs of any structures that will be impacted must be provided. The "Section 106 Project Information Form" can be obtained from the SHPO website or requested from the SHPO by telephone, (573) 751-7858, or mail:

Missouri Department of Natural Resources
State Historic Preservation Office
Attn: Section 106 Review
P.O. Box 176
Jefferson City, MO, 65102-0176

Based on the information supplied, SHPO may clear the project at that time or request that the contractor acquire the services of an archaeological consultant to conduct a historic preservation survey of the proposed area. A listing of currently acceptable and available archaeological consultants who can complete a survey if required can be viewed at the SHPO's website. Any questions can be directed to the Design Division-Historic Preservation Section, at (573) 751-0473.

9. Public Land

If borrow sites are proposed on any publicly owned land, contact the MoDOT district representative before proceeding. Section 4(f) of the Department of Transportation Act of 1966 (now codified as 49 U.S.C. 303 and 23 U.S.C. 138) protects certain public lands. Section 4(f) requires that all U.S. DOT-funded transportation projects must avoid impacts to public parkland and wildlife refuges (and cultural resources deemed eligible for the National Register of Historic Places), unless it is successfully demonstrated that no feasible and prudent alternative exists that avoid "use" or impacts to the park or refuge. It is strongly recommended that public lands not be considered as potential borrow sites.

Once the contractor has obtained all of the above information, it should be provided to the MoDOT district contact. The transmittal letter must include **county, route and job number** of the project, along with a map depicting the location and limits of the site(s).

**ENVIRONMENTAL/CULTURAL PERMITS,
LAND DISTURBANCE PERMIT(s),
APPROVAL LETTERS RAILROADS, ETC.**

The following permits have been acquired and are included herein:

1. Environmental Tracking Form
2. MoDNR Section 106 Cultural Assessment Review
3. Army Corp of Engineer's 404 Permit / MoDNR 401 Water Quality Permit
4. MDC Heritage Review
5. Lead and Asbestos Test Results
6. MoDNR Land Disturbance Permit
7. Jefferson County Land Disturbance Permit
8. Jefferson County Floodplain Development Permit

Environmental Tracking Form**For Federal Aid Projects**

EN/HP ID Number: 2672

Project Number: STP 5403656 **TIP Number:** 5774-14

County: Jefferson **District:** 5

City: _____ **Bridge Number:** _____

Route: Stroup Road Bridge **TIGER Grant Funds** ☐

Location: Over Little Creek

Description:

The Stroup Road Bridge project over Little Creek is 550 feet long. The existing bridge #2470012 and rehabbed bridge #24700121 is located in Section 5, T40N, R5E in Jefferson County, Mo.
 Replace Bridge - see link -
<http://www.ewgateway.org/download/For%20MoDOT%20Local%20Programs/MO%20STP%20Recommended/>

NEPA Classification: Programmatic CE **Programmatic Section:** 17

NEPA Approval Date: 4/28/2014

Final Environmental Review Completed: 4/6/2016

	NA	Pending	Cleared	
Section 106	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<u>5/5/2014</u>
	<u>SHPO Project No. 035-JE-14; "no historic properties affected".</u>			
Farm Land Impact	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<u> </u>
	<u>Due to the nature of the project there will be no encroachment onto farmlands by the project.</u>			
4(f) or 6(f)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<u> </u>
	<u>Section 4(f)/6(f) protected resources are not located in the project footprint according to Google Earth and ArcMap. If public lands are impacted, the sponsor shall contact MoDOT environmental staff as soon as possible.</u>			
404 / 401	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<u>7/18/2014</u>
	<u>project authorized by Nationwide Permit # 14. the general NWP # 14 permit conditions and the automatic 401 Water Quality Certification (MDNR) for NWP # 14 must be followed.</u>			
Floodplain Impacts	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<u>2/10/2016</u>
	<u>Administrator approved floodplain development permit and possible "no-rise"</u>			

Date Received by EN/HP: 4/14/2014

Date Transmitted by EN/HP: 4/6/2016

Environmental Tracking Form**For Federal Aid Projects**

EN/HP ID Number: 2672

certificate.

T&E Impacts☐ ☐ ☒ 4/28/2014

Tree Clearing should be done between November 1 and March 31. Bridges can provide structure for birds such as swallows to construct mud nests. It is recommended to undertake field checks for any existing bird nests attached to the bridge. If there are bird nests on the existing bridge, recommend do not disturb conditions when nests are active. Generally, this is between April 1 and July 31. This can be accomplished by working on the structure outside the restriction dates, or removing existing mud nests before the breeding season and maintaining a nest-free condition (scraping and/or exclusionary measures to deter access to the bridge by birds) on work areas until the existing bridge is demolished.

Hazardous Waste☐ ☐ ☒ 4/30/2014

No asbestos present. Lead paint present in regulated amounts, follow recommendations to comply with applicable laws. Demolition or renovation of bridges requires asbestos inspection, notification and demolition notice to DNR. In regards to demolition notification, the Contractor (or Local Program) is required to notify DNR 10-days in advance of all bridge demolitions.

Noise☒ ☐ ☐ _____

this is a Type III project a noise analysis is not required.

NOTE: The sponsor is responsible for issues with wellhead and surface water protection.

Date Received by EN/HP: 4/14/2014

Date Transmitted by EN/HP: 4/6/2016



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

May 5, 2014

Stephen E. Alsbury, PE
ABNA
4140 Lindell Boulevard
St. Louis, Missouri 63108

Re: Stroup Road Bridge Project STP-5403(656) (FHWA) Jefferson County, Missouri

Dear Mr. Alsbury:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the April 2014 report entitled *Cultural Resource Investigations, Phase I Survey, Stroup Road Bridge Project, Jefferson County, Missouri* by the Environmental Research Center of Missouri, Inc. Based on this review it is evident that a thorough and adequate cultural resources survey has been conducted of the project area. We concur with the investigator's recommendation that there will be **no historic properties affected** and we have no objection to the initiation of project activities.

Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.

If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862. Please be sure to include the SHPO Log Number **(035-JE-14)** on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Mark A. Miles
Director and Deputy State
Historic Preservation Officer

MAM:jd

c Raegan Ball, FHWA
Michael Meinkoth, MoDOT
Craig Sturdevant, ERC

Celebrating 40 years of taking care of Missouri's natural resources. To learn more about the Missouri Department of Natural Resources visit dnr.mo.gov.

Recycled Paper

5/14/14

Cultural Resource Investigations
Phase I Survey
Stroup Road Bridge Project
Jefferson County, Missouri

STP-5403 (656)

Prepared for:

ABNA
St. Louis, Missouri

Prepared By:

Environmental Research Center of Missouri, Inc.
1201 Moreau Drive
Jefferson City, Missouri
Phone: 573-635-9569
Email: craigsturdevant@mchsi.com
Principal Investigator:
Craig Sturdevant
April 2014

ERC Project No. 3078



ABSTRACT

During April 2014 a Phase I cultural resource survey was carried out for approximately five acres in rural Jefferson County, Missouri. The area is the location of a proposed bridge replacement project over Little Creek on Stroup Road.

The records and literature review determined that there are no National Register of Historic Places (NRHP) properties located within or near the project boundaries. There are recorded archaeology near but not within the project area. There are no Missouri DNR Historic Architecture sites within the project boundaries. Review of plat/atlas maps found no 19th century structures within the project boundaries. The most recent USGS topographic quadrangle illustrates farmsteads near but outside of the project boundaries.

The field investigation was carried out under mixed surface visibility conditions in a grass, winter wheat, and timber setting. Shovel tests extending from 30 to 50cm in depth were excavated where surface visibility dropped below 10% for at least 10m.

No evidence of the presence of prehistoric occupation was identified as a result of the investigation. Aside from Stroup Road and the existing bridge which is not eligible for listing on the NRHP, no historic resources are located within the project boundaries. Nearby houses and outbuildings are all less than 50 years old and have replaced structures shown on the USGS quadrangle.

It is the finding of this Phase I cultural resource survey that the proposed bridge replacement project will not threaten significant cultural resources as currently planned. It is the recommendation of this investigation that the proposed project proceed as planned in terms of Section 106 concerns in that no significant cultural resources are threatened.

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INTRODUCTION

Purpose of Study

In compliance with current environmental regulations and policies, ABNA of St. Louis, Missouri entered into a contractual agreement with Environmental Research Center of Missouri, Inc. (ERC) to conduct a Phase I cultural resource survey for a proposed bridge replacement project in rural Jefferson County, Missouri. The study followed the Missouri Department of Natural Resources (DNR) "Guidelines for Cultural Resource Contract Reports and Professional Qualifications" and is submitted in accordance with current environmental regulations and policies and in agreement with the study contract.

The project actions included discussion of the project with Missouri Department of Natural Resources/Historic Preservation Program staff, a records and literature review, and an intensive pedestrian field investigation of the project area. The study methods used are described and the results of the findings of these actions are presented in terms of cultural resource descriptions, when present, and recommendations for cultural resource compliance in reference to the proposed project actions. The project area cultural and environmental settings are briefly described.

Under state and federal legislation and policies outlined by the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act (NHPA) of 1966 as amended, the National Environmental Policy Act of 1970, the 1986 Protection of Historic Properties and other regulations regarding specific activities such as strip mining, it is necessary to inventory archaeological and historical resources located within proposed project areas which may be threatened by federally regulated or funded actions and evaluate any disruptive effects these actions might have on resources that are present. Briefly, the National Historic Preservation Act requires that an area threatened by a federally funded and/or regulated project consider cultural resources which might be impacted by project related actions; the State Historic Preservation Officer (SHPO) and/or federal agency involved may request that a cultural resource survey be conducted prior to granting permission to proceed with the proposed project actions. If any cultural resources are identified, they are evaluated in terms of National Register of Historic Places (NRHP) eligibility criteria. Where NRHP eligible sites are found to occupy compliance project areas, consultation is initiated which may include the Advisory Council on Historic Preservation (Council), the SHPO, and the governmental agency involved in the project. If an eligible site cannot be avoided, a Memorandum of Agreement may be prepared which would stipulate specific compliance actions to be initiated prior to project actions. The project initiator, if not a federal agency, may be requested to concur. The present project is partially funded or regulated by a federal agency. As a result, cultural resource compliance has been implemented by a federal agency and Missouri SHPO and the present survey has been carried out in order to meet NHPA requirements.

Project Personnel and Schedule

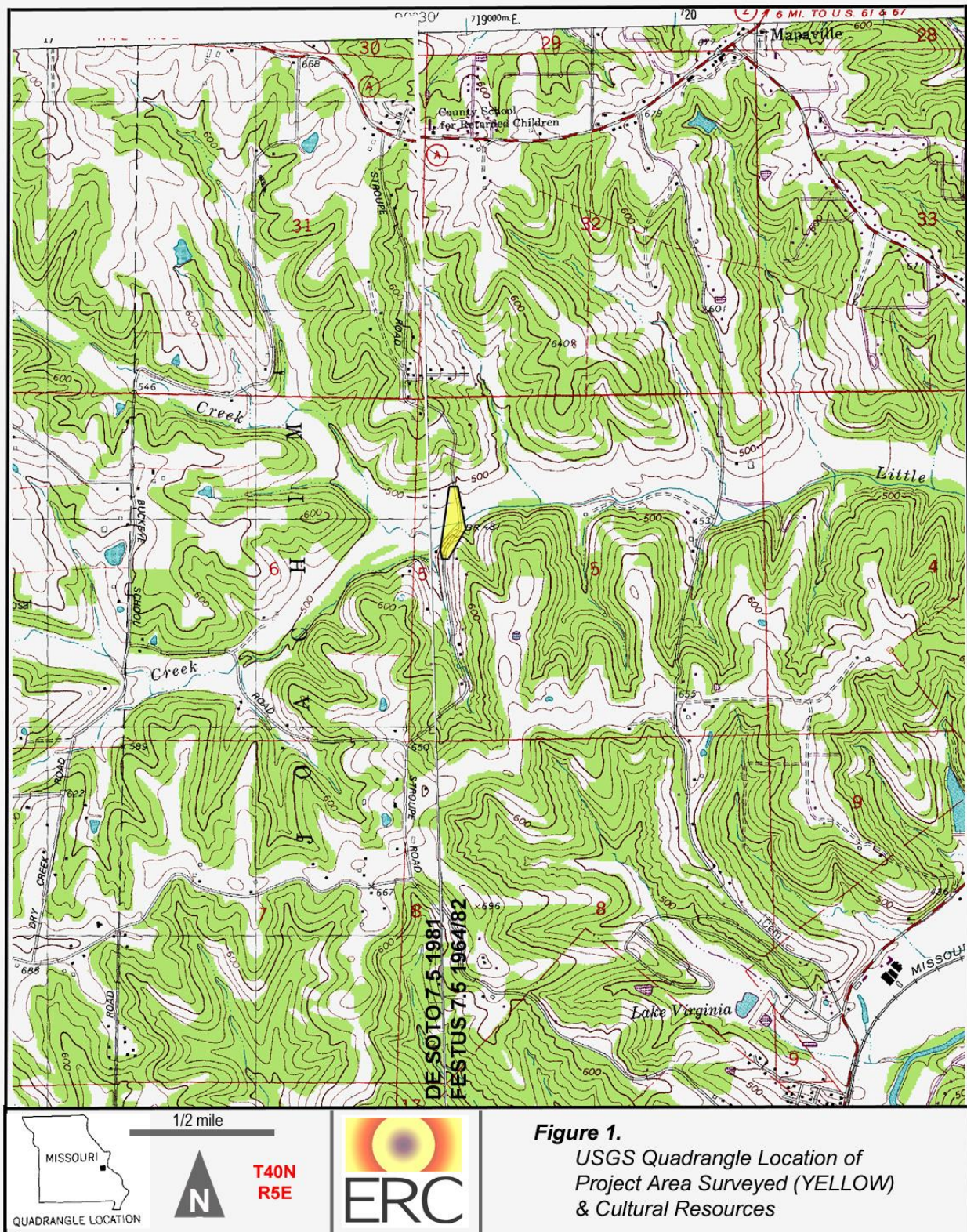
The present project was carried out during April 2014. Principal Investigator and report author is Craig Sturdevant. Sturdevant has a Master of Arts degree in Anthropology from the University of Iowa, Iowa City and meets state and federal requirements for Principal Investigator for cultural resource compliance projects. John Carrel, ERC research associate, was field technician for the project.

The Project

The proposed study area includes approximately five acres of land on both sides of Little Creek. The project will include removal of the existing bridge, construction of a new bridge, and construction of new bridge access. It was assumed that any cultural resources located within the project boundaries would be disturbed. The project is located on Mapaville Hematite Road in Section 5, Township 40 North, Range 5 East, Jefferson County, Missouri (Figure 1).

The present investigation included a literature and records review concerning possible presence of previously reported potentially significant cultural resources, a pedestrian field investigation of the property, and analysis of the possibility that the proposed project may threaten important surficial and buried cultural resources.

The present investigation has been carried out utilizing Phase I survey procedures as outlined in the methods section of this report and all available standard procedures for determining presence/absence of buried and surficial resources have been attempted (observation of vegetation-free surfaces, stream cut banks and erosion cuts, bank profiling, and shovel testing). Findings and recommendations are made with the understanding that it sometimes may not be possible to identify all possibly significant resources within a project area.



INVESTIGATION METHODS

Introduction

The major goal of the present study was the inventory and evaluation of cultural resources within the designated project boundaries through the use of currently accepted Phase I survey techniques and procedures. It is important that sufficient data are collected to allow development of appropriate recommendations concerning the significance of the identified cultural resources in the project area in terms of NRHP eligibility criteria. The methods and techniques used during the present investigation allowed an intensity of coverage that should have identified all possibly significant cultural resources. Deeply buried sites and very low material density sites are possible to miss no matter how intense the survey techniques. This study has been initiated in order to carry out federally mandated compliance regulations. The scope of work placed emphasis upon identification and description leading toward eventual NRHP evaluation of eligibility of cultural resources located within the defined project boundaries.

The following section includes a discussion of the methods that have been employed in this study. These consist of a pre-field evaluation of pertinent literature and records from which the field survey techniques and site designation criteria are developed, an intensive pedestrian survey of the project area, an attempt to recover sufficient data for site designation and evaluation in terms of NRHP eligibility requirements, notation of locational information regarding site provenience and physiographic setting, post-field activities involving data analysis, and report preparation. The methods and techniques and justifications for interpretations are discussed below.

Records & Literature Review

A review of relevant publications and records prior to the field component of the study is important as it aids in establishing a comprehensive understanding of the project area cultural sequence and knowledge of types of cultural resources which might be expected to occur. Further, previously reported cultural resources may also be present within a proposed project area. The process includes review of cultural resource management reports that have been produced for areas near the project. These reports are housed in the DNR State Historic Preservation Program, Jefferson City, Missouri and are catalogued by county as well as author. The repository also includes historic - architecture site forms for the state, NRHP forms for Missouri, and correspondence regarding the project. Additionally, the SHPO GIS layers include locations of sites and previous Phase I surveys on USGS topographic quadrangles. Other resources consulted that contain important data include the state library facility in Jefferson City, local historic societies when appropriate, and the State Historic Society in Columbia. Other archaeologists and architectural historians, particularly those employed by the state that are involved with Section 106 procedures, are consulted regarding their knowledge of potentially significant cultural resources in a project area.

Field Procedures

The archaeological field component of the present study involved pedestrian coverage of the entire project areas by ERC personnel. Transect width utilized was approximately 10m. All vegetation-free zones were observed for presence of prehistoric cultural materials. Throughout most of Missouri, this can include lithic debitage (chert flakes and shatter), fire-cracked rock, pottery shards and occasionally bone and shell fragments. Features such as fire hearths and burial tumuli may also be encountered. Historic sites are discussed below. Where vegetation covered the surface for over 4m, shovel tests were carried out. This involved removal of around a 50cm by 50cm area of sod and then controlled removal of subsurface soil matrix to depths of up to 50cm below surface. Soils are carefully observed to determine presence/absence of cultural evidence. Where soil conditions allow, soils are screened through a portable 1/4 inch screen. Shovel testing that does not include screening of matrix is implemented where larger numbers of shovel tests are necessary and surface visibility conditions are poor. In this instance, soil matrix is removed by shovel and carefully scraped with a trowel to look for prehistoric/early historic evidence. During the present study, screened and unscreened shovel tests were necessary since the project areas exhibited varied surface visibility conditions.

Where evidence of presence of a cultural resource is defined, the location is noted on a U.S.G.S. quadrangle and a sketch and description of the site area is field prepared. Where features or structures were encountered, photographs are taken. The field procedures incorporated in the pedestrian survey were directed toward two primary goals: the first was the inventory of all possibly significant cultural resources within the project area and the second an attempt to recover sufficient information to allow interpretation of NRHP potential of the cultural resource that had been identified within the project area.

While subjective, ERC has developed a set of criteria for determining presence of a cultural resource, which are currently accepted by the SHPO as appropriate. These criteria are not presented as appropriated for all situations but as the general practice followed by ERC in making decisions regarding presence/absence of cultural resources for cultural resource compliance purposes: A prehistoric archaeology site is designated by ERC and an archaeology site form prepared when evidence of prehistoric occupation one or more of the following specific criteria are met:

- A. a feature is identified
- B. 2 or more prehistoric artifacts are identified within a 10 by 10m or smaller area
- C. a shovel test recovers 2 or more artifacts.

Materials recovered by the field investigation are retained and placed in appropriately marked collection bags. If permission is not attained, materials are observed and potential diagnostics and tools measured, photographed and left in the field

or given to the landowner if so requested. When a permanent site number is assigned, retained materials are curated with the site designation. Where material density at a site is obviously high, a small but representative sample is retained.

Historic resources include architecture, artifacts, and evidence of no longer structures when obviously over 45 years old. Where structures are present, they are photographed and sufficient data gathered to fill out the DNR Historic Architecture Form. Aside from photography, historic structures are not recorded where it is obvious that the structures were less than 45 years old and not significant in any possible respect. If historic materials are identified that appear older than 45 years, the materials are assessed in terms of their potential to meet NRHP eligibility criteria. For instance, low-density historic artifact scatters are usually not recorded given their ubiquitous nature in rural Missouri settings. Where an area of potential effect (APE) is established, all architectural resources within the APE that are possibly over 45 years old are photographed and given preliminary evaluation regarding possible NRHP significance.

Analysis Procedures

Significance of cultural resources is interpreted from National Register of Historic Place eligibility criteria that are listed below:

"The quality of significance in American History, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- A) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B) that are associated with the lives of persons significant in our past; or
- C) that embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant distinguishing entity whose components may lack individual distinction; or
- D) that have yielded, or may be likely to yield, information important in prehistory or history: (36 CFR Part 60.6).

Archaeological sites that are identified during the Phase I survey are evaluated in terms of meeting one or more of the above criteria. In general, archaeological sites most often are evaluated with reference to D above. A statewide planning document was prepared by the DNR/HPP that allows minimal means for evaluation of potential significance of cultural resources (Weichman and Weston 1986). The statewide plan includes information regarding traditions, types of traditions expected, forms of data that may be important, and research questions that can be incorporated in the interpretation of

cultural resource significance. Generally, a cultural resource will be evaluated on the bases of types of materials recovered (uniqueness, affiliation, type), resource integrity (degree of disturbance), and material/feature density (density and quantity of artifacts and presence and number of potentially extant features such as hearths, house sites, and burial tumuli). If an archaeological site exhibits sub-plow integrity and produces diagnostic artifacts or features, the site is interpreted as significant in that it would very likely contain sufficient information to contribute to the understanding of the cultural history of the area thus meeting NRHP eligibility criteria D. The consultant makes recommendations regarding NRHP eligibility. The determination of eligibility process requires consultation with the SHPO and the federal agency involved in the project.

Statement of Findings and Recommendations

Where ERC locates a cultural resource within the designated APE, recommendations of significance and justification are made to the SHPO and the federal agency. A decision regarding significance would be made at that level in terms of possible NRHP eligibility of the resource. Recommendations made include not eligible for NRHP status, eligible for NRHP status, or possibly eligible for NRHP status. Where a recommendation of not eligible is accepted by the SHPO and federal agency, a proposed compliance project can proceed as planned; a recommendation of possibly eligible usually results in the request that the project be modified to avoid the resource or tested by Phase II procedures in order to establish NRHP eligibility; a recommendation of eligible usually results in a request to modify the project to avoid the cultural resource or proceed with the consultation process as outlined by 36 CFR Part 800: Protection of Historic Properties that governs the Section 106 review process established by the National Historic Preservation Act of 1966 as amended.

GENERAL PROJECT SETTING

Environmental Setting

The general project area is located along the southern edge of the Dissected Till Plains of the Central Lowland region of North American. The general topography is the product of stream erosion etched into loess overlying Ordovician and Mississippian age limestones and dolomites. There are available cherts in the general project area within the local Ordovician and Mississippian formations along bluffs and stream cuts. Limestone bedrock is exposed along some stream walls and lower bluffs in the general project zone. The area is located on a low terrace above Little Creek.

Soils in the project area are part of the general Union – Goss – Gasconade - Peridge Soil Associations of the Ozark Border Region (Allgood & Persinger 1979). These soils were formed in a mostly oak - hickory timber growth vegetation settings.

Vegetation at the time of the Government Land Office (GLO) surveys found that Jefferson County included very little prairie grass setting and that the project zone exhibited presettlement woodland vegetation (Schroeder 1981:7 & 34). The development of the climax oak-hickory community at the highest elevation would have been followed at lower elevation along the stream valley with semi-hydrophytic and aquatic plants such as duck potato, lotus, groundnut which roots, bulbs, tubers, and rhizomes which could have been exploited by prehistoric populations over the winter months (King 1984). The more mesic conditions in the project zone itself including hickory, oak, and pecan would have and contributed to prehistoric subsistence, fuel, and building materials.

Faunal species that would have frequented the woodlands in the area include wolf, bobcat, cougar, black bear, white-tailed deer, turkey, raccoon, other small mammals, amphibians, and reptiles. It is probable that this setting would have created some useful subsistence conditions on a seasonal basis. Transition zones between forest and prairie to the north supported a number of mammals including cottontail rabbit, fox, chipmunk, ground squirrel, weasel, coyote, and woodchuck among others (cf. Schwartz and Schwartz 1981).

Climate in the area is considered midcontinental with varied conditions produced by alternate invasions of moist, warm Gulf air, dry western air, and dry, cold Canadian air. Precipitation averages around 91cm per year with April through July generally comprising the wettest months. The average temperature of 50 degrees F ranges from 24 in the coldest months to over 90 degrees F in the hottest month. Currently, the growing season ranges from around 180 to 210 days a year occurring between April and October. Since human inhabitation of the area over 12,000 years ago, there have been major climatic changes that would have resulted in variable growing seasons that would be reflected in prehistoric socio-economic patterns.

Cultural Setting

Chapman (1975; 1980) has compiled the only comprehensive overview of the prehistory of Missouri available in publication form. He proposes generalized cultural - chronological sequences for various portions of the state on the basis of physiographic - archaeological similarities. The present area is within Chapman's Southeast Riverine Region of Missouri and the Missouri DNR/SHPO Middle Mississippi drainage basin (Figure 2). In addition to Chapman's comprehensive overview for the state, a great deal of work and analyses have been produced for the American Bottoms and lower Illinois River valley which are potentially appropriate for the Missouri side of the Mississippi River (cf. Kelly et al. 1979). The cultural sequence hypothesized for this area includes the following traditions:

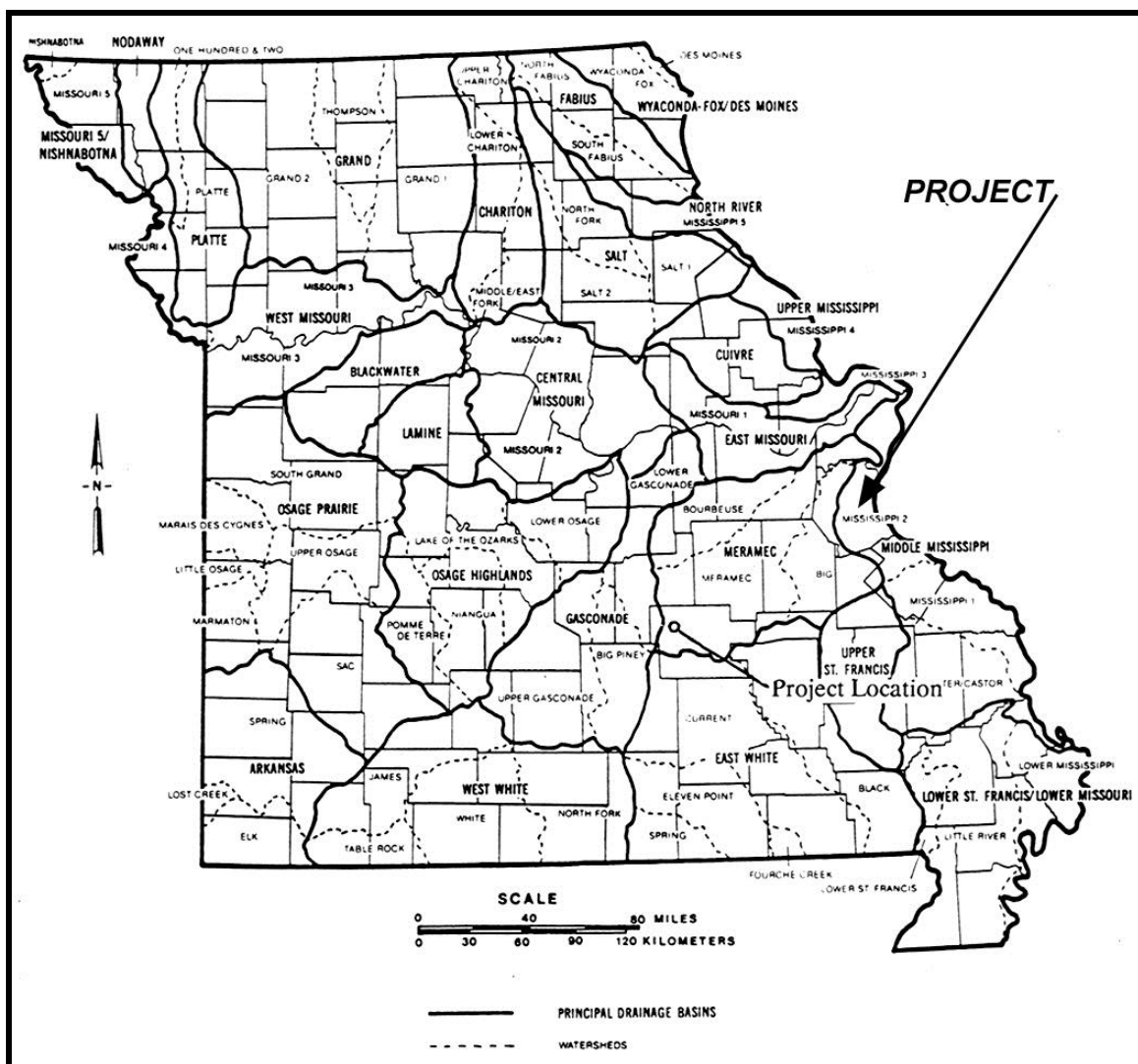


Figure 2.
DNR/SHPO Study Unit / Drainage Basin Location of Project

Paleo-Indian	12000 to 8000 B.C.
Dalton	8000 to 7000 B.C.
Early Archaic	7000 to 5000 B.C.
Middle Archaic	5000 to 3000 B.C.
Late Archaic	3000 to 1000 B.C.
Early Woodland	1000 to 500 B.C.
Middle Woodland	500 B.C. to A.D. 400
Late Woodland	
Rosewood	A.D. 300 to 450
Mund	A.D. 450 to 600
Patrick Phase	A.D. 600 to 900
(Emergent Mississippian	A.D. 800 to 1000)
Early Mississippian	
Fairmont	A.D. 900 to 1050
Stirling	A.D. 1050 to 1150
Moorhead	A.D. 1150 to 1250
Middle Mississippian	A.D. 1250 to 1400
Late Mississippian	A.D. 1400 to 1600's
Historic Spanish - French Period	A.D. 1600's
American Period	A.D. 1800's

With the exception of the more refined Late Woodland and Early Mississippian phases, these cultural - chronological periods are broad guidelines to the prehistory and history of the general area. They are useful for identification of traditions present in a project area when diagnostic materials are found or identified. Brief descriptions of these traditions along with some of their diagnostics are offered below.

Paleo-Indian: The Paleo-Indian period is generally defined by the presence of fluted lanceolate points. The extensive literature concerning Paleo-Indian socio-cultural patterns presents a picture of small egalitarian bands with a nomadic settlement pattern associated with a large game hunting and gathering subsistence pattern. Temporary camp sites and kill sites appear to compose the function/type associated with defined Paleo-Indian occupations. With few exceptions, reviews of the prehistoric setting in the Midwest begin discussions with statements indicating that this period is not well known. While several fluted points have been recovered from the region (Chapman 1975:67), there is little specific data available concerning the occupation. Fluted points have been generally recovered along the hilltops and bluffs adjacent to the major stream valleys.

Dalton/Early Archaic: Not always included in general cultural sequences for the area, the Dalton period has been defined as a transitional period between Paleo-Indian and the Archaic periods (Chapman 1975). The occupation is defined by the presence of Dalton Serrated points often in association with Plano-like lanceolate forms (Chapman 1975). During this period, means of subsistence tended to be more diversified than during the earlier Paleo-Indian period resulting in establishment of a more varied set of

ecological niches. The type sites associated with this period are often temporary campsites, although there is evidence of somewhat more lengthy occupation of sites than for the earlier period (Chapman 1975). Both Dalton and Early Archaic occupation is defined by presence of Dalton Serrated, Graham Cave Notched, Hardin Barbed, Hidden Valley Stemmed, and Rice Lobed as well as a variety of biface scraper and chopper forms (Chapman 1975). Both Dalton and Early Archaic sites appear to be relatively well dispersed through possible terrain settings along the Mississippi River valley and include old oxbow, floodplain, terrace remnant, low rise on floodplain, and uplands. It has been postulated that the Early Archaic was a development within an environmental situation complicated by climatic shift which necessitated an increasingly sophisticated seasonal pattern of food gathering activities when compared to earlier large game hunting tradition (Kelly et al. 1979).

Middle Archaic: The Middle Archaic was basically a continuation and expansion of a forager tradition begun in the Dalton/Early Archaic. A drying climate forced greater reliance upon foraging or collecting floral species and small animals as opposed to wet environment subsistence techniques. Sites continued to be small, exhibiting semi-nomadic or seasonal occupation with no specific topographic location (Chapman 1975:179). Floodplain Middle Archaic settlement has not been well defined in Missouri although there are scattered finds of diagnostics through the American Bottoms in Illinois (Kelly et al. 1979). The tool kit associated with Middle Archaic continued to expand from the postulated Early Archaic base and probably depended upon the extraction activity in specific niches. Diagnostics include Big Sandy Notched, Jakie Stemmed, as well as full-grooved axes and side notched and stemmed forms (Chapman 1975; Houart 1971).

Late Archaic: The Late Archaic began toward the climax of a xenothermic warming period which reached its height around 2000 B.C. (Cleland 1966). The Late Archaic also represents the climax of the hunting and foraging traditions in many areas of the Midwest. Population increased along with adaptation requirements as reflected in an expanding artifact inventory. Emphasis was probably placed on a method of procurement that could effectively exploit various types of resources which were available in reliable quantities either on a seasonal basis or continually throughout the year. Using a type of adaptation pattern referred to as primary forest efficiency (Caldwell 1958), a more restricted settlement pattern may have developed, adjusting to a central-based wandering settlement/subsistence pattern in which the particular seasonal resources available would determine the type and location of temporary camps radiating from more permanent occupation sites. This form of socio-economic structure would have supported a population base than did the preceding periods. The greater population along with the more restrictive settlement pattern resulted in more extensive and higher material density sites as well as sites located in a variety of topographic contexts. In terms of defined Late Archaic sites in the general area, the percentage more than doubles when compared to the earlier periods that make Late Archaic one of the more numerous defined occupations in the watershed and drainage basin. The American Bottoms work has resulted in differentiation of four separate phases including Falling Springs (3000-2300 B.C.), Titterington (2300-1900 B.C.), Labras Lake (1900-1000 B.C.), and Prairie Lake (1100-

600 B.C.). These separate phases have not been well defined in Missouri with the exception of the Sedalia phase that is similar to the Titterington phase (Chapman 1975). Site 23SL36, a recently excavated Titterington phase site located near the present project, produced a number of pit features along with Sedalia-like artifacts. Late Archaic diagnostics include a wide variety of square stemmed, basal notched, and corner notched biface forms. Typical points from Late Archaic sites in the area include Smith Basal Notched, Stone Square, Afton, Sedalia, and Clear Fork Gouge (Chapman 1975).

Early Woodland: Woodland is subdivided into Early, Middle, and Late periods. The advent of ceramics to the technological base generally separates the Early Woodland from the preceding Archaic periods. Cultigens became a more important factor in subsistence in some regions and burial mounds had become an integral component of the mortuary system. The traditions associated with the Early Woodland appear to have been an east to west moving phenomena with more representative sites with earlier dates occurring in Illinois than in Missouri. The earliest Early Woodland occupation in the general area is found in the American Bottoms and is represented by Marion Thick ceramics (Munson 1966). Liverpool Stemmed and Dickson Broad Bladed (Gary) are also considered possible Early Woodland diagnostics (cf. Chapman 1980). Within the American Bottoms two Early Woodland phases have been defined which include Marion (600 B.C.- 300 B.C.) and Florence (500 - 300 B.C.). Settlement pattern includes occupation primarily on floodplain and talus slopes near the base of river valley bluffs. Material density at sites is relatively low in most instances. From excavations at the Peisker Site in the lower Illinois Valley, Struever suggests that Early Woodland populations were exploiting a variety of floodplain fauna but that they did not overly depend upon any one species (1968). Asch (1979) suggests that these populations were quite selective in the plant food resources exploited. In any event, few data are available concerning Early Woodland occupation in Missouri. Several sites in the present investigation drainage basin have been assigned to the Early Woodland tradition on the basis of presence of contracting stemmed points (Gary, Langtry, etc.). With the absence of ceramics, however, the designation of Early Woodland is tenuous at best.

Middle Woodland: Defined as the first cultural climax in the Midwest, the Middle Woodland cultures with main centers occurring in the upper Ohio and Illinois valleys have been subject to several interpretations in terms of origins, settlement pattern, mortuary practices, etc. (cf. Caldwell 1964; Griffin et al. 1970; Struever 1965; Chapman 1980). In Missouri, the first conclusive evidence of a ceramic tradition dates to the Middle Woodland (Chapman 1980). Throughout the Midwest, sequential statements including chronological - cultural divisions have varied. In general, the Middle Woodland exhibits an elaboration of earlier patterns as reflected in stylistic changes in ceramics, the mortuary system, and an extensive trade network of raw materials and finished products. The Middle Woodland period is characterized by the introduction of new ceramic vessel forms and decorative techniques, projectile point forms, and a specialized blade/core tool production technique. In Missouri, a constellation of artifacts and attributes has been defined as exhibiting close resemblance to Middle Woodland assemblages from Illinois Havana and Crab Orchard Hopewellian traditions (Chapman 1980:23). These, in turn, bear some similarity to Middle Woodland assemblages within

the "Hopewell" category (Brose and Greber 1979). While it is generally accepted that interregional contact may have been extensive between at least the larger centers as evidenced by exchange of exotic raw materials. This phenomenon has been termed the "Hopewell Interaction Sphere" (Caldwell 1958). The Ozark highlands and border region in the general project area appear to have been little affected by the Hopewellian Interaction Sphere (Chapman 1980). Several sites have been defined as exhibiting Havana-Hopewell types of materials, on the Illinois side of the Mississippi River (cf. Fortier et al. 1984; Kelly et al. 1979).

Late Woodland: The Late Woodland is often interpreted as a period of decline between the Hopewell and Mississippian climaxes. Ceramic styles became less elaborate, burial complexes, while still present, were not as extensive, and settlement patterns appear to have become less sedentary than those represented by the earlier Hopewell and later Mississippian. Introduction of the bow and arrow perhaps contributed to reshaping subsistence patterns as exploitation of a wide variety of fauna led to less domesticated plant dependence. At the same time, however, portions of the general area exhibited little change from earlier Middle Woodland patterns aside from reduction in elaboration of ceramic style and burial systems. It is also apparent that the agricultural base of the later Mississippian climax appears to have been initiated during this period. In the general area, Late Woodland sites range from villages and towns to scattered transient hunting camps. The settlement patterns hypothesized to exist are quite varied in the Midwest and it is difficult to define a common thread between regional and local Late Woodland cultures adaptation patterns aside from lithic and ceramic styles. It is apparent that centralization initiated in the Middle Woodland is built upon by Late Woodland cultures in some areas of the region while a reduction in habitation size and more transient settlement patterns developed in other areas in the region. It is probable that a Great - Little Tradition dichotomy, long known from Chinese ethnographic study, was in operation from the Woodland period through the Mississippian in that elaboration of culture through stratification, material goods, and trade were the central village property while marginal groups continued to develop along separate lines. Work in the lower Illinois River valley and American Bottom led to a division of Late Woodland into Early Bluff and Late Bluff periods (Munson 1971). As a result of work in the American Bottom area Early Bluff has been further divided into three phases (Rosewood - A.D. 300 to 350; Mund - A.D. 450 - 600; and Patrick - A.D. 600 - 800) (Kelly et al. 1979). These phases have not been well defined in Missouri and the Patrick Phase is generally considered to the Late Woodland variant in the watershed (cf. Chapman 1980). In the American Bottom, the Late bluff has been divided into Emergent Mississippian periods which vary in definition depending upon sites included in the sequence. Once again, on the Missouri side of the Mississippi there has been little evidence of the narrow sequences hypothesized for the American Bottom.

Emergent Mississippian: The Emergent Mississippian period is basically the hypothesized shift from Late Woodland hunting and horticulture subsistence patterns to agricultural subsistence depending extensively upon maize. While maize is present in Late Woodland occupations along with other probable cultivated starchy seeds, subsistence still relies heavily upon collecting and hunting. The major change in material

culture from Late Woodland to Mississippian is seen in the rapid replacement of grit, grog, and limestone tempered ceramics to shell tempered ceramics. The term Emergent Mississippian is somewhat misleading in that it requires the Mississippian period(s) to follow some emergent form. Since Mississippian occupations are present in Missouri, these traits had to be introduced in some manner whether by intrusion of people and ideas or through some form of microevolution pattern postulated for the American Bottom area as well as other areas along the Mississippi River valley. Some archaeological investigations in the Missouri region of the Emergent Mississippian complex have found that Late Woodland was present before, during, and after Mississippian occupation occurred (Sturdevant 1997). This strongly suggests that emergence of the Mississippian culture should be looked for elsewhere and that the St. Louis/American Bottom area Mississippian cultures represent intrusive elements. Much more work needs to be carried out before Emergent Mississippian periods can be included as a phase in the cultural sequence for the drainage basins.

Mississippian: The Mississippian periods in the area represent a climax and decline of cultural forms growing out of the Woodland periods. Agriculture became an important component of the subsistence pattern and camp - village - town settlement patterns expanded to include civic-ceremonial centers with fortifications, extensive trade networks, and a marked influence throughout the Mississippi Valley. The period is characterized as a time representing the culmination of the socio-economic and political development begun in the late Late Woodland and includes the climax and fall of Cahokia and other great civic-ceremonial centers. The general area has produced an impressive array of data concerning Early Mississippian occupation. The extensive mound and civic-ceremonial center on the west banks of the Mississippi River in the St. Louis area are known only through historic records as a result of 19th century destruction (Chapman 1980:169-70). The area has been summarized by Chapman to include the Fairmont, Stirling, and Moorehead Phases. He further suggests that the great mound complex which was located in St. Louis was closely related to the American Bottom Complex. Preceded by an unknown phase (A.D. 800 to 900), the Fairmont Phase of the Early Mississippian (A.D. 900 to 1050) is indicated by Powell Plain, Monks Mound Red, Cahokia Red Filmed, St. Clair Plain, Merrel Red Filmed, and Cahokia Stump Ware ceramics as well as by ceramics indicating trade (Fowler and Hall 1972). During this period the construction of Monks Mound and fortification began. The Stirling Phase (A.D. 1050 to 1150) was characterized by the completion of Monks Mound. Ceramics include Old Village pottery (Powell Plain and Ramey Incised) jar forms with rolled, extruded, and everted rims (Kelly et al. 1979). The Moorehead Phase (A.D. 1150 to 1250) is denoted by shell tempered Cahokia Cord Marked, an early form of Wells Incised, and Tippetts Bean Pot (Chapman 1980:173). The Trappist Phase (Focus) (Sand Prairie Phase) (A.D. 1200 or 1250) probably marked the decline of Cahokia's reign as a major Mississippian center by 1300 or before (Kelly et al. 1979) and is identified by presence of classic Cahokia Cordmarked jars with everted rim, Wells Fine Incised plates, fabric marked pans, Tippetts Bean Pot, and effigy-head bowls (Griffin 1949). The change from Early to Middle Mississippian is primarily characterized by expansion of population and relationships between civic-ceremonial centers as well as the termination of Cahokia as a major center. New territory was colonized and civic ceremonial center

mounds expanded in size along with public buildings and fortifications. Differentiation between Early Mississippian and Middle Mississippian is generally difficult to establish with certainty as a result of regional cultural developmental variability and continuation of Early Mississippian cultural patterns. The area is represented by the Sand Prairie Phase which includes Cahokia Cord Marked, Tippetts Bean Pot, Wells Incised plates, Powell Plain bottles, effigy-head bowls, and fabric-impressed plates. By the initiation of the Middle Mississippian the Cahokia center had begun its decline from power over the area. The civic-ceremonial centers were not, however, remnants of the past as centers flourished in the south and in the east. The American Bottom Mississippian sequence varies from that proposed for the Missouri side of the Mississippi and is a result a much broader data base. The great mound complex of St. Louis was very likely related to the American Bottom Cahokia complex but was destroyed many years before sufficient archaeological recording practices were available to produce the type of information needed to interpret cultural history patterns.

The Late Mississippian period is given a wide range of dating depending upon the area, drainage, investigator, and region and includes proto-historic and historic-contact groups. Agricultural societies exhibiting incised shell tempered ceramics and subdivided into Fort Ancient, Oneota and Fisher occur in the Midwest with some examples marginally associated with the region.

Historic Indians: The history of Native-Americans in the Mississippi valley during the 17th and 18th centuries is a story of disruption, dissension, and decay. The decline of the Indian tribes which once inhabited the valley resulted from a variety of factors, the most important being the impact of European intrusion into America and the decimation brought on by intertribal warfare, which itself was frequently caused by competing French and English colonial ambitions. Within the Midwest, a large number of Indian groups maintained permanent villages. In the area of present-day Illinois, the loosely organized Illini Confederacy, which included the Cahokia, Kaskaskia, Michigamea, Moingwena, Peoria, and Tamaroa tribes, remained dominant throughout most of the historic epoch. According to Temple (1966:12), "the lands of the Illini in early historic times were bounded by the Wisconsin, Ohio, Wabash, and Mississippi rivers. At times they also lived in the present states of Iowa and Missouri." In the mid-17th century, the Illini Confederacy reportedly included some sixty villages and was a powerful force in the Mississippi valley (Temple 1966:13). During their time of pre-eminence in the Mississippi valley, the members of the Illini Confederacy occupied numerous village sites, although they frequently moved to avoid destruction at the hands of other Indian tribes or to take advantage of European trade opportunities and military protection. The major areas of settlement include the area around Starved Rock, Lake Peoria, Kaskaskia, and Cahokia (Temple 1966:45). However, other villages were situated along the Illinois River and at one time a small Illini village was located at the mouth of the Ohio River (Temple 1966).

Historic Setting: The earliest European incursions into the Mississippi came with the 16th century DeSoto exploration following by Jolliet and Marquette in 1673. LaSalle traversed the river to its mouth in 1687 and claimed it and surrounding territory for France. Recurring presence west of the Mississippi did not begin until the 18th century

when French trappers and isolated settlers began to occupy the area. No permanent European settlement west of the Mississippi was undertaken until Ste. Genevieve was established in the 1730's. By the end of the 18th century, a number of permanent settlements had been established in what is now Missouri. These included St. Louis (1764), Potosi (1765), Saint Charles (1769), Portage des Sioux (1769) and New Madrid (1781) (Conard 1901). The area, called the Louisiana Territory, was ceded to Spain by France. The Louisiana Territory was purchased by the United States in 1804 which resulted in an increase in population, land values, and commercial and transportation developments. St. Louis began to expand its commercial command of the area (Houck 1908:191). The general area was the focus of early French interests given the presence of lead which was mined in the area beginning the late 1700s. The practice was relatively simple, miners would dig a hole in the rocky soils and remove the bluish-gray ore. Tunnels or mine shafts were not attempted. Smelting was carried out by placing the ore on a pile on the ground upon which a large bonfire would be built resulting in puddles of lead. Moses Austin, originally from Connecticut, moved to Missouri in 1797. He knew the mining industry and was able to secure a large Spanish land grant in the lead district which included Mine a Breton. He changed and improved mining techniques and expanded the industry. He had new furnaces built, constructed a shot tower at Herculaneum, and was influential in establishing the town of Potosi. The territory was secretly retroceded to France by treaty in 1800 but Spain remained in control until after the purchase of the territory by the U.S. in 1803. Formal transfer of the territory to the U.S. occurred in 1804.

Permanent settlement began when St. Louis was founded. After the change in ownership of the area from France to Spain in 1770, Spain offered inducements to settle in the area including land grants. By the end of the 18th century, both French and Americans had registered claims. A deterrent to settlement was from Indian raids. After 1770, the Osage began raiding settlements in the region which resulted in erecting fortifications in the area. The Spanish government invited the Shawnee and Delaware to settle south of St. Louis in hopes that this would create a buffer to protect the white settlements.

The American immigrants that came into the general area during the early 1800s were agriculturally oriented and spread out with single homesteads along river bluffs and tributary streams rather than settle in tight-knit small communities like the first Euro-Americans who started the settlements noted above. Following the Louisiana Purchase, American immigration into the area continued at a slow but steady rate. Immigration into the area slowed around 1810 and was halted by 1814 because of increasingly hostile Indian activity. The threat of Indian violence led to the construction of numerous forts and block houses and the bolstering of the local militia.

Indian attacks included skirmishes between Indian groups. The situation was resolved between 1819 and 1832. The Osage Indians, who had claimed all of the land west of the Mississippi River to the Rocky Mountains and south of the Missouri River to the Arkansas River, were removed to the southwest quarter of Missouri. A treaty with the Osage allowed the U.S. government to move other displaced tribes into the territory. By 1825, all Osage lands were ceded to the state of Missouri and remaining Indians were

forced to move into the Indian Territory to the west. By 1817 Indian hostilities in the general project area had ceased and immigrants came pouring westward across the Mississippi. The 1830's and 40's brought waves of German immigrants and migrants from Kentucky and Tennessee into Missouri and several made there way northward and settled in the general project area.

Jefferson County was organized in December 1818 from St. Louis and Ste. Genevieve counties and named for Thomas Jefferson. The 1830's and 40's brought waves of German immigrants and migrants from Kentucky and Tennessee into Missouri and several made there way northward and settled in the general project area. Herculaneum was first named the county seat in 1819 but lost importance by 1831 with the decline in lead mining. Hillsboro was established as the county seat and a courthouse was built in 1838 – 1840. During the Civil War, the citizens of Jefferson County remained with the Union. No regular engagements occurred in the county although Jeff Thompson of Confederate fame made an expedition through the county in 1861 to destroy the Iron Mountain RR Bridge over Big River and seize lead from the local lead mines for Confederate use.

INVESTIGATION FINDINGS

Records and Literature Review

Jefferson County, Missouri currently has 14 National Register of Historic Place (NRHP) properties. These include:

Beaumont-Tyson Quarry District, address restricted (10/10/74) (also in St. Louis County)

Boemler Archaeological District, address restricted (10/01/74)

Boland Archaeological District, address restricted (10/01/74)

Central School Campus, 221 S. 3rd. St., De Soto (10/08/09)

Fletcher, Thomas C., House, Elm St. between 1st and 2nd Sts., Hillsboro (11/19/74)

Greystone-Meissner, Gustave, House, NE of Pevely off US 61/67 (12/31/74); additional information (3/11/85)

Kimmswick Bone Bed, Mastodon State Historic Site, NW of Imperial, Kimmswick vicinity (11/05/80)

Kimmswick Historic District, roughly bounded by Front St., Fourth St., Mill St., Elm St. and Oak St., Kimmswick (7/24/07)

Leight, Valentine, General Store, 4566 Main St., House Springs (8/18/92)

Moder Archaeological District, address restricted (10/16/74)

Rozier, Louis J. and Harriet, House, 322 W. Clement, DeSoto (4/05/06)

Sandy Creek Covered Bridge State Historic Site, 5 mi. N of Hillsboro off US 21 (7/08/70)

Stonebrook, 3511 Stonebrook Forest, Antonia vicinity (1/14/11)

Windsor Harbor Road Bridge, Windsor Harbor Rd. at Rock Cr., Kimmswick (9/08/83)

None of these NRHP properties is located within or immediately adjacent to the proposed project boundaries. No NRHP property is directly or indirectly threatened by the proposed project actions.

The record and literature review produced no evidence of the presence of previously reported significant cultural resources within the proposed project boundaries. There are no previously recorded archaeology sites within or adjacent to the project. The nearest recorded archaeology site is located over one-mile west of the project. Structures are shown on the USGS topographic quadrangle to the northeast and southwest of the project boundaries. A Phase I survey for the airport to the west identified several archaeology sites (Figure 3).

MoDNR Archaeology Viewer

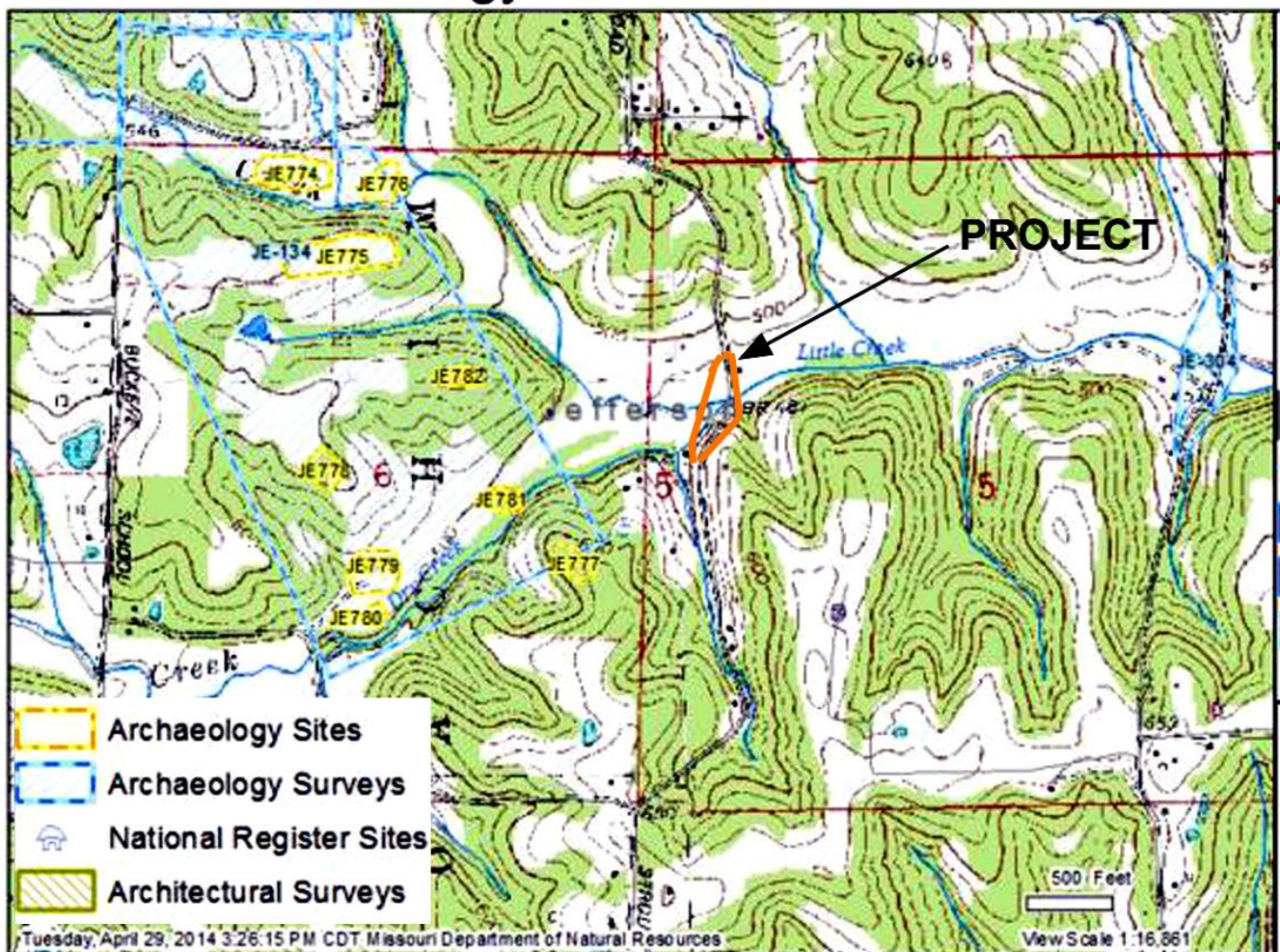


Figure 3.
SHPO Archaeology GIS Layers with Project

The 1876 illustrated atlas of Jefferson County does not show any structures within or immediately adjacent to the project boundaries (Figure 4). It does show Peter Stroup as owner of the property on the north side of Little Creek, possibly the person for whom the road is now named.

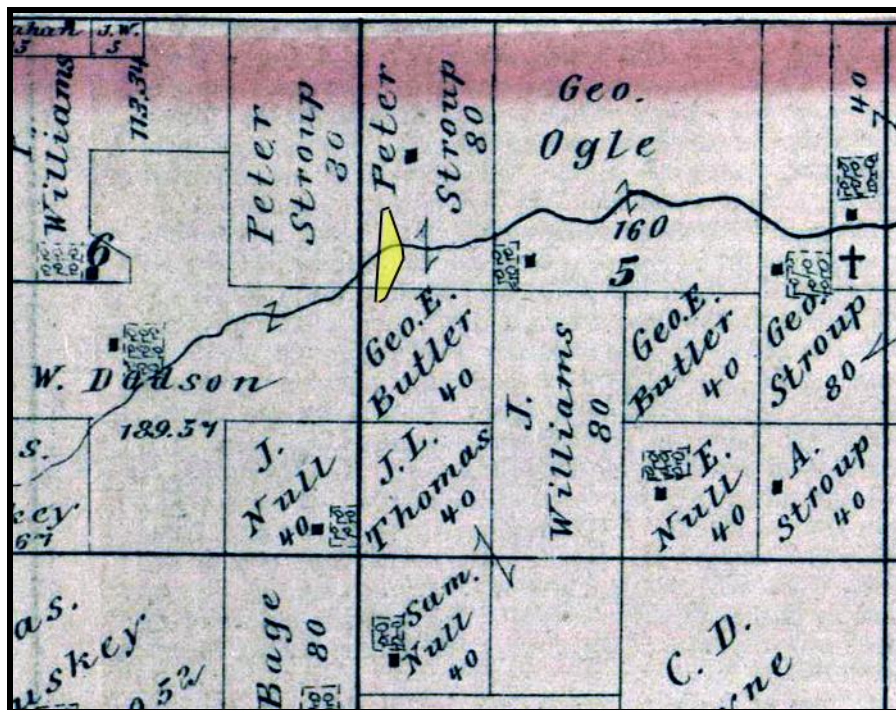


Figure 4.

1876 Brink, McDonough & Co. Atlas Map with Project (YELLOW)

The cultural history of the general area has not been well defined in terms of prehistoric and historic cultural traditions. It is probable that the presence of a prehistoric or early historic resource with some degree of integrity within the project boundaries would be considered potentially significant by the Missouri SHPO.

Field Investigation Findings

The field investigation was carried out under mixed surface visibility conditions in a grass, winter wheat, and timber vegetation setting (Figure 5). The entire project area was observed at approximate 15m intervals. Shovel tests were implemented at 10m intervals where surface visibility dropped below 10%. With the exception of the riparian timber, the area has been cultivated in the past and there is an old plow zone extending to approximately 20cm below surface. No evidence of the present of prehistoric occupation was identified on the surface or in any of the shovel tests which were excavated.



Figure 5.
Aerial Photograph with Project (YELLOW)

With the exception of the existing bridge and road (Photograph 1) which are not eligible for NRHP listing, the project area contains no historic structures, features, or artifacts. Structures shown on the 1964 USGS topographic quadrangle located near the project boundaries have been replaced with newer structures that are less than 50 years old.



Photograph 1. Existing Bridge No. 2470012 which will be Replaced

It is the finding of this Phase I cultural resource survey that the proposed bridge replacement project will not threaten significant cultural resources as it is currently planned.

RECOMMENDATIONS

During April 2014 a Phase I cultural resource survey was carried out for approximately five acres in rural Jefferson County, Missouri. The area is the location of a proposed bridge replacement project over Little Creek on Stroup Road.

The records and literature review determined that there are no National Register of Historic Places (NRHP) properties located within or near the project boundaries. There are recorded archaeology near but not within the project area. There are no Missouri DNR Historic Architecture sites within the project boundaries. Review of plat/atlas maps found no 19th century structures within the project boundaries. The most recent USGS topographic quadrangle illustrates farmsteads near but outside of the project boundaries.

The field investigation was carried out under mixed surface visibility conditions in a grass, winter wheat, and timber setting. Twenty-five shovel tests extending from 30 to 50cm in depth were excavated where surface visibility dropped below 10% for at least 10m.

No evidence of the presence of prehistoric occupation was identified as a result of the investigation. Aside from Stroup Road and the existing bridge which is not eligible for listing on the NRHP, no historic resources are located within the project boundaries. Nearby houses and outbuildings are all less than 50 years old and have replaced structures shown on the USGS quadrangle.

It is the finding of this Phase I cultural resource survey that the proposed bridge replacement project will not threaten significant cultural resources as currently planned. It is the recommendation of this investigation that the proposed project proceed as planned in terms of Section 106 concerns in that no significant cultural resources are threatened.

REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT CORPS OF ENGINEERS
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103-2833

July 18, 2014

Regulatory Branch
File Number: MVS-2014-281

Ms. Deborah Lehnoff
Jefferson County
P.O. Box 100
Hillsboro, Missouri 63050

Dear Ms. Lehnoff:

We have received your submittal requesting Section 404 permit authorization to replace the Stroup Road bridge over Little Creek, in Jefferson County. The April 15, 2014 application was submitted on behalf of Jefferson County by ABNA Engineering. According to the submittal, Jefferson County proposes to replace the existing bridge with an approximate 170-foot, three-span concrete bridge. Stroup Road will be re-aligned to place the structure on a less acute curve. Therefore, the location of the proposed span occurs approximately 50 feet upstream (west) of the existing structure. The project includes removal of the existing bridge. The proposed structure, which is supported by in-stream piers, shall impact approximately 60 linear feet of Little Creek. However, the project proposes stone revetment for armoring the proposed structure, as well as the bridge removal site. Including the stone revetment, approximately 180 linear feet of impacts will occur.

The project is located on Stroup Road, approximately 1.3 road miles south of its intersection with Plass Road. More specifically, the project is located in Section 5, Township 40 North, Range 5 East, Fifth Principal Meridian, Jefferson County, Missouri. The approximate geographic coordinates of the crossing are 38.2288°North, -90.4986° West. Little Creek is a secondary tributary to the Mississippi River, a navigable waterway.

We consulted the U.S. Geological Survey 7.5-minute topographic map, aerial photography, and other relevant sources for natural resource information concerning the site. Based on this review, we have determined that Little Creek possesses an ordinary high water mark at this location and is considered a jurisdictional water of the United States. Therefore, the placement of fill material below the ordinary high water elevation requires a permit from this office.

The Corps of Engineers has determined that this activity will have no affect on endangered species, and is authorized under Section 404 of the Clean Water Act by an

existing Department of the Army nationwide permit for *Linear Transportation Projects*, as described in the February 21, 2012, Federal Register, Reissuance of Nationwide Permits; Notice (77 FR 10273), Appendix A (B)(14). **This verification is valid until March 18, 2017**, unless the District Engineer modifies, suspends, or revokes the nationwide permit authorizations in accordance with 33 CFR 330.5(d). If you commence, or are under contract to commence, this activity before the nationwide permits expire, you will have 12 months after the date the nationwide permits expire or are modified, suspended, or revoked, to complete the activity under the present terms and conditions of these nationwide permits. You are reminded that General Condition 12 of the Nationwide Permit mandates that "Appropriate soil erosion and sediment controls must be used and maintained in 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."

In accordance with General Condition number 30 of the Nationwide Permit, a compliance certification (Attachment A of this package) must be completed within 30 days of project completion or the permit issuance may be revoked and considered null and void.

The Missouri Department of Natural Resources Water Protection Program (MDNR/WPP) has conditionally issued general Section 401 Water Quality Certification for this nationwide permit, subject to special conditions (see enclosure). These conditions are part of the Corps permit. If you have any questions regarding the Water Quality Certification conditions, you may call Ms. Stacia Bax, MDNR/WPP, at (573) 526-4586.

This determination is applicable only to the permit program administered by the Corps of Engineers. It does not eliminate the need to obtain other Federal, state or local approvals before beginning work. This permit verification does not convey property rights, nor authorize any injury to property or invasion of other rights.

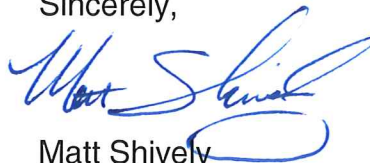
You are reminded that the permit is based on submitted plans. Variations from these plans shall constitute a violation of Federal law and may result in the revocation of the permit. If this nationwide permit is modified, reissued, or revoked during this period, the provisions described at 33 CFR 330.6(b) will apply.

The jurisdictional determination for this project is considered a preliminary jurisdictional determination (PJD) in accordance with Corps regulations at 33 CFR Part 331. A PJD is an expedited determination that does not require interagency coordination, but is also not appealable. If you consent to the findings of this PJD, please sign and date the enclosed *Preliminary Jurisdictional Determination Form* and return it to this office at the letterhead address. If you do not agree with the PJD, you may request an Approved Jurisdictional Determination, which may be appealed, by contacting our office for further instruction.

If you have any questions please contact Matt Shively at (314) 331-8632. **Please refer to file number MVS-2014-281.** The St. Louis District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to go to our Customer Service Survey

found on our web site at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,



Matt Shively
Project Manager
Regulatory Branch

Enclosures

Copy Furnished: (electronically w/o enclosures)

Ms. Stacia Bax, MDNR-Water Protection Program
Mr. Jason Daniels, U.S. Environmental Protection Agency
Ms. Judith Deel, MDNR-State Historic Preservation Office
Mr. Bryan Simmons, U.S. Fish & Wildlife Service
Mr. Alan Leary, Missouri Department of Conservation
Ms. Jennifer Campbell-Allison, Missouri Department of Conservation

Copy Furnished:

Mr. Stephen Alsbury, ABNA Engineering

ATTACHMENT A**COMPLETED WORK CERTIFICATION**

Date of Issuance: July 18, 2014

File Number: MVS-2014-281

Name of Permittee: Jefferson County

River Basin/County/State: Upper Mississippi-Meramec/Jefferson/Missouri

Project Manager: Shively

Upon completion of this activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

**U.S. Army Corps of Engineers
Attn: Regulatory Branch (OD-F)
1222 Spruce Street
St. Louis, Missouri 63103-2833**

(Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification or revocation.)

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date



U.S. Army Corps
Of Engineers
St. Louis District

Nationwide Permit Summary

No. 14, LINEAR TRANSPORTATION PROJECTS

(NWP Final Notice, 77 FR 10273)

Activities required for 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 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 31.) (Sections 10 and 404)

Note: 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).

NATIONWIDE PERMIT CONDITIONS

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

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.

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 NWPs 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 and storm water management activities, 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.

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. No 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. 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).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

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 Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(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 project, or if the project 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 work or that utilize the designated critical habitat that might be affected by the proposed work. 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 project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until 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 regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a 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 U.S. 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) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect 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. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate

compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-Federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may 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 may be affected by the proposed work 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 resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, 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 and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may 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 or that consultation under Section 106 of the NHPA has been completed.

(d) 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. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work 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 (16 U.S.C. 470h-2(k)) 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 NWPs 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 NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, 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 adverse effects on the aquatic environment are 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 adverse effects to the aquatic environment are 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 effects of the proposed activity are minimal, and provides a project-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 minimal adverse effects on the aquatic environment. 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 minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) 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)-(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

STP-5403(656) Stroup Road Bridge
to ensure timely completion of the required compensatory mitigation
(see 33 CFR 332.3(k)(3)).

(4) 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.

(5) 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.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) 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 project 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 a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. 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 establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing 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 compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory 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.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of 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 effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all

Jefferson County, Missouri
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 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 work 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 work and mitigation..

31. 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 in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may 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 (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 project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; 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. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project 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);

(4) 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 waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) 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 effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(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 a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(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 project's adverse environmental effects to a minimal level.

(2) For 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, for 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, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), 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 telephone or fax the district engineer notice

STP-5403(656) Stroup Road Bridge that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse 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 preconstruction 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 NWP, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are 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.

(3) 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.

(4) 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. For a linear project, this determination will include an evaluation of the individual crossings 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 streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. 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 assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. 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 projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory

Jefferson County, Missouri 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 effects on the aquatic environment are 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 no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project 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 project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project 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 effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When 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.

F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or

rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a

waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any

Jefferson County, Missouri
pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent—meaning bordering, contiguous, or neighboring—to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)–(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

MISSOURI NATIONWIDE PERMIT REGIONAL CONDITIONS

For All Nationwide Permits:

1. **Stream Crossings.** In addition to requirements of General Condition (2) and General Condition (9) of the Nationwide Permits, the following guidelines for stream crossings apply for regulated activities in waters of the United States. The guidelines are available at:

<http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/MORCIStreams.pdf>.

2. **Seasonal Restrictions for Activities Proposed in Spawning Areas.** In addition to the requirements of General Condition (3) of the Nationwide Permits, the following specific seasonal restrictions apply for regulated activities in waters of the United States. Between the closed dates listed in the Missouri Combined Stream Spawning List, the permittee must not excavate from or discharge into the listed waters. The list of waters with seasonal restrictions is available on request from the Corps or at:

<http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/SpawningList.pdf>

3. **Invasive and Exotic Species.** Plant species listed at

<http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/MOInvasivePlants.pdf> shall not be used for revegetation unless this requirement is waived by the district engineer based on a case specific analysis of the revegetation plan. Best management practices should be used to reduce the risk of transferring invasive plant and animal species to or from the project site. Best management practices can be found at: <http://www.invasivespeciesinfo.gov/toolkit/prevention.shtml>. Known zebra mussel waters within Missouri can be found at: <http://nas.er.usgs.gov/queries/zmbyst.asp>.

4. **Suitable Material.** In addition to the specific examples in General Condition (6) of the Nationwide Permits, the following materials are not suitable for fill activities in waters of the United States: vehicle bodies, construction or demolition debris, garbage, tires, treated lumber (chromated copper arsenate (CCA), creosote, and pentachlorophenol), liquid concrete not poured into forms, grouted riprap, bagged cement, and sewage or organic waste.

Broken concrete used as bank stabilization must be reasonably well graded, consisting of pieces varying in size from 20 pounds up to and including at least 150 pound pieces to withstand expected high flows. Applicants must break all large slabs to conform to the well graded requirement. Generally, the maximum weight of any piece should not be more than 500 pounds. Gravel and dirt should not exceed 15% of the total fill volume when using broken concrete as fill. All protruding reinforcement rods, trash, asphalt, and other extraneous materials must be removed from the broken concrete prior to placement in waters of the United States.

5. **Priority Watersheds.** The applicant must provide preconstruction notification to the District Engineer for any regulated activity in a priority watershed. The list of priority watersheds requiring notification is available on request from the Corps or at

<http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/PriorityWatersheds.pdf>

6. **Special Aquatic Resources.** The applicant must provide preconstruction notification to the District Engineer for any regulated activity which may impact a jurisdictional fen, seep or bog of any size.

7. **Sensitive Aquatic Species.** The applicant must provide preconstruction notification to the District Engineer for any regulated activity in waters listed at:

<http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/MORC7AquaticSpecies.pdf>. The submitted preconstruction notification will be coordinated in accordance with General Condition 31(d) with the U.S. Fish and Wildlife Service as determined appropriate by the Corps.

For Specific Nationwide Permits:

8. **NWP 12 – Utility Line Activities.** The applicant must provide preconstruction notification to the District Engineer prior to commencing the activity if the discharge is in a special aquatic site or when new utility line construction activities have multiple crossings of the same stream and/or parallel a stream. The preconstruction notification must include a revegetation plan for impacted wetlands and riparian areas in accordance with Regional Condition 3. Where preconstruction notification is required for utility line activities within streams, the submittal must include site-specific plans for the stabilization of disturbed channel bed and bank areas.
9. **NWP 23 - Approved Categorical Exclusions.** The applicant must provide preconstruction notification to the District Engineer for all regulated Nationwide Permit 23 activities in waters of the United States. In addition to information required by General Condition 31, the applicant must identify the approved categorical exclusion that applies and provide documentation that the project fits the categorical exclusion.
10. **NWP 27 – Stream and Wetland Restoration Activities.** The applicant must provide preconstruction notification to the District Engineer prior to commencing the activity if the discharge is associated with impacts to forested wetlands.
11. **NWP 44 – Mining Activities.** Nationwide Permit 44 cannot be used to authorize in-stream mining projects, including in-stream sand and gravel mining operations.
12. **Requirements for Waiver of 300 Linear Foot Limit Associated with NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, 52.** The applicant must request the waiver in writing and provide documentation and environmentally based reasons to support the waiver request in accordance with the requirements of General Condition (31)(e) for making waiver determinations.
13. **Lake of the Ozarks:** The applicant must provide a preconstruction notification to the District Engineer for any regulated activity associated with Nationwide Permits 3, 7, 12, 14, 15, 18, 22, 27, 33, and 45 within Lake of the Ozarks. A copy of this notification must also concurrently be sent to Ameren Missouri. Nationwide Permits 2, 13, 16, 19, 25, 29, 31, 35, 36, 39, 41, and 44 are revoked in the Lake of the Ozarks. NWPs 1, 9, 10, 11 and 28 are only valid when both Ameren Missouri and the Missouri State Water Patrol have approved the activity. The Corps and Ameren Missouri, regardless of the request to use any Nationwide Permit, may verify the activity under the provisions of Regional General Permit 38M <http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/permits/GP-38M.pdf>. Additional information on Ameren Missouri and Lake of the Ozarks permit requirements can be found at the following webpage: <http://www.ameren.com/sites/aeu/lakeoftheoarkas/Pages/Home.aspx>

Note: Preconstruction Notification to the District Engineer must be in accordance with General Condition (31) of the Nationwide Permits.

STATE OF MISSOURI
CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION
2012 GENERAL AND SPECIFIC CONDITIONS
NWP 14 - LINEAR TRANSPORTATION PROJECTS

These conditions ensure that activities carried out under Nationwide Permits (NWPs) do not violate the Water Quality Standards of the State of Missouri resulting in permanent damage to habitat, increased turbidity, reduced bank and channel stability, and/or impacts to the biological and chemical integrity of the waters. These conditions are in addition to, not a replacement for, those conditions included by the federal authorities. Proposed projects authorized by the NWPs listed above that cannot be conducted within the conditions listed below must apply for individual Clean Water Act Section 401 Water Quality Certification (certification).

Applications for certification should be sent to the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176, or electronically to wpsc401cert@dnr.mo.gov. A complete application consists of the application submitted to the U.S. Army Corps of Engineers (Corps) 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 (10 CSR 20-6.060(5)).

An issued certification becomes part of the 404 Permit and; therefore, expires with the 404 Permit unless explicitly stated in the certification. Not all permit modifications require the certification to be modified and/or reissued. An example would be when a permit expiration date is extended or the permit is reissued and there are no changes to the original project, the certification may remain valid for that project.

The Department 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: <http://www.epa.gov/owow/NPS/lid/> and www.lid-stormwater.net/lid_techniques.htm.

GENERAL CONDITIONS for ALL NWPs

1. NWPs shall not allow the filling of jurisdictional springs.
2. Acquisition of a NWP(s) and the attendant certification(s) 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 (NPDES) 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 Missouri 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.
3. Care shall be taken to keep machinery out of the waterway as much as possible. 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 floodway 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 Missouri Department of Natural Resources' Environmental Emergency Response number at (573) 634-2436.
5. Only clean, nonpolluting fill shall be used. The following materials are not suitable for bank stabilization and shall not be used due to their potential to cause violations of the general criteria of the Water Quality Standards (10 CSR 20-7.031 (3)(A)-(H)):
 - a. Earthen fill, gravel, broken concrete where the material does not meet the specifications stated in the Missouri NWP Regional Conditions (http://www.nwk.usace.army.mil/regulatory/NWP_2012/nwp.htm) 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; and
 - e. Any material containing chemical pollutants (including but not limited to creosote or pentachlorophenol).
6. Clearing of vegetation/trees shall be the minimum necessary to accomplish the activity. A vegetated corridor shall be maintained 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 this NWP, lack of ownership or control of any portion of this corridor may be considered a legitimate and discretionary cause to waive this requirement on that portion.

7. This certification is not valid for any Section 404 Permit issued on a water that is:
- Listed as impaired by inorganic sediment, aquatic habitat alteration or unknown impairment as listed in the most current Water Quality Report (Section 305(b) Report). For convenience a table of these impaired waters is provided at the following website: www.nwk.usace.army.mil/regulatory/NWP_2012/MO/MOWQC_Con7.pdf;
 - Located in or occur within two miles upstream of a designated outstanding state or national resource water; or
 - Located in a designated metropolitan no-discharge stream.

The most current Water Quality Report can be found at <http://www.dnr.mo.gov/env/wpp/waterquality/305b/>. A listing of *Outstanding National and State Resource Waters* and *Metropolitan No-Discharge Streams* can be found in 10 CSR 20-7.031, Tables D, E and F or at <http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-7.pdf>.

The Department's geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Services website at <http://msdis.missouri.edu/>.

Additional information to identify the project location may be obtained from the program at (573) 751-1300.

- Streambed gradient shall not be permanently altered during project construction.
- NWPs issued by the Corps for which the 300 linear foot threshold for stream impacts is waived by the district engineer shall require individual certification by the state. This is applicable to all NWPs where the permit has a 300 linear foot threshold including NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51 and 52.
- No project under a NWP shall accelerate bed or bank erosion.
- Representatives from the Department shall be allowed on the project property to inspect the authorized activity at any time deemed necessary to ensure compliance with permit conditions.
- You must submit a copy of the signed "Compliance Certification" referenced in NWP General Condition No. 30 as proof of project completion when the original is submitted to the Corps. This document is to be sent to the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176 or electronically to wpsc401cert@dnr.mo.gov.
- After avoidance and minimization for the project, unavoidable stream impacts shall be mitigated appropriately. Mitigation for loss of aquatic resources shall be in conformance with the currently approved "Missouri Stream Mitigation Method" and the "State of Missouri Wetland Assessment Method" as well as other mitigation guidance located on-line at <http://www.nwk.usace.army.mil/regulatory/CompMit/compmit.htm>.
- Best Management Practices shall be used 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 construction disturbances.
- Pursuant to Chapter 644.038, RSMo, the Department 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 2009 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.

SPECIFIC CONDITIONS for NWP 14 - Linear Transportation Projects

- The permittee must propose and employ measures to mitigate the removal of impounded gravel in the unstable area upstream of the low water crossing to prevent it from being transported downstream and/or constructing a notched weir to slow the release of impounded gravel from upstream of the low water crossing.
- 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 waterway.



Missouri Department of Conservation

Natural Heritage Review Report

April 28, 2014 -- Page 1 of 2

Resource Science Division
P. O. Box 180
Jefferson City, MO 65102
Prepared by: Emily Clancy
Emily.Clancy@mdc.mo.gov
(573) 522 - 4115 ext. 3182

ABNA ENGINEERING
ATTN: STEPHEN ALSBURY, P.E.; S.E.
PROJECT MANAGER
4140 LINDELL BLVD.
ST. LOUIS, MISSOURI 63108

Project type:	Bridge
Location/Scope:	Section 5 of T40N R05E
County:	Jefferson
Query reference:	Stroup Road Bridge over Little Creek Federal Project No. STP 5403 (656)
Query received:	April 28, 2014

This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially affected by the proposed project. On-site verification is the responsibility of the project. Natural Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information may be found at <http://mdc.mo.gov/discover-nature/places-go/natural-areas> and mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. Contact information for the department's Natural History Biologist is online at <http://mdc.mo.gov/contact-us>.

Records of federal-listed (these are also state-listed) species or critical habitats near the project site:

Natural Heritage records identify no wildlife preserves, no designated wilderness areas or critical habitats, no federal-listed species records within one mile of the site, or in the public land survey section listed above or sections adjacent.

Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. See insert regarding *Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers*.

- ♦ Avoid disturbance to stream banks and riparian areas. Channel modification, flow interruption or bank modification should occur only in compliance with conditions established in permits required under the federal Clean Water Act.
- ♦ Grade and seed disturbed areas as soon as possible to minimize erosion. Native grasses and wildflowers are recommended for plantings compatible with the local native landscape and wildlife needs. Annuals like ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza.
- ♦ All temporary in-channel fills that could impound water should be culverted. Culverts should (a) maintain at least six inches of water and (b) not create water velocities in excess of two feet per second during average annual discharges. A drop between the downstream end of the culverts and the downstream water surface should not occur at any time.
- ♦ Avoid work in the channel from March 15 until June 15, a time when many fish are spawning and eggs need minimal disturbance.

Take all necessary precautions to prevent petroleum products from entering the stream.

FEDERAL LIST species/habitats are protected under the Federal Endangered Species Act. **Consult with** U.S. Fish and Wildlife Service, 101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132

Records of state-listed (not federal-listed) endangered species AND / OR state-ranked (not state-listed endangered) species and natural communities of conservation concern. The Department tracks these species and natural communities due to

population declines and/or apparent vulnerability.

Natural Heritage records identify no state-listed endangered species within one mile of the site.

Natural Heritage records identify Fremont's leather flower (*Clematis fremontii*, state-rank S3) within the area of the project. This plant species may be found in glade complex habitats. More information may be found at: <http://mdc.mo.gov/discover-nature/field-guide/fremont-s-leather-flower>. The state-rank S3 is defined as vulnerable in the state- this species is rare and uncommon, or found only in a restricted range (even if abundant in some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.

See http://mdc.mo.gov/sites/default/files/resources/2010/04/2014_species_concern.pdf for a complete list of species and communities of conservation concern.

STATE ENDANGERED species are listed in and protected under the [Wildlife Code of Missouri](#) (3CSR10-4.111).

General recommendations related to this project or site, or based on information about the historic range of species (unrelated to any specific heritage records):

- Indiana bats (*Myotis sodalis*, federally and state listed endangered) hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats, especially from September to April. **If any trees need to be removed by your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132).**
- Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. Best management recommendations relating to streams and rivers may be found at: http://mdc.mo.gov/sites/default/files/resources/2013/02/constprojnearstreams_2013.pdf.
- Jefferson County has known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area. See http://mdc.mo.gov/nathis/caves/manag_construc.htm for best management information.
- Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.
 - ◆ Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
 - ◆ Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
 - ◆ When possible, wash and rinse equipment thoroughly with hard spray or HOT water ($\geq 104^{\circ}$ F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.

These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Natural Heritage records largely reflect only sites visited by specialists in the last 30 years. This means that many privately owned tracts could host unknown remnants of species once but no longer common.

Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers

MISSOURI DEPARTMENT OF CONSERVATION



Introduction

The streams and rivers of Missouri support a wide and diverse community of wildlife that includes many species of mammals, birds, fishes, mussels, crayfish, and insects. The continued diversity and health of this community is dependent upon how well Missourians manage and protect this resource. While water quality is essential, maintaining a diverse array of habitat features also is essential for aquatic wildlife to persist. Since implementation of the Clean Water Act, point source pollution has been greatly reduced, but polluted and sediment-laden runoff (non-point source) from rural and urban development is still a serious problem.

There are management practices that can be implemented to prevent degradation of our streams and rivers. By adapting these best management practices we can prevent the loss of species diversity and maintain the quality of our lives as well. Preventative measures may require extra effort initially, but they provide long-term dividends by eliminating costly damage resulting from poor management practices.

Access and Staging Area Management Recommendations

Staging areas are those short- or long-term sites within a construction or development area where most equipment and materials are stored. These areas often are accessed frequently; and when fuel and oil are stored here, the potential for runoff and erosion in these areas may be high.

- Erosion and sediment controls should be installed and maintained to prevent discharge from the site.
- Staging areas for crew, equipment, and materials should be established well away from streams and rivers or highly erodible soils.
- Stationary fuel and oil storage containers should remain within a staging area or another confined area to avoid accidental spills into the stream systems.
- Excess concrete and wash water from trucks and other concrete mixing equipment should be disposed of where this material cannot enter the stream systems.
- If temporary roadways must be built, ensure that roadways are of low gradient with sufficient roadbed and storm water runoff drains and outlets.
- Containment basins, silt fences, filter strips, etc. should be included for retention of storm water runoff for reducing sediment introduction into natural waterways.

→ Avoid stream crossings. If unavoidable, temporary crossings should be used. Temporary crossings should not restrict or interrupt natural stream flow. If temporary in-channel fill is necessary, culverts of sufficient size should be employed to avoid water impoundment and allow for fish passage.

Riparian Corridor Management Recommendations

The riparian corridor is the vegetation adjacent to a stream or river. This area is critical to the health and quality of the aquatic environment because of its ability to slow and reduce sediment and chemical runoff into the stream or river channel. A riparian corridor with a minimum width of 100 feet from the edge of the stream or river should be maintained along both sides of streams and rivers.

- Limit clearing of vegetation, including both standing and downed timber, to that which is absolutely necessary for construction purposes.
 - Heavy equipment use within the riparian corridor should be restricted to minimize vegetation destruction and compaction of soils. Flagging or fencing areas that are not to be disturbed is helpful in alerting construction personnel.
 - General application of pesticides, herbicides, or fertilizers within the riparian corridor should be prohibited to avoid water contamination due to over-spray or runoff. Fertilizer use or spot application of pesticides and herbicides is acceptable if appropriate non-restricted chemicals are used.
 - Riparian areas located down slope of construction zones should be physically screened with sediment controls, such as silt fences or filter strips. Sediment controls should be monitored after rain and maintained for the duration of the project.
 - All riparian corridors disturbed by the project should be revegetated immediately following or concurrent with project implementation.
- Appropriate native bottomland or riparian trees, shrubs, and grasses should be planted to ensure long-term stability in areas where the soil erosion threat is not critical. Annual non-native grasses such as rye or wheat may be planted in conjunction with native species to provide short-term erosion control. Areas judged to be subject to immediate soil loss due to steep slopes or other factors causing critical erosion conditions may be planted with non-native mixtures to assure rapid establishment and erosion control.

→ Post-construction evaluation of vegetation establishment should be conducted at one month intervals for at least three months after completion of the project. Any recommended sediment controls should be inspected at these times. If determined beneficial to soil stability and not adversely impacting site function and/or aesthetics, recommended sediment controls should remain permanent.

→ All temporary erosion and sediment controls should be removed (unless removal would cause further disturbance) and properly disposed of within 30 days after final site stabilization is achieved or after temporary practices are no longer needed.

Bank and Channel Management Recommendations

The structure of a bank is an important feature of a stream or river. It defines and provides stability for the channel.

→ Bank stability will vary depending on height, slope, and soil conditions. Project engineers and hydrologists should thoroughly investigate the physical properties and hydrologic record of the proposed site before construction begins.

→ Limit clearing of vegetation, including both standing and downed timber, to that which is absolutely necessary for construction purposes.

→ Projects in which bank alteration is necessary should employ, to the highest degree possible, erosion prevention measures before actual excavation activities begin. These preventative measures should be monitored regularly and maintained for the duration of the project.

→ Use of riprap for stream bank stabilization should be limited to those areas that could experience substantial erosion before adequate vegetation becomes established. The material for the rock blanket should consist of durable stone or broken concrete that is well graded. It is preferable that 40-60 percent of the material be as large as the thickness of the blanket, with enough smaller pieces of various sizes to fill the larger voids. It should not contain more than 10 percent of earth, sand, shale, and non-durable rock. Bank stabilization materials should allow for continuous passage of fish and other aquatic species.

→ No permanent fill materials, other than design-approved structures and related bank stabilization materials, should be placed in the stream channel. Avoid channelization. Excavated materials should not be stored or stockpiled below the high bank.

→ Work should be conducted during low flow periods when possible.

→ Care should be taken to keep machinery out of the waterway as much as possible.

→ Do not alter or remove natural stream features, such as riffles and pools.

→ Large woody debris is an important habitat component of a stream and should not be removed unless absolutely necessary for construction and maintenance purposes.

Information Contacts

For further information regarding regulations for development near streams and rivers, contact:

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd.
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
608 E. Cherry Street, Room 200
Columbia, MO 65201
Telephone: 573/876-1911

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

Lead Survey of Stroup Road Bridge Over Little Creek

April 30, 2014

Prepared for
Jefferson County
Public Works Department
P.O. Box 100
Hillsboro, MO 63050

4140 Lindell Blvd.
Saint Louis, MO 63108
314-454-0222 Ext. 1120



ABNA

Civil . Structural . Testing & Inspection . CM . Surveying . GIS . Planning
www.abnaengineering.com

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1.0 INTRODUCTION

ABNA Engineering (ABNA) has completed a lead survey at the Stroup Road Bridge Over Little Creek. The survey was conducted April 1, 2014 in order to facilitate renovation of the structure. This report summarizes the sampling activities and identifies structure materials that contain lead-based paint in regulated amounts.

2.0 STRUCTURE DESCRIPTION

The structure is located on Stroup Road in Festus, MO, and consists of a concrete deck over a metal frame bridge (See figure 1).

3.0 LEAD SURVEY

3.1 Sampling Procedure

ABNA Engineering Inc. inspected the frame of the structure to identify materials containing lead in regulated amounts on painted surfaces. A Missouri licensed lead inspector performed the survey. The credentials of the inspectors are presented in Appendix A. The lead survey included the testing of accessible exterior surfaces by paint chip sampling. Three samples of each component by color were sampled with an approximately four square inch paint chip sample. Paint-chip samples were collected for analysis, and were analyzed by EMSL, a laboratory recognized under the EPA's National Lead Laboratory Accreditation Program (NLLAP).

3.2 Results of Sampling

The results of the data from EMSL were tabulated, and are presented in Appendix B. Field data sheets are also presented in Appendix B. Table 1 presents a listing of paint chip results, and their location. The location of samples taken is shown on Figure 3. Paint Chip results $>$ than .5 % by weight or 1.0 milligrams per square centimeter (mg/cm^2) or higher indicate that lead is present in a regulated amount. The results of paint chip sampling showed, that painted frame of the bridge contained lead in regulated amounts.

The conditions of the metal frame were consistent. The metal throughout the areas inspected was generally in poor condition with a thin coat of oxidized rust. Paint on girders, underneath girders, and rails, were not intact, and mostly rusted out or severely cracked.

4.0 CONCLUSIONS

- The painted metal frame of the Stroup Road Bridge Over Little Creek contains lead based paint in regulated amounts.

5.0 RECOMMENDATION

During renovation of any areas containing lead-based paint in amounts greater than 1.0 mg/cm², precautions to protect workers, and prevent the spread of lead dust should be taken.

If bridge components are to be removed to reduce the potential exposure to lead, state regulations require that Missouri-licensed lead supervisors and workers be used, that state regulations be followed during the abatement of lead.

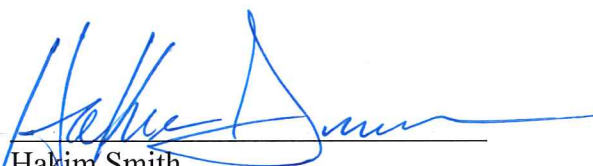
A lead operations and maintenance program should be developed to protect workers and residents during renovation and routine maintenance operations so that proper precautions are taken to reduce the risk of disturbing and spreading lead-bearing dust.

6.0 DISCLAIMER

The opinions provided within this report were developed from field investigations, sampling and laboratory analysis. The opinions provided herein reflect conditions known or observed in the survey area at the times of the surveys and observations.

Our professional services have been performed, our findings obtained, and our conclusions prepared in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

This report is intended solely for the use of the Jefferson County Public Works Department and agents/clients engaged by them. No other party may rely on the information presented herein without the written permission of the Jefferson County Public Works Department and ABNA Engineering, Inc.


Hakim Smith
Lead Inspector
License # 120905 300003828

4/30/14
Date


Raymond E. Bailey, Ph.D., P.E., R.G.
Construction Services Manager

4-30-2014
Date

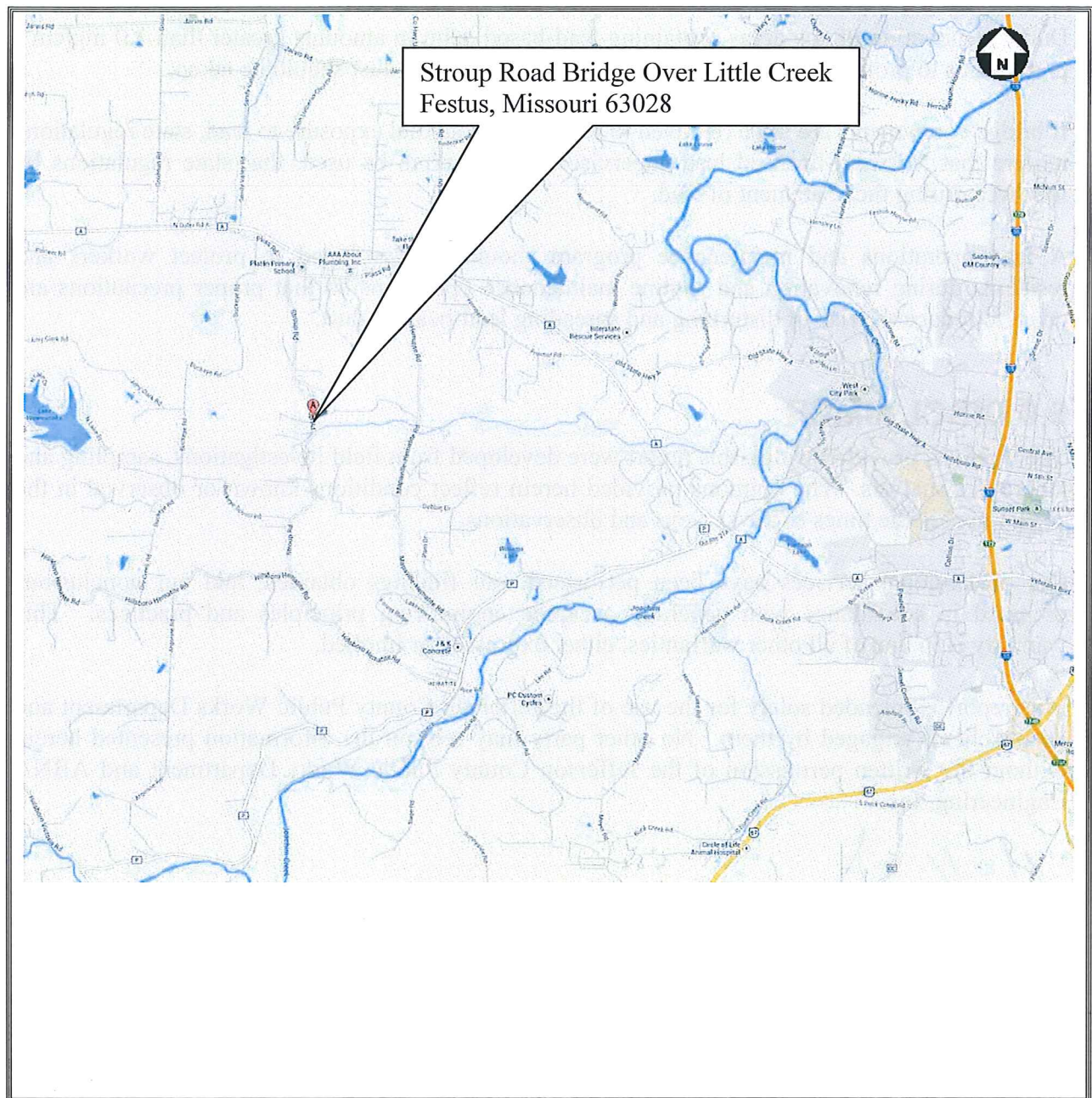
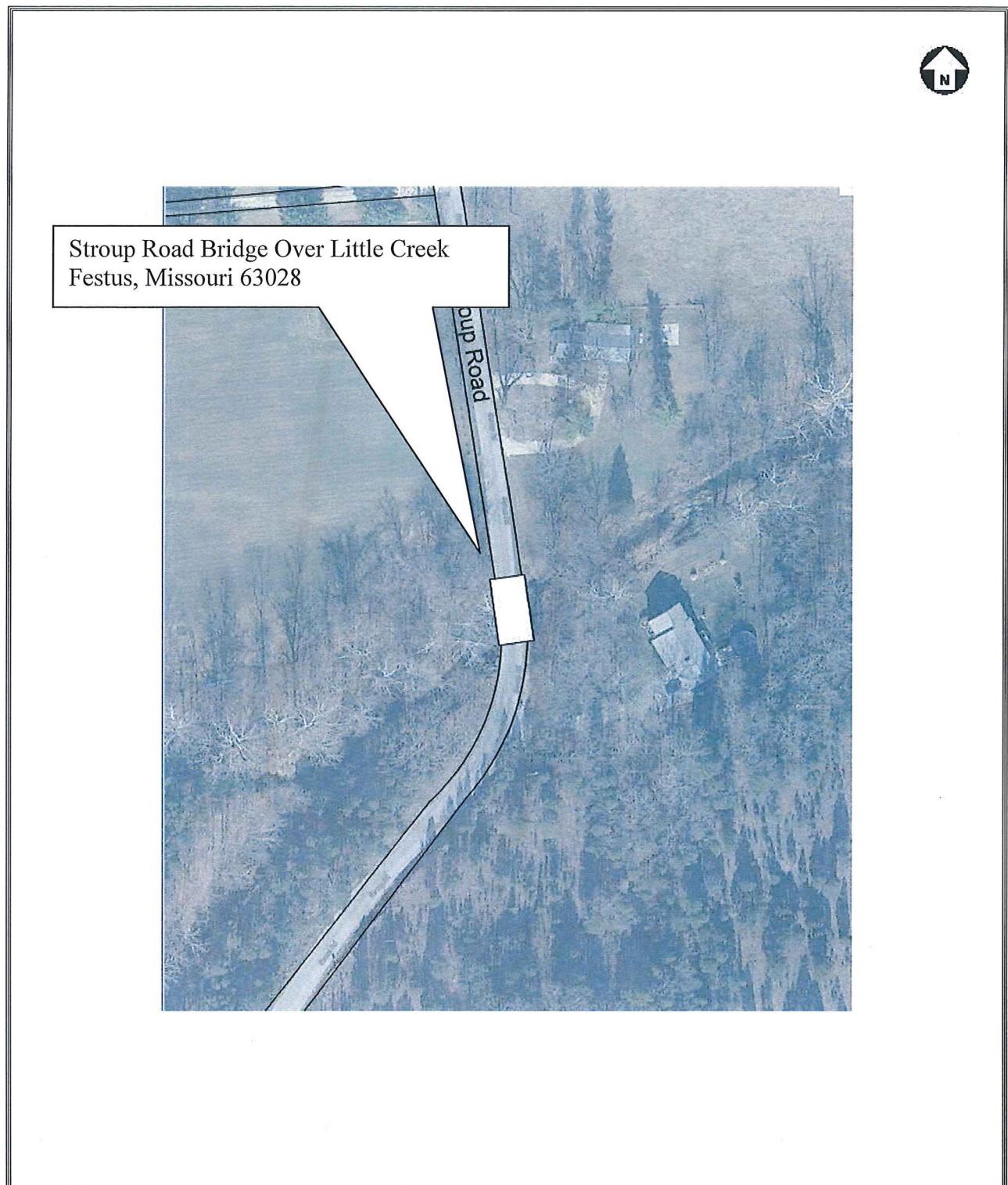


Figure 1: Site Location Map Stroup Road Bridge Over Little Creek Festus, Missouri



**Figure 2: Site Plan Stroup Road Bridge Over Little Creek
Festus, Missouri**

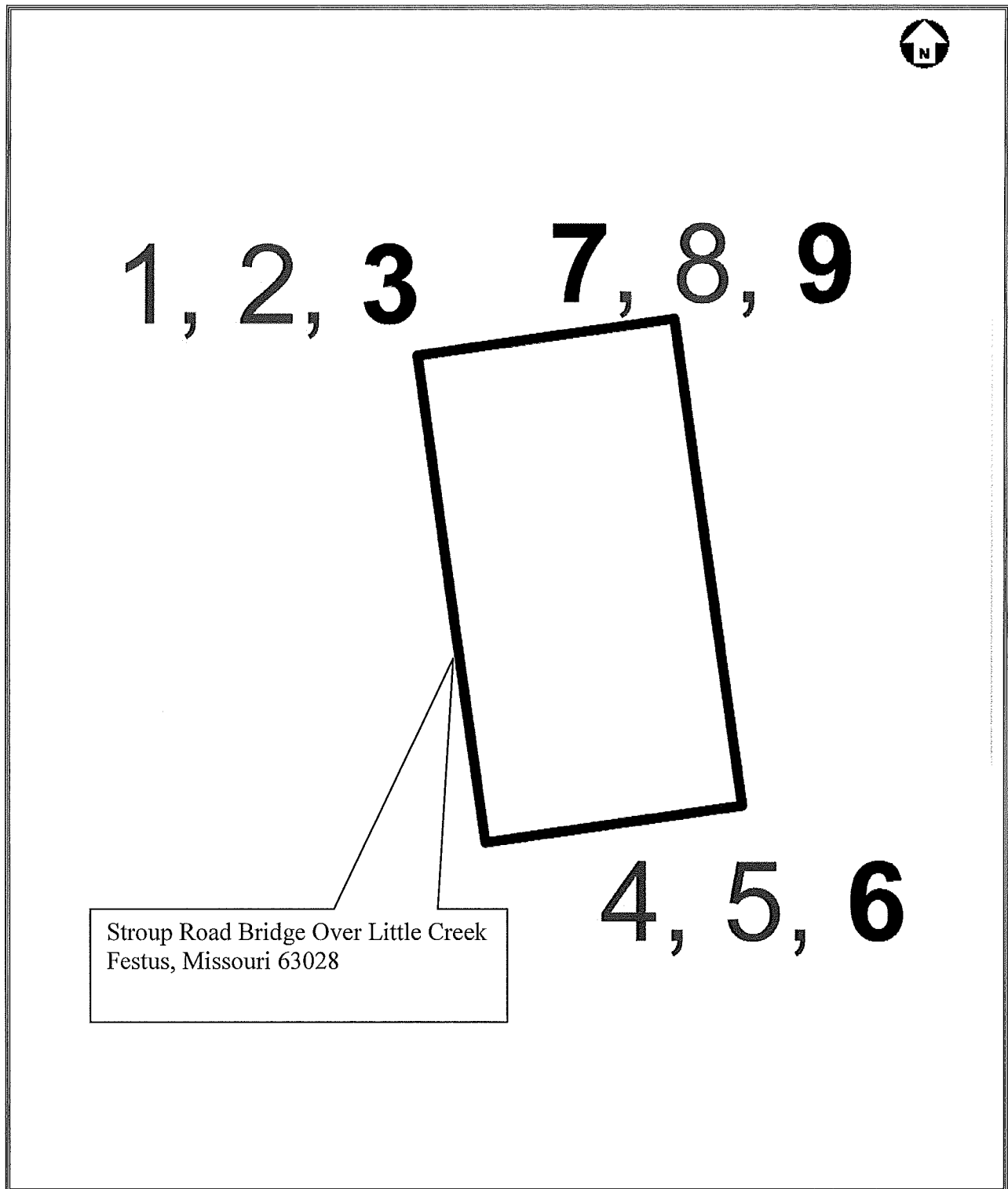


Figure 3: Positive Lead Sample Locations in Bold for Stroup Road Bridge Over Little Creek Festus, Missouri

APPENDIX A: EMPLOYEE CERTIFICATIONS

CERTIFICATE OF ATTENDANCE

Hakim Smith

has attended a training in the

OSHA LEAD IN CONSTRUCTION STANDARD IN ACCORDANCE WITH 29CFR 1926.62 (I)

Conducted by: KTA-Tator, Inc.

Course No. 310035

Certificate No. 310035-001

January 10, 2013
Course Date(s)

St. Louis, Missouri
Course Location



Dan O'Malley

Dan O'Malley
Manager EHS

Corporate Headquarters: KTA-Tator, Inc. 115 Technology Drive Pittsburgh, PA 15275 412.788.1300 www.kta.com

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

HAKIM SMITH

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

Lead Inspector
Category of License

Issuance Date: 9/5/2012
Expiration Date: 9/5/2014
License Number: 120905-300003828



Margaret T. Donnelly
Margaret T. Donnelly
Director
Department of Health and Senior Services

Lead Licensing Program, PO Box 570, Jefferson City, MO 65102



APPENDIX B: LABORATORY ANALYSIS REPORTS

Table 1 Stroup Road Bridge Over Little Creek Positive Lead Results in Bold							
No	Room	Wall	Structure	Substrate	Color	Condition	Sample Results
1	Northwest		Girder	Metal	Orange	Poor	0.046 by Weight
2	Northwest		Under	Metal	Orange	Poor	<0.010 by Weight
3	Northwest		Rail	Metal	Orange	Poor	1.0 by Weight
4	Southeast		Girder	Metal	Orange	Poor	<0.012 by Weight
5	Southeast		Under	Metal	Orange	Poor	<0.010 by Weight
6	Southeast		Rail	Metal	Orange	Poor	12.0 by Weight
7	Northeast		Girder	Metal	Orange	Poor	9.0 by Weight
8	Northeast		Under	Metal	Orange	Poor	<0.018 by Weight
9	Northeast		Rail	Metal	Orange	Poor	1.0 by Weight

OrderID: 391402865



Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

391402865

 EMSL ANALYTICAL, INC.
 3029 S JEFFERSON
 ST. LOUIS, MO 63118
 PHONE: (314) 577-0150
 FAX: (314) 776-3313

Company: <u>ABNA ENGINEERING</u>		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>4140 LINDALE BLVD</u>		Third Party Billing requires written authorization from third party	
City: <u>ST LOUIS</u>	State/Province: <u>MO</u>	Zip/Postal Code: <u>63108</u>	Country:
Report To (Name): <u>RAY BILLOV</u>		Telephone #: <u>314 454 0222</u>	
Email Address:		Fax #:	Purchase Order:
Project Name/Number: <u>13-0079 LITTLE CREEK BRIDGE</u>		Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email	
U.S. State Samples Taken: <u>MO</u>		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide			
Matrix	Method	Instrument	Reporting Limit
Chips <input type="checkbox"/> % by wt. <input checked="" type="checkbox"/> mg/cm ² <input type="checkbox"/> ppm	SW846-7000B	Flame Atomic Absorption	0.01%
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter
	NIOSH 7300 modified	ICP-AES/ICP-MS	0.5 µg/filter
Wipe* <input type="checkbox"/> ASTM <input type="checkbox"/> non ASTM <input type="checkbox"/> *if no box is checked, non-ASTM Wipe is assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe
	SW846-6010B or C	ICP-AES	1.0 µg/wipe
	SW846-7000B/7010	Graphite Furnace AA	0.075 µg/wipe
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)
	SW846-1131/7000B/6010B or C	ICP-AES	0.1 mg/L (ppm)
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)
	SW846-7010	Graphite Furnace AA	0.3 mg/kg (ppm)
	SW846-6010B or C	ICP-AES	2 mg/kg (ppm)
Wastewater Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	SM3111B/7000B	Flame Atomic Absorption	0.4 mg/L (ppm)
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)
	EPA 200.7	ICP-AES	0.020 mg/L (ppm)
Drinking Water Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)
TSP/SPM Filter	40 CFR Part 50	ICP-AES	12 µg/filter
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter
Other:			
Name of Sampler: <u>HAKIM SMITH</u>		Signature of Sampler: <u>Hakim Smith</u>	
Sample #	Location	Volume/Area	Date/Time Sampled
01	NW GIRDOR	4 in	4-9-14 @ 9:30
02	NW UNDER	4 in	4-9-14 @ 9:30
03	NW RAIL	4 in	4-9-14 @ 9:30
04	SE GIRDOR	4 in	4-9-14 @ 10:00
05	SE UNDER	4 in	4-9-14 @ 10:00
Client Sample #'s: <u>01-09</u>		Total # of Samples: <u>9</u>	
Relinquished (Client): <u>Buster Wren</u>	Date: <u>4-9-14</u>	Time: <u>1:30</u>	
Received (Lab): <u>Jeffrey Burtner</u>	Date: <u>4-9-14</u>	Time: <u>1:30 W/I</u>	
Comments: <u>Per call from Buster these are chips. Nothing was marked on COC. BB</u>			

Page 1 of 2 pages

Page 1 Of 2



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

39140 2865

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Page 2 of 2 pages

ABNA ENGINEERING

**EMSL Analytical, Inc.**

3029 S. Jefferson, Saint Louis, MO 63118
 Phone/Fax: (314) 577-0150 / (314) 776-3313
<http://www.EMSL.com> saintlouislab@emsl.com

EMSL Order: 391402865
 CustomerID: ABNA34
 CustomerPO:
 ProjectID:

Attn: **Raymond Bailey**
ABNA Engineering, Inc.
4140 Lindell Blvd.
Saint Louis, MO 63108

Phone: (314) 454-0222
 Fax:
 Received: 04/09/14 1:30 PM
 Collected:

Project: 13-0079 Little Creekbrog

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Lab ID:	Analyzed	RDL	Lead Concentration	Notes
0001	4/10/2014	0.046 % wt	0.83 % wt	
<i>Client Sample 01</i>				<i>Collected:</i>
0002	4/10/2014	0.010 % wt	<0.010 % wt	
<i>Client Sample 02</i>				<i>Collected:</i>
0003	4/10/2014	1.0 % wt	17 % wt	
<i>Client Sample 03</i>				<i>Collected:</i>
0004	4/10/2014	0.012 % wt	0.40 % wt	
<i>Client Sample 04</i>				<i>Collected:</i>
0005	4/10/2014	0.010 % wt	0.019 % wt	
<i>Client Sample 05</i>				<i>Collected:</i>
0006	4/10/2014	1.0 % wt	12 % wt	
<i>Client Sample 06</i>				<i>Collected:</i>
0007	4/10/2014	1.0 % wt	9.1 % wt	
<i>Client Sample 07</i>				<i>Collected:</i>
0008	4/10/2014	0.010 % wt	0.018 % wt	
<i>Client Sample 08</i>				<i>Collected:</i>
0009	4/10/2014	1.0 % wt	8.4 % wt	
<i>Client Sample 09</i>				<i>Collected:</i>

Jeff Siria, Laboratory Manager
 or other approved signatory

*Analysis following Lead in Paint by EMSL SOP: Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. *slight modifications to methods applied. *C* (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise.
 Samples analyzed by EMSL Analytical, Inc. Saint Louis, MO AIHA-LAP, LLC-ELLAP Accredited #102033

Initial report from 04/10/2014 13:25:41

APPENDIX C: PHOTOGRAPHIC LOG

Stroup Road Bridge Over Little Creek**Festus, Missouri 63028****Photographic Log**

- | |
|--|
| |
| 1. Stroup Road Bridge Over Little Creek pic 0252 |
| 2. Painted Girder and Rails pic 0259 |
| |

Stroup Road Bridge Over Little Creek

Festus, Missouri 63028

Photographic Log



1. Stroup Road Bridge Over Little Creek



2. Bridge Girder and Rails

Asbestos Inspection of Stroup Road Bridge

April 30, 2014

Prepared for
Jefferson County
Public Works Department
P.O. Box 100
Hillsboro, MO 63050

4140 Lindell Blvd.
Saint Louis, MO 63108
314-454-0222 Ext. 1120



ABNA

Civil . Structural . Testing & Inspection . CM . Surveying . GIS . Planning
www.abnaengineering.com

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1.0 Executive Summary

ABNA Engineering (ABNA) inspected the Stroup Road Bridge over Little Creek in Jefferson County, Missouri for the presence of asbestos-containing building materials (ACBM). The asbestos inspection was conducted in accordance with the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulations.

The results of the asbestos inspection indicate that no asbestos was detected.

2.0 Introduction

ABNA Engineering was retained by Jefferson County Public Works Department, to perform an environmental inspection of the Stroup Road Bridge Over Little Creek. The structure is located on Stroup Road in Festus, MO, and consists of a concrete deck over a metal frame bridge (See figure 1).

3.0 Limitations

This inspection was a visual inspection of exposed surfaces intended to determine the presence of ACBM to the extent possible by standard inspection techniques. ABNA Engineering certifies that it has used accepted and standard professional practices in conducting this inspection. Beyond this ABNA Engineering makes no warranties regarding the conclusions presented herein.

4.0 Asbestos Inspection

4.1 Asbestos Sampling

Suspect ACBM was not observed during a walkthrough inspection of the structure and as a result no samples were collected.

Personnel accredited under AHERA, the USEPA Model Accreditation Program for Building Inspectors and the State of Missouri conducted all assessment and sampling of suspect ACBM. Credentials of personnel conducting the asbestos inspection are presented in Appendix A.

4.2 Discussion of Results

No surfacing materials nor thermal system insulation were observed during the inspection. The presence of epoxy was not observed during the inspection.

5.0 CONCLUSIONS

- No asbestos was identified during the visual inspection.
- No further action is required concerning asbestos in relation to this structure.

6.0 RECOMMENDATIONS

- Establish an Operations and Maintenance (O&M) Program during rehabilitation / demolition work on the structure, and refer to this report that at this time there was no asbestos detected on the structure.

7.0 DISCLAIMER

The opinions provided within this report were developed from field investigations. The opinions provided herein reflect conditions known or observed in the inspection area at the times of the inspections and observations.


Our professional services have been performed, our findings obtained, and our conclusions prepared in accordance with generally accepted engineering principals and practices. This warranty is in lieu of all other warranties, either expressed or implied.

This report is intended solely for the use of the Jefferson County Public Works Department and agents/clients engaged by them. No other party may rely on the information presented herein without the written permission of the Jefferson County Public Works Department and ABNA Engineering Inc.



Hakim Smith
Missouri Asbestos Inspector

4/30/14
Date



Raymond E. Bailey, Ph.D., P.E., R.G.
Construction Services Manager

4-30-2014
Date

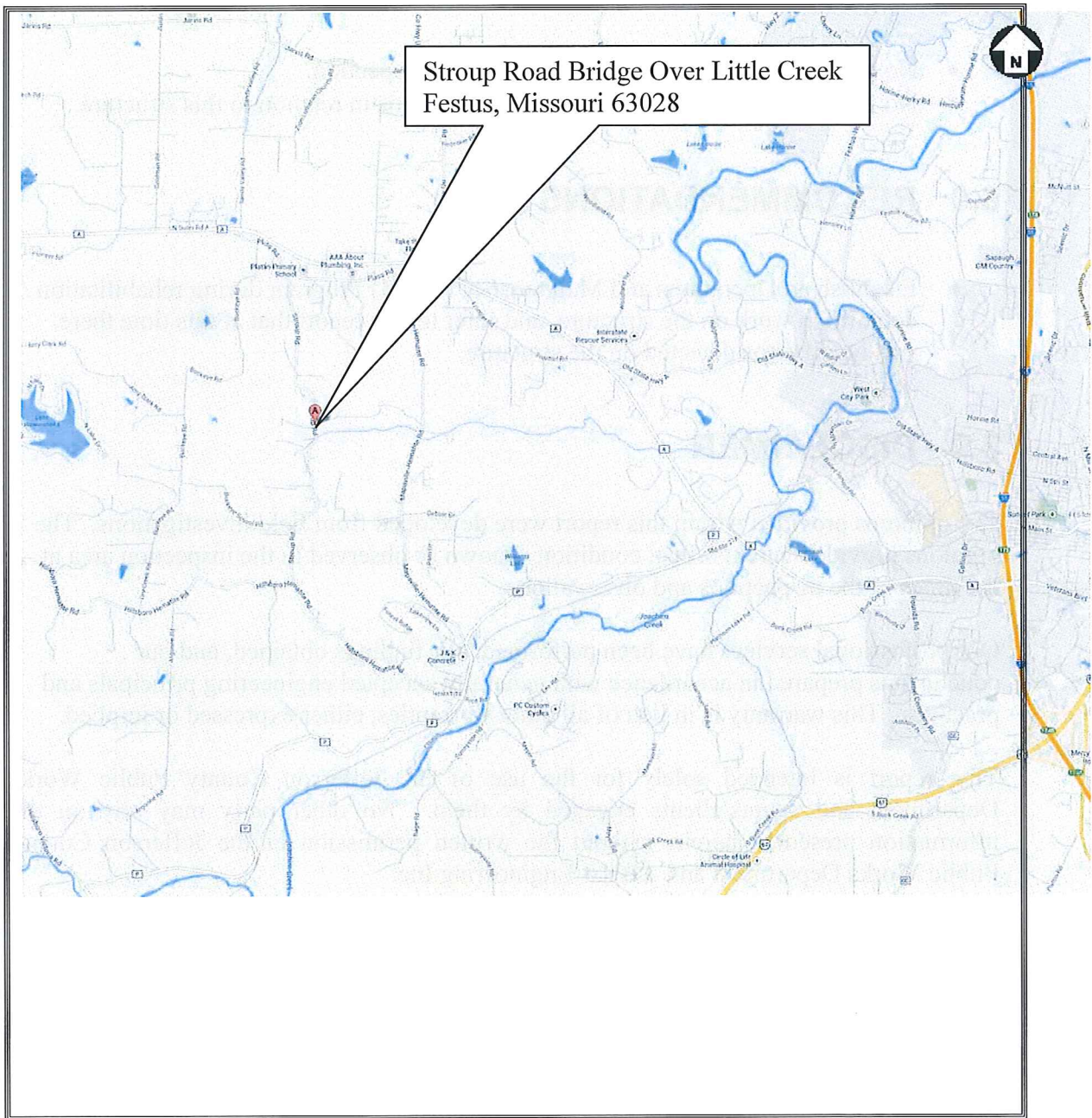


Figure 1: Site Location Map Stroup Road Bridge Over Little Creek Festus, Missouri

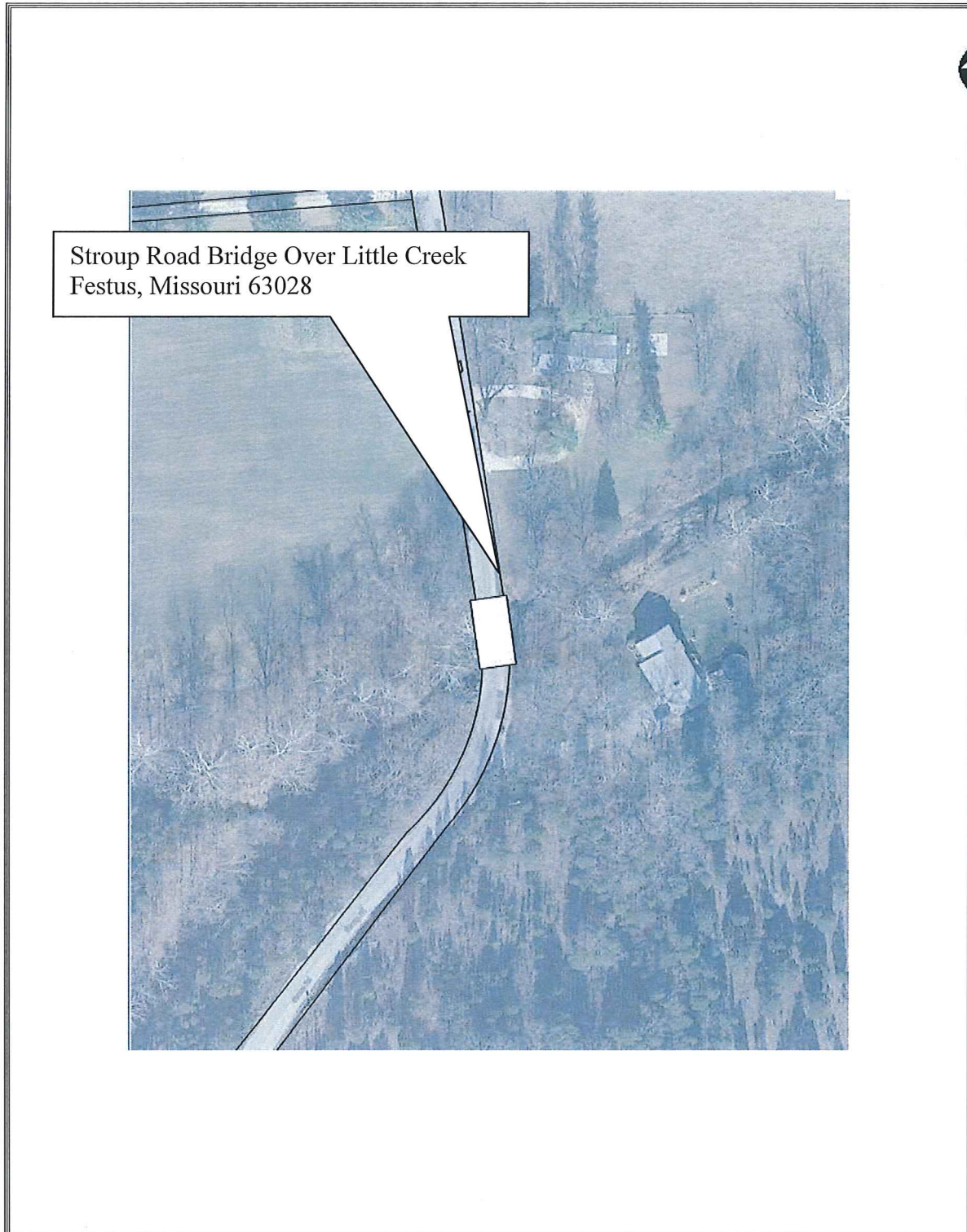


Figure 2: Site Plan Stroup Road Bridge Over Little Creek Festus, Missouri

APPENDIX A: EMPLOYEE CERTIFICATIONS



Certificate # ME695DC4CE66474D8

Hakim Smith

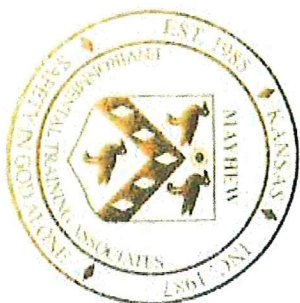
*has on 5/2/2013 in Maryland Heights, MO
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646*

4-hr. Asbestos Building Inspector Refresher

*as approved by MO & the US EPA under 40 CFR 763 (AHERA) from 5/2/2013 to 5/2/2013
and
passed the associated exam on 5/2/2013 with a score of at least 70%*

Bob Baer
Instructor

Thomas Mayhew
President



SSN: XXX-XX-0028
Expiration: 5/2/2014
P.O. Box 786 - Lawrence, KS. 66044 - 800.444.6382
www.metaenvironmental.net

APPENDIX B: PHOTOGRAPHIC LOG

Stroup Road Bridge Over Little Creek**Festus, Missouri 63028****Photographic Log**

- | |
|--|
| |
| 1. Stroup Road Bridge Over Little Creek pic 0252 |
| 2. Painted Girder and Rails pic 0259 |
| |

Stroup Road Bridge Over Little Creek

Festus, Missouri 63028

Photographic Log



1. Stroup Road Bridge Over Little Creek



2. Bridge Girder and Rails



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

MAY 28 2013

Jefferson County Public Works
725 Maple Street
Hillsboro, MO 63050

Dear Jefferson County Public Works:

Enclosed please find your Missouri State Operating Permit which authorizes land disturbance activities for Jefferson County Public Works. This permit has been issued at your request and is based upon information submitted in your application to the Department.

Please note that prior to the beginning of land disturbance activities other permits may also be required. Especially note the requirements for a Missouri Department of Natural Resources 401 Water Quality Certification and the U.S. Army Corps of Engineers 404 permit. A 401 Certification is needed when placing material, or fill, into the jurisdictional waters of the United States. Examples are culverts under road crossings, riprap along stream banks and storm water outfall pipes. The term jurisdictional waters refers to large lakes, rivers, streams and wetlands, including those that don't always contain water.

The permitting and certification process is shared between the Department and the U.S. Army Corps of Engineers. More details can be found at the US Army Corps of Engineer's Website at <http://www.usace.army.mil/>. Some of these activities are also described on page 2, item 3 of the enclosed permit.

This permit contains several requirements and should be thoroughly read and understood by you. If your permit requires environmental monitoring, copies of the necessary forms have been enclosed. In all future correspondence regarding your permit please reference your permit number as shown on page 1 of the permit.

Please contact the Water Pollution Enforcement and Compliance Unit if you would like to schedule an Environmental Assistance Visit (EAV) at 573-751-1300. During the visit, staff will review the requirements of the permit and answer any questions that you may have. Staff will also be available to walk the site to advise on Best Management Practices required by the permit. The Department's regional office staff may also contact you to schedule an EAV.

If you were adversely affected by this decision, you may be entitled to an appeal before the administrative hearing commission pursuant to 10 CSR 20-1.020 and Sections 644.051.6 and 621.250, RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission. Contact information for the AHC is as follows: Administrative Hearing Commission, Truman State Office Building, Room 640, 301 W. High Street, P.O. Box 1557, Jefferson City, MO 65102, Phone: 573-751-2422, Fax: 573-751-5018, Website: www.oa.mo.gov/ahc.

Please be aware that this facility may also be subject to any applicable county or other local ordinances or restrictions.

Sincerely,

WATER PROTECTION PROGRAM



John Madras
Director

JM/sb

Enclosure

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

General Operating Permit

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No: MOR100085
Owner: Jefferson County Public Works
Address: 725 Maple Street
HILLSBORO, MO 63050

Continuing Authority: Jefferson County Public Works
725 Maple Street
Hillsboro, MO 63050

Facility Name: Jefferson County Public Works
Facility Address: 725 Maple Street
HILLSBORO, MO 63050

Legal Description: NE 1/4, NW 1/4, Sec. 18, T43N, R04E, Jefferson County
UTM Coordinates: 707713.731/4260873.295
Receiving Stream: Tributary to Big River (U)
First Classified Stream - ID#: Meramec R. (P) 1841.00
USGS# and Sub Watershed#: 07140104 - 0407

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

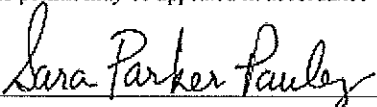
FACILITY DESCRIPTION All Outfalls SIC #1629

All Outfalls - Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading and other activity that results in the destruction of the root zone and/or land disturbance activity that is reasonably certain to cause pollution of waters of the state)

This permit authorizes only wastewater, including storm water, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System. It does not apply to other regulated areas. This permit may be appealed in accordance with RSMo Section 644.051.6 and 621.250, 10 CSR 20-6.020, and 10 CSR 20-1.020.

May 20, 2013

Issue Date


Sara Parker Pauley, Director
Department of Natural Resources

May 30, 2017

Expiration Date


John Madras
Director, Water Protection Program

A. APPLICABILITY

1. This general permit authorizes the discharge of stormwater and certain non-stormwater discharges from land disturbance sites that disturb one or more acres of land or disturb less than one acre when part of a larger common plan of development or sale that will disturb a cumulative total of one or more acres over the life of the project.

This general permit also authorizes the discharge of stormwater and certain non-stormwater discharges from smaller projects where the Missouri Department of Natural Resources (Department) has exercised its discretion to require a permit [10 CSR 20-6.200 (1)(B)].

This general permit is issued to a city, county, state or federal agency or other governmental jurisdiction for land disturbance projects performed by or under contract to the permittee. A stormwater control plan or stormwater pollution prevention plan (SWPPP) must be developed prior to issuance of this permit. These plans must include a narrative of the types and appropriate uses of Best Management Practices (BMPs) for erosion and sediment control and stormwater management.

All water pollution controls on land disturbance sites shall conform to the storm water control program and/or SWPPP of the city, county or other governmental jurisdiction in which the land disturbance activity is occurring. These storm water control programs and/or SWPPPs shall be developed prior to permit issuance. The requirements of the stormwater control program and/or SWPPP must be at least as stringent as those described in this permit and 10 CSR 20-6.200. If the permittee is a regulated municipal separate stormwater system (MS4), the stormwater program and/or SWPPP must comply with the permittee's MS4 permit. The Department may enforce the requirements of the stormwater program and/or SWPPP.

All projects covered under this permit must also be identified as part of the Missouri State Operating Permit covered area and must have a SWPPP developed specific to the project site. The site specific SWPPP shall be developed prior to removal of any vegetation or site disturbance. This SWPPP must contain all the SWPPP requirements of this permit.

Any site owner/operator subject to these requirements for stormwater discharges and who disturbs land *prior* to permit issuance from the Department or prior to the development of the SWPPP is in violation of both State and Federal Laws.

The legal owner of the property, the right-of-way or the easement on which the site is located and the operator are responsible for compliance with this permit.

2. This permit authorizes discharges from construction support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided that appropriate stormwater controls are designed, installed, maintained and provided:
 - a. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;
 - b. The support activity is not a commercial operation; and
 - c. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports.

It is the permittee that is responsible for compliance with this permit for any construction support activities.

3. This permit authorizes non-stormwater discharges from the following activities provided that these discharges are addressed in the SWPPP required by this general permit:
 - a. De-watering activities if there are no contaminants other than sediment present in the discharge, and the discharge is treated as specified in Requirements, Section C.10.1. of this permit;
 - b. Flushing water hydrants and potable water lines;
 - c. Water only (i.e., without detergents or additives) rinsing of streets and buildings; and
 - d. Site watering to establish vegetation.
4. This general permit does not authorize the placement of fill materials in flood plains, the obstruction of stream flow, directing stormwater across private property not owned or operated by the permittee, or changing the channel of a defined drainage course. This general permit addresses only the quality of the stormwater runoff and the minimization of off-site migration of sediments and other water contaminants.
5. This general permit does not authorize any discharge to waters of the state of sewage or pollutants including but not limited to:
 - a. Any hazardous material, oil, lubricant, solid waste or other non-naturally occurring substance from the site, including fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
 - b. Soaps or solvents used in vehicle and equipment washing;
 - c. Hazardous substances or petroleum products from an on-site spill or handling and disposal practices,
 - d. Wash and/or rinse waters from concrete mixing equipment including ready mix concrete trucks, unless managed by an appropriate control. Any such pollutants must be adequately treated and addressed in the SWPPP, and cannot be discharged to waters of the state;
 - e. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
 - f. Wastewater generated from air pollution control equipment or the containment of scrubber water in lined ponds;
 - g. Domestic wastewaters, including gray waters; or
 - h. Industrial stormwater runoff.
6. The Department reserves the right to revoke or deny coverage under this general permit to applicants for stormwater discharges from land disturbance activities at sites that have contaminated soils that will be disturbed by the land disturbance activity or where such materials are brought to the site to use as fill or borrow. A site-specific permit may be required to cover such activities.
7. If Department may require any person authorized by a general permit to apply for and obtain an individual operating permit [10 CSR 20-6.010 (13) (C)].

The Department may require the permittee to apply for and obtain a site-specific or different general permit if:

- a. The permittee is not in compliance with the conditions of this general permit;
- b. The discharge no longer qualifies for this general permit due to changed site conditions and/or regulations; or
- c. Information becomes available that indicates water quality standards have been or may be violated.

8. The permittee will be notified in writing of the requirement to apply for a site-specific permit or a different general permit. When a site-specific permit or different general permit is issued to the authorized permittee, the applicability of this general permit to the permittee is automatically terminated upon the effective date of the site specific or different general permit.
9. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site-specific permit [10 CSR 20-6.010 (13)(D)].
10. This permit does not authorize land disturbance activity in jurisdictional waters of the United States as defined by the Army Corps of Engineers, unless the permittee has obtained the required 404/401 permit. Land disturbance activities may not begin in the affected portions of the site until the required 404/401 permits have been obtained.
11. This permit does not supersede compliance with the Historic Preservation Act or the Endangered Species Act.
12. This permit does not supersede any requirement for obtaining project approval under an established local authority.
13. This permit is not transferable to other owners or operators.

B. EXEMPTIONS FROM PERMIT REQUIREMENTS

1. Facilities that discharge all stormwater runoff directly to a combined sewer system are exempt from stormwater permit requirements.
2. Land disturbance activity as described in [10 CSR 20-6.200 (1) (B)] and [10 CSR 20-6.010 (1) (B)] where water quality standards are not exceeded.
3. Linear, strip, or ribbon construction (as described in [10 CSR 20-6.200 (1) (B) 8]) where water quality standards are not exceeded.
4. Sites that disturb less than one acre of total land area as described in [10 CSR20-6.200 (1)(B)7], that are not part of a common plan or sale and that do not cause any violations of water quality standards, and are not otherwise designated by the Department as requiring a permit.
5. Agricultural stormwater discharges and irrigation return flows as described in [10CSR 20-6.200 (1) (B) 6].

C. REQUIREMENTS

These requirements do not supersede nor remove any requirement to comply with county or other local ordinances [10 CSR20-6.010(14) (D)]:

1. This permit is to ensure the design, the installation and the maintenance of effective erosion controls and sediment controls to minimize the discharge of pollutants. At minimum, such controls must be designed, installed and maintained to:
 - a. Control stormwater volume and velocity within the site to minimize soil erosion;
 - b. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
 - c. Minimize the amount of soil exposed during construction activity;
 - d. Minimize the disturbance of steep slopes;

- e. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle size expected to be present on the site.;
 - f. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and
 - g. Minimize soil compaction and, unless infeasible, preserve topsoil.
2. The primary requirement of this permit is the development and implementation of a SWPPP which incorporates site specific practices to best minimize the soil exposure, soil erosion, and the discharge of pollutants. The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this general permit throughout the term of all land disturbance projects covered under this permit.
 3. The permittee must inspect all land disturbance sites as described in C.13 of this permit.
 4. The permittee shall provide a list of active land disturbance sites to the Department on a quarterly basis. The list shall contain the name of the project, location (including the County), name of the primary receiving water(s) for each project, description of the project, number of acres disturbed, percent completion of the project and projected date of completion. The permittee shall submit quarterly reports each January, April, July and October. The Department must receive reports by the end of the specified month.
 5. The permittee is required to keep a current copy of the SWPPP at an easily accessible location so that it can be made available at the time of an onsite inspection by the Department or local agency approving stormwater management plans.

The SWPPP must:

- a. List and describe all outfalls or primary receiving water(s) for the project;
- b. Incorporate required practices identified below;
- c. Incorporate erosion control practices specific to site conditions;
- d. Provide for maintenance and adherence to the plan;
- e. Discuss whether or not a 404/401 Permit is required for the project; and
- f. Name the person responsible for inspection, operation and maintenance of BMPs.

The purpose of the SWPPP is to ensure; the design, implementation, management and maintenance of Best Management Practices (BMPs) in order to prevent sediment and other pollutants in stormwater discharges associated with the land disturbance activities; compliance with the Missouri Water Quality Standards; and compliance with the terms and conditions of this general permit.

The permittee shall select, install, use, operate and maintain appropriate BMPs for the permitted site. The following manuals are acceptable resources for the selection of appropriate BMPs.

Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Activities (Document number EPA 833-R-06-004) published by the United States Environmental Protection Agency (USEPA) in May 2007. This manual as well as other information, including examples of construction SWPPPs, is available at the USEPA internet site at <http://cfpub1.epa.gov/npdes/stormwater/swppp.cfm>; and

The latest version of *Protecting Water Quality: A field guide to erosion, sediment and stormwater best management practices for development sites in Missouri*, published by the Missouri Department of Natural Resources. This manual is available on the Department's internet site at: <http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm>.

The permittee is not limited to the use of these guidance manuals. Other guidance publications may be used to select appropriate BMPs. However, all BMPs should be described and justified in the SWPPP.

6. **SWPPP Requirements:** The following information and practices shall be provided for in the SWPPP:
 - a. **Nature of the Construction Activity:** The SWPPP briefly must describe the nature of the construction activity, including:
 - 1) The function of the project (e.g., low density residential, shopping mall, highway, etc.);
 - 2) The intended sequence and timing of activities that disturb the soils at the site;
 - 3) Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities including off-site borrow and fill areas; and
 - 4) A general map (e.g., United States Geological Survey quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and waters of the United States within one mile of the site.
 - b. **Site Map:** The SWPPP must contain a legible site map showing the site boundaries and outfalls and identifying:
 - 1) Direction(s) of stormwater flow and approximate slopes anticipated after grading activities;
 - 2) Areas of soil disturbance and areas that will not be disturbed (or a statement that all areas of the site will be disturbed unless otherwise noted);
 - 3) Location of major structural and non-structural BMPs identified in the SWPPP;
 - 4) Locations where stabilization practices are expected to occur;
 - 5) Locations of off-site material, waste, borrow or equipment storage areas;
 - 6) Locations of all waters of the United States (including wetlands);
 - 7) Locations where stormwater discharges to a surface water; and
 - 8) Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
 - c. **Site Description:** In order to identify the site, the SWPPP shall include facility and receiving water(s) information. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs.
 - d. **Effluent Limits:** The permittee must select control measurements (e.g., BMPs, controls, practices, etc.) to meet effluent limits found in Section E.1. of this permit. All control measures must be properly selected, installed and maintained in accordance with any relevant manufacturer specifications and good engineering practices to ensure stormwater outfall discharges do not cause water quality problems. The permittee must implement the control measures from commencement of the construction activity until final stabilization is complete unless the exception noted in Section C.6.i. of this permit applies.
 - e. **Selection of Temporary and Permanent Non-Structural BMPs:** The permittee shall select appropriate non-structural BMPs for use at the site and list them in the SWPPP. The SWPPP shall require existing vegetation to be preserved where practical. For surface waters located on or immediately adjacent to the site, the permittee must provide at minimum a 25-foot buffer of undisturbed natural vegetation between the disturbed portions of the site and the surface water unless infeasible or where there is a more stringent local requirement. The buffer is measured perpendicularly from the ordinary high water mark or the bank edge, whichever is further landward from the water. The time period for disturbed areas to be without vegetative cover is to be minimized to the maximum extent practicable. Examples of non-structural BMPs which the permittee should consider specifying in the SWPPP include preservation of trees and mature vegetation, protection of existing vegetation

for use as buffer strips, mulching, sodding, temporary seeding, final seeding, geotextiles, stabilization of disturbed areas, preserving existing stream channels as overflow areas when channel straightening or shortening is allowed, soil stabilizing emulsions and tackifiers, mulch tackifiers, stabilized site entrances/exits and other appropriate BMPs.

- f. Selection of Temporary and Permanent Structural BMPs: The permittee shall select appropriate structural BMPs for use at the site and list them in the SWPPP. Examples of structural BMPs that the permittee should consider specifying in the SWPPP include diverting flows from undisturbed areas away from disturbed areas, silt (filter fabric and/or straw bale) fences, earthen diversion dikes, drainage swales, sediment traps, rock check dams, subsurface drains (to gather or transport water for surface discharge elsewhere), pipe slope drains (to carry concentrated flow down a slope face), level spreaders (to distribute concentrated flow into sheet flow), storm drain inlet protection and outlet protection, reinforced soil retaining systems, gabions, temporary or permanent sediment basins and other appropriate BMPs.
- g. Description of BMPs: The SWPPP shall include a description of both structural and non-structural BMPs that will be used at the site.

The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:

- 1) Physical description of the BMP;
- 2) Site and physical conditions that must be met for effective use of the BMP;
- 3) BMP installation/construction procedures, including typical drawings; and
- 4) Operation and maintenance procedures for the BMP.

The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:

- 1) Whether the BMP is temporary or permanent;
- 2) Where, in relation to other site features, the BMP is to be located;
- 3) When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project; and
- 4) Site conditions that must be met before removal of the BMP if the BMP is not a permanent BMP.

- h. Disturbed Areas: Slopes for disturbed areas must be defined in the SWPPP. A site map or maps defining the sloped areas for all phases of the project must be included in the SWPPP.

Temporary stabilization is to take place where soil disturbing activities will cease on any portion of the site and are not planned to resume for a period exceeding 14 calendar days. Temporary stabilization must be initiated immediately upon knowing the duration is more than 14 days. Temporary stabilization must be completed within 7 calendar days. Temporary stabilization shall consist of well-established and maintained BMPs that are reasonably certain to protect waters of the state from sediment pollution over an extended period of time. This may require adding more BMPs to an area than is normally used during daily operations. These BMPs may include a combination of sediment basins, check dams, sediment fences and mulch. The types of BMPs used must be suited to the area disturbed, taking into account the number of acres exposed and the steepness of the slopes. If the slope of the area is greater than 3:1 (3 feet horizontal to one foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, then the permittee shall establish temporary stabilization within seven days of ceasing operations on that part of the site.

Final stabilization of disturbed areas must be initiated immediately and completed within 7 calendar days whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site.

Allowances to the 7 day completion period for temporary and final stabilization may be made due to weather and equipment malfunctions. The use of allowances shall be documented in the SWPPP.

- i. Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP. Peripheral or border BMPs to control runoff from disturbed areas shall be installed or marked for preservation before general site clearing is started. Note that this requirement does not apply to earth disturbances related to initial site clearing and establishing entry, exit and access of the site, which may require that stormwater controls be installed immediately after the earth disturbance. Stormwater discharges from disturbed areas which leave the site shall pass through an appropriate impediment to sediment movement such as a sedimentation basin, sediment traps and silt fences prior to leaving the land disturbance site. A drainage course change shall be clearly marked on a site map and described in the SWPPP. The location of all BMPs must be indicated on a site map, included in the SWPPP.
- j. Sedimentation Basins: The SWPPP shall include a sedimentation basin for each drainage area with ten or more acres disturbed at one time. The sedimentation basin shall be sized to contain a volume of at least 3,600 cubic feet per each disturbed acre draining thereto. Accumulated sediment shall be removed from the basin when basin is 50% full. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface unless infeasible. Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream. The SWPPP shall require the basin be maintained until final stabilization of the disturbed area served by the basin.

Where use of a sediment basin is impractical, the SWPPP shall evaluate and specify other similarly effective BMPs to be employed to control erosion and sediment delivery. These similarly effective BMPs shall be based on good engineering practices. The BMPs must provide equivalent water quality protection to achieve compliance with this permit. The SWPPP shall require both temporary and permanent sedimentation basins to have a stabilized spillway to minimize the potential for erosion of the spillway or basin embankment.

- k. Pollution Prevention Measures: The SWPPP shall include BMPs for pollution prevention measures. At minimum such measures must be designed, installed, implemented and maintained to:
 - 1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge ;
 - 2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater; and
 - 3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures. Included but not limited to the installation of containment berms and use of drip pans at petroleum product and liquid storage tanks and containers.

- l. Dewatering: Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. The SWPPP shall include a description of any anticipated dewatering methods including the anticipated volume of water to be discharged and the anticipated maximum flow discharged from these dewatering activities expressed in gallons per minute. Maximum flow may be stated in the SWPPP as an estimate based on the type and capacity of equipment being used for dewatering. The SWPPP shall call for specific BMPs designed to treat water pumped from trenches and excavations and in no case shall this water be pumped off-site without being treated by the specified BMPs. When discharging from basins and impoundments utilize outlet structures that withdraw water from the surface, unless infeasible.
- m. Roadways: Where applicable, upon installation of or connection to roadways, all efforts should be made to prevent the deposition of earth and sediment onto roadways through the use of proper BMPs. Stormwater inlets susceptible to receiving sediment from the permitted land disturbance site shall have curb inlet protection. Where stormwater will flow off the end of where a roadway terminates, a sediment catching BMP such as gravel berm or silt fence shall be provided. Roadways and curb inlets shall be inspected weekly or following a rainfall that generates a run-off and cleaned as necessary to maintain a clean roadway and drainage system. Where practicable, construction entrance BMP controls shall be used to prevent sediment track-out.
7. Good housekeeping practices shall be maintained at all times to keep waste from entry into waters of the state. Solid and hazardous waste management include providing trash containers and regular site clean-up for proper disposal of solid waste such as scrap building material, product/material shipping waste, food containers and cups, and providing containers and proper disposal of waste paints, solvents and cleaning compounds. The provision of portable toilets for proper disposal of sanitary sewage and the storage of construction materials should be kept away from drainage courses and low areas.
8. All fueling facilities present shall at all times adhere to applicable federal and state regulations concerning underground storage, above ground storage and dispensers.
9. Hazardous wastes that are transported, stored, or used for maintenance, cleaning, or repair shall be managed according to the provisions of the Missouri Hazardous Waste Laws and Regulations.
10. All paint, solvents, petroleum products, petroleum waste products and storage containers such as drums, cans, or cartons shall be stored according to BMPs. The materials exposed to precipitation shall be stored in watertight, structurally sound, closed containers. All containers shall be inspected for leaks or spillage during the once per week inspection of BMPs.
11. Amending/Updating the SWPPP: The permittee shall amend and update the SWPPP as appropriate during the term of the land disturbance activity. The permittee shall amend the SWPPP at a minimum whenever the:
 - a. Design, operation, or maintenance of BMPs is changed;
 - b. Design of the construction project is changed that could significantly affect the quality of the stormwater discharges;
 - c. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
 - d. The Department notifies the permittee in writing of deficiencies in the SWPPP;
 - e. SWPPP is determined to be ineffective in minimizing or controlling erosion and sedimentation (e.g., there is visual evidence of excessive site erosion or excessive sediment deposits in streams or lakes);
 - f. Settleable Solids from a stormwater outfall exceed 2.5 ml/L; and
 - g. The Department determines violations of water quality standards may occur or have occurred

12. An individual shall be designated by the permittee as responsible for environmental matters. The individual responsible for environmental matters shall have a thorough and demonstrable knowledge of the site's SWPPP and sediment and erosion control practices in general. The individual responsible for environmental matters or a designated inspector knowledgeable in erosion, sediment and stormwater control principles shall inspect all structures that function to prevent pollution of waters of the state including those for material, waste, borrow, or equipment storage and maintenance areas that are covered by this permit. These inspections shall be conducted in accordance with No. 13 of these requirements.
13. Site Inspection Reports: The permittee (or a representative of the permittee) shall conduct regularly scheduled inspections at least once per seven calendar days. These inspections shall be conducted by a qualified person, one who is responsible for environmental matters at the site, or a person trained by and directly supervised by the person responsible for environmental matters at the site. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. All stormwater outfalls shall be inspected for evidence of erosion or sediment deposition. When practicable the receiving stream shall also be inspected for 50 feet downstream of the outfall. Any structural or maintenance problems shall be noted in an inspection report and corrected within seven calendar days of the inspection. If a rainfall causes stormwater runoff to occur on-site, the BMPs must be inspected. These inspections must occur within 48 hours after the rain event has ceased during a normal work day and within 72 hours on the next business day if the rain event ceases during a non-work day such as a weekends or holiday. The total rainfall measured for that day must be recorded. A properly maintained rain gauge must be kept on site or the storm event information may be obtained from a weather station that is representative of your location.

The SWPPP must explain how the person responsible for erosion control will be notified when stormwater runoff occurs. If weather conditions prevent correction of BMPs within 7 calendar days, the reasons for the delay must be documented (including pictures) and there must be a narrative explaining why the work cannot be accomplished within the 7 day time period. The documentation must be filed with the regular inspection reports. The permittee shall correct the problem as soon as weather conditions allow.

A log of each inspection and a current copy, of all the inspection reports shall be kept at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or at the request of the Department. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so. The inspection report is to include the following minimum information:

- a. Inspector's name;
 - b. Date of inspection;
 - c. Observations relative to the effectiveness of the BMPs;
 - d. Actions taken or necessary to correct the observed problem; and
 - e. Listing of areas where land disturbance operations have permanently or temporarily stopped.
14. Proper Operation and Maintenance: The permittee shall at all times maintain all pollution control measures and systems in good order to achieve compliance with the terms of this general permit.
 15. Notification to All Contractors: The permittee shall be responsible for notifying each contractor or entity (including utility crews and city employees or their agents) that will perform work at the site of the existence of the SWPPP and what action or precautions shall be taken while on-site to minimize the potential for erosion and the potential for damaging any BMP. The permittee is responsible for any damage a subcontractor may do to established BMPs and any subsequent water quality violation resulting from the damage.

16. **Public Notification:** The permittee shall post a copy of the public notification sign described by the Department at the main entrance to the site. The public notification sign must be visible from the public road that provides access to the site's main entrance. An alternate location is acceptable provided the public can see it and it is noted in the SWPPP. The public notification sign must remain posted at the site until the permit has been terminated.

D. OTHER DISCHARGES

1. **Hazardous Substance and Oil Spill Reporting:** Refer to Section B, #14 of Part I of the Standard Conditions that accompany this permit.
2. **Removed substances:** Refer to Section B, #6 of Part I of the Standard Conditions that accompany this permit.
3. **Change in discharge:** In the event soil contamination or hazardous substances are discovered at the site during land disturbance activities, the permittee shall notify the Department's regional office by telephone as soon as practicable but no later than 24 hours after discovery. The permittee must also notify the Department's regional office in writing no later than 14 calendar days after discovery.

E. SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

1. **Settleable Solids** discharging from a stormwater outfall shall not exceed 2.5 ml/L per Standard Method 2540 F for storm events up to but not exceeding the local 2-year, 24-hour storm. The Settleable Solids limit does not apply during storm events that exceed the local 2-year, 24-hour storm.
2. The Department may require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of contamination from activities at the site. If such an action is needed, the Department will specify in writing any sampling requirements, including such information as location, extent and parameters.

F. RECORDS

1. The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis and all site inspection records required by this general permit. The records shall be accessible during normal business hours. The records shall be retained for a period of at least three years from the date of the Letter of Termination.
2. The permittee shall provide a copy of the SWPPP to the Department, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties.
3. The permittee shall ensure a copy of the SWPPP to those who are responsible for installation, operation, or maintenance of any BMP. The permittee, their representative, and/or the contractor(s) responsible for installation, operation and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site.

G. LAND PURCHASE AND CHANGE OF OWNERSHIP

1. Federal and Missouri stormwater regulations [10 CSR 20-6.200] require a stormwater permit and erosion control measures for all land disturbances of one or more acres. These regulations also require a permit for less than one acre lots if the lot is part of a common plan of development or sale where that plan is at least one acre in size. If the permittee sells less than one acre of the permitted site to an entity for, commercial, industrial, or residential use, (unless sold to an individual for the purpose of building his/her own private residence and in accordance with No. 3 of this section) this land remains a part of the common sale and regulated by this permit. Therefore, the permittee is still responsible for erosion control on the sold property until termination of the permit.
2. If the permittee sells one or more acres of the permitted site to an entity, the new owner of the property must obtain a land disturbance permit for the purchased property. The original permittee must amend the SWPPP to show that the property (one acre or more) has been sold and therefore no longer under the original permit jurisdiction.
3. If the permittee has stabilized the less than one acre lot which is part of a larger common plan of development and the lot is sold to an individual for purposes of building his/her own private residence, the permittee is no longer responsible for erosion control on the lot.
4. Property of any size which is part of a larger common plan of development where the property has been stabilized and the original permit terminated will require application of a new land disturbance permit for any future land disturbance activity.
5. If the entire tract is sold to a single entity, then this permit shall be terminated when the new owner obtains a new land disturbance permit for the site.

H. TERMINATION

This permit may be terminated when the project is stabilized. The project is considered to be stabilized when perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetation cover shall be at least 70% plant density over 100% of the site. In order to terminate the permit, the permittee shall notify the Department.

The Cover Page (Certificate Page) of the Master General Permit for Land Disturbance specifies the "effective date" and the "expiration date" of the Master General Permit. The "issued date" along with the "expiration date" will appear on the State Operating Permit issued to the applicant. This permit does not continue administratively beyond the expiration date.

If the project or development completion date will be after the expiration date of this general permit, then the permittee must reapply to the Department for a new permit. The applicant must file a request to the Department for a new permit 180 days prior to the expiration of this permit.

If the permittee has not terminated the permit and the permit expires, and the permittee has not applied for a new permit the permittee will be consider "operating without a permit" if the site does not meet the requirements for termination.

I. MODIFICATION, REVOCATION, AND REOPENING

1. The U.S. Environmental Protection Agency (EPA) has proposed stormwater requirements that may direct the State to reopen this permit. The EPA is proposing to change its construction general permit (CGP) with more prescriptive requirements and design standards for buffers to prevent stormwater runoff, increased monitoring requirements and more frequent inspections. While the EPA permit is only effective in areas where EPA has permitting authority these requirements are likely to act as a template, setting a baseline for the agency's approval of state plans for permitting sites.
2. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by reopening this permit, or revoking this permit and requiring the owner/operator of the permitted site to apply for a site-specific permit, the Department may revoke a general permit and require any person to obtain such an operating permit as authorized by 10 CSR 20-6.010 (13) and 10 CSR 20-6.200(5).
3. If this permit is re-opened, modified or revoked pursuant to this Section, the permittee retains all rights under Chapter 536 and 644 Revised Statutes of Missouri upon the Department's reissuance of the permit as well as all other forms of administrative, judicial, and equitable relief available under law.

J. DUTY TO COMPLY

The permittee must comply with all conditions of this general permit. Any noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION**

Revised
October 1, 1980

PART I - GENERAL CONDITIONS

SECTION A - MONITORING AND REPORTING

1. **Representative Sampling**
 - a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
 - b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.
2. **Schedule of Compliance**
No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting the permit.
3. **Definitions**
Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.
4. **Test Procedures**
Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7015.
5. **Recording of Results**
 - a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
 - (i) the date, exact place, and time of sampling or measurements;
 - (ii) the individual(s) who performed the sampling or measurements;
 - (iii) the date(s) analyses were performed;
 - (iv) the individual(s) who performed the analyses;
 - (v) the analytical techniques or methods used; and
 - (vi) the results of such analyses.
 - b. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or both.
 - c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
6. **Additional Monitoring by Permittee**
If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

SECTION B - MANAGEMENT REQUIREMENTS

1. **Change in Discharge**

- a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.
- b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such change, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.

2. **Noncompliance Notification**

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions:
 - (i) a description of the discharge and cause of noncompliance, and
 - (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
- b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

3. **Facilities Operation**

Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.

4. **Adverse Impact**

The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.



Missouri
Department of
Natural Resources

STORMWATER DISCHARGES FROM
THIS LAND DISTURBANCE SITE ARE
AUTHORIZED BY THE MISSOURI STATE
OPERATING PERMIT NUMBER:

IF YOU HAVE QUESTIONS OR
CONCERNS ABOUT STORMWATER
DISCHARGES FROM THIS SITE, PLEASE
CONTACT THE MISSOURI
DEPARTMENT OF NATURAL
RESOURCES AT

1-800-361-4827

FACT SHEET

MOR100085 LAND DISTURBANCE GENERAL PERMIT 2012 Reissue

The purpose of this fact sheet is for permit clarity. It is not an enforceable part of the permit. The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Fact Sheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

PART I. NPDES Stormwater General Permit

The vast majority of discharges associated with construction activity are covered under NPDES general permits. General permits cover a group of similar dischargers under one permit. General permits simplify the process for dischargers to obtain authorization to discharge, provide permit requirements for any discharger that applies for coverage, and reduce the administrative workload for NPDES permitting authorities.

This General Permit is for regulating stormwater discharge at land disturbance construction sites in Missouri. This program requires the owner or operator of a construction site disturbing land of one acre or greater, or less than one acre but part of a larger common plan of development, to obtain this permit prior to conducting any land disturbance activity.

PART II. The Need for Stormwater Regulations at Construction Sites

Stormwater runoff is a major source of urban water pollution endangering humans by polluting the water resources used for drinking, household purposes, recreation and fishing. Stormwater discharges often contain pollutants in amounts that could reduce water quality. The primary pollutants of concern from construction activities are silt and sediment, but other pollutants such as oils and grease, vehicle fluids, and debris are present as well.

Stormwater runoff from construction activities can have a significant impact on water quality. As stormwater flows over a construction site, it can pick up pollutants like sediment, debris, and chemicals and transport these to a nearby storm sewer system or directly to a river, lake, or coastal water. Polluted stormwater runoff can harm or kill fish and other wildlife. Sedimentation can destroy aquatic habitat, and high volumes of runoff can cause stream bank erosion. Debris can clog waterways and potentially reach the ocean where it can kill marine wildlife and impact habitat.

Construction activities increase pollutant loads in runoff. The volume and rate of runoff are typically increased, providing a larger capacity to transport pollutants to rivers and lakes. In addition, the removal of vegetation leaves bare soil which is much more vulnerable to erosion, resulting in sediment moving into receiving waters.

Additional stormwater information and requirements including application for a land disturbance permit can be found at <http://dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm>.

PART III. Key Component and Primary Requirement of this Permit

The key component of this permit are effluent limitations that require the permittee to minimize discharge of pollutants in stormwater by using control measures that reflect best engineering practices based on federal and state government best professional judgment. Dischargers must minimize their discharge of pollutants in stormwater using appropriate erosion and sediment controls and control measures for other pollutants such as litter, construction debris, and construction chemicals that could be exposed to stormwater and other wastewater. The primary requirement of this general permit is the development and implementation of a stormwater pollution prevention plan (SWPPP) to document the steps they will take to comply with the terms, conditions and effluent limitations of the permit. Note that the SWPPP is not an effluent limitation, nor does it include effluent limitations. Information including examples of a SWPPP can be found at the following <http://cfpub.epa.gov/npdes/stormwater/swppp.cfm#model>. These examples should be used for educational or training purposes only. Construction site SWPPPs must be developed following the requirements of Missouri's land disturbance permit and describe the specific conditions of the site and plans for development.

PART IV. Additional Information for the Purpose of Permit Clarity

Applicability

- **“Industrial stormwater run-off”** are activities that take place at industrial facilities, such as material handling and storage, that are often exposed to the weather. As runoff from rain or snowmelt comes into contact with these activities, it can pick up pollutants and transport them to a nearby storm sewer system or directly to a river, lake, or coastal water. To

minimize the impact of stormwater discharges from industrial facilities, the NPDES program includes an industrial stormwater permitting component that covers 10 categories of industrial activity that require authorization under an NPDES industrial stormwater permit for stormwater discharges. More information on industrial permit requirements can be found at <http://dnr.mo.gov/env/wpp/stormwater/sw-industrial-permits.htm>.

- A **“larger common plan of development or sale”** is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. For example, if a developer buys a 20-acre lot and builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures sometime in the future, this would be considered a larger common plan of development or sale. If the land is parceled off or sold, and construction occurs on plots that are less than one acre by separate, independent builders, this activity still would be subject to stormwater permitting requirements if the smaller plots were included on the original site plan. Other than the less than one acre property sold to the individual for construction of their personal residence, property of any size which is part of a larger common plan of development where the property has been stabilized and the original permit terminated will require application of a new land disturbance permit for any future land disturbance activity. The larger common plan of development or sale also applies to other types of land development such as industrial parks or well fields. A permit is required if one or more acres of land will be disturbed, regardless of the size of any of the individually-owned or developed sites.

- The **SWPPP** required for permit issuance is a general document written in a manner that can be utilized for any project throughout the governmental jurisdiction as each individual project is planned and designed. Individual projects covered under this permit must have a SWPPP developed specific to the project site prior to any remove of any vegetation or site disturbance. Individual projects must be identified in the quarterly report.
- Documentation of Permit Eligibility Related to **Endangered Species**: The SWPPP must include documentation supporting a determination of permit eligibility with regard to Endangered Species.
For more information please visit the following links:

For information on understand what critical habitat is, please go to the following link,
www.fs.fed.us/r9/wildlife/tes/docs/esa_references/critical_habitat.pdf.

For information on listed species by State & County, please go to the following link,
<http://cfpub.epa.gov/npdes/stormwater/esa.cfm>.

The Missouri Department of Conservation's internet site for the Natural Heritage Review may be very helpful and can be found at the following link,
<http://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm>. Also helpful are the local offices of the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS), these centers often maintain lists of federally listed endangered or threatened species on their internet sites.

If there are listed species in the county or township, check to see if critical habitat has been designated and if that area overlaps or is near the project area. Critical habitat designations and associated requirements may also be found at 50 CFR Parts 17 and 226. For additional information, use the mapview tool at <http://criticalhabitat.fws.gov/crithab/> to find data specific to your state and county.

- A Clean Water Act Section 404 Department of the Army Permit and the Department's Clean Water Act Section 401 Water Quality Certification (certification) are needed when placing material or fill into jurisdictional waters of the United States. Any impacts to jurisdictional streams or wetlands would require an application to be sent to the appropriate US Army Corps of Engineers District Regulatory Branch. A map of the district offices and contact information can be located online at: <http://www.dnr.mo.gov/env/wpp/401/corps-map3.gif>). Not all land disturbance projects will require a 404 permit; however, if a 404 permit is required, land disturbance activities are not to be conducted in the jurisdictional area of the project until the 404 permit has been obtained. A discussion on the need for a 404/401 permit as a requirement of this permit and is to be included in the SWPPP.

Exemptions from Permit Requirements

- The USEPA defines **linear projects** to include the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area. Missouri regulation 10 CSR 20-6.200 (1)(B) 8 exempts linear project construction from stormwater permit regulations which meet one of the following: A. Grading of existing dirt or gravel roads which does not increase the runoff coefficient and the addition of an impermeable surface over an existing dirt or gravel road; B. Cleaning or routine maintenance of roadside ditches, sewers, waterlines, pipelines, utility lines or similar facilities; C. Trenches two (2) feet in width or less; or D. Emergency repair or replacement of existing facilities as long as best management practices are employed during the emergency repair.

Permit Requirements

- The permit requires that the “**sequence and timing**” of activities for disturbing soils at the site be addressed in the SWPPP. For purposes of this requirement and to allow flexibility for contractors, “sequence and timing” can be replaced with “intended start and completion date” of activities.
- The requirement of a **buffer area** applies only to surface water as defined by the Environmental Protection Agency. The Department does not consider stormwater control features (e.g. stormwater conveyance channels, storm drain inlets, sediment basins) to constitute “surface waters” for the purpose of triggering the buffer area requirement. Areas that the permittee does not own or that are otherwise outside operational control may be considered areas of undisturbed natural buffer for purposes of compliance with this requirement.
- Areas that are no longer being disturbed, **stabilization of the area must be initiated immediately**. For purposes of this permit the following types of activities will constitute the initiation of stabilization:
 - a) prepping the soil for vegetative or non-vegetative stabilization;
 - b) applying mulch or other non-vegetative product to the exposed area;
 - c) seeding or planting the exposed area;
 - d) starting any of the activities in # 1 – 3 on a portion of the area to be
 - e) stabilized, but not on the entire area; and
 - f) finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization. This list of examples is not exhaustive.

The term “immediately” is used to define the deadline for initiating stabilization measures. In the context of this requirement, “immediately” means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

- The permit requires the submittal of a **quarterly report**. The required quarterly report should be sent to the Department by post mail to P.O. Box 176, Jefferson City MO 65102, and/or by email to wpssc401cert@dnr.mo.gov.
- The permittee is required to conduct inspections of the site. The person(s) inspecting the site may be a staff person or a hired third party to conduct such inspections. The permittee is responsible for ensuring that the person who conducts inspections is a “qualified person or personnel.” A “**qualified person**” is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected to control the quality of stormwater discharges from the construction activity.
- A sample **inspection report** has been developed as a helpful tool to aid in completing site inspections. This sample inspection report was created consistent with USEPA’s Developing Your Stormwater Pollution Prevention Plan and can be found at http://www.epa.gov/npdes/pubs/sw_swppp_inspection_form.doc. Both the guide and the sample inspection report (formatted in Microsoft Word) can be found at <http://cfpub.epa.gov/npdes/stormwater/swppp.cfm>.

- For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) **sediment basin** that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent control measures, must be provided where attainable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, must be provided where attainable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on-site, etc. In any event, the operator must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment controls must be used where site limitations would preclude a safe design.
- Public Notification: A public notification sign has been added to the permit. If a different sign is to be used it should be one of the same size sign and lettering and containing the same information as that of the one supplied with the permit. The required information includes a statement for those with questions or concerns, the permit number and the Department's toll free phone number. The permittee shall post a copy of the public notification sign described by the Department at the main entrance to the site. An alternate location is acceptable provided the public can see it and it is noted in the SWPPP. The public notification sign must remain posted at the site until the permit has been terminated.

Other Discharges

- Machinery should be kept out of the waterway as much as possible. Fuel, oil and other petroleum products, equipment and any solid waste should not be stored below the ordinary high water mark at any time or in the adjacent floodway beyond normal working hours. All precautions are to be taken to avoid the release of wastes or fuel as a result of this operation. Petroleum products spilled should be immediately cleaned up and disposed of properly. Any such **spills of petroleum or other chemicals** are to be reported as soon as possible to the Department's 24-hour Environmental Emergency Response number at (573) 634-2436.

Sampling Requirements and Other Effluent Limitations

- 40 CFR 450.21 Subpart B - Construction and Development (C&D) Effluent Guidelines are **non-numeric effluent limits** and are structured to require construction operators to first prevent the discharge of sediment and other pollutants through the use of effective planning and erosion control measures; and second, to control discharges that do occur through the use of effective sediment control measures. Permittees are also required to implement a range of pollution prevention measures to limit or prevent discharges of pollutants including those from dry weather discharges. The C&D rule's non-numeric effluent limits are available at the following internet site: <http://www.gpo.gov/fdsys/pkg/CFR-2010-title40-vol29/xml/CFR-2010-title40-vol29-sec450-21.xml>. The associated fact sheet can be found at: http://www.epa.gov/npdespub/pubs/cgp_proposedfs.pdf.

- The USEPA has proposed numeric **effluent limitation guidelines** (ELGs) to control the discharge of pollutants from construction sites of a certain size. The Department may modify this permit upon finalization of the USEPA effluent limitation guidelines. The proposed Effluent limitation guidelines can be view at the following website <http://water.epa.gov/scitech/wastetech/guide/construction/>.

Land Purchase and Change of Ownership

- A person having **operational control over only a portion of a larger project** (e.g., one of four homebuilders in a subdivision), is responsible for compliance with all applicable effluent limits, terms, and conditions of the permit as it relates to the activities on that portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP. This person must ensure either directly or through coordination with other permittees, that these activities do not render another party's pollutant discharge controls ineffective. This person must either implement their own portion of a common SWPPP or develop and implement their own SWPPP. For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Individual operators at a site may, but are not required to, develop separate SWPPPs that cover only their portion of the project provided referenced is made to other operators at the site. In instances where there is more than one SWPPP for a site, cooperation between the permittees is encouraged to ensure stormwater discharge control measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).
- The Department does not allow the transfer of a land disturbance permit from one owner to another; however, to facilitate the change in the ownership status of a property the Department developed the "Application for Change of Ownership" form. This form will allow the new owner to receive a new permit and number. The form may also be used to terminate the original permit if all the property included in the original permit is no longer the responsibility of the original owner. The "Application for Change of Ownership" (form MO780-2051) can be found online at <http://www.dnr.mo.gov/forms/#StormWater>.

Termination

- To begin the process of terminating this permit, the permittee should submit Form H – "Request for Termination" (MO780-1409) to the Department. The form can be found at the following web location: <http://www.dnr.mo.gov/forms/#StormWater>.

PART V. Addendums to Fact Sheet**Addendum #1****Individual Lot Certification**

This form is not a requirement of the permit, but may be used by the permittee when selling individual lots that are part of the property that has been authorized by a Missouri Water Pollution Control General Permit under the NPDES for stormwater discharged associated with construction activity. This is a certification between the purchaser and the seller to cooperatively implement the SWPPP and the conditions of the NPDES permit and does not constitute a transfer of the permit. The permittee shall maintain this form on-site, or in a readily available location. The permittee shall provide individual lot certification forms or a copy of the contract for land sale having the equivalent wording to the Missouri Department of Natural Resources.

Addendum #2**Response to Comments**

The 30-day public notice period for this permit expired on May 30, 2012. These are the responses to comments received through the public notice comment process.

**ADDENDUM #1
INDIVIDUAL LOT CERTIFICATION**

For Storm Water Discharges Associated with Construction Activity Authorized by a Missouri Water Pollution Control General Permit under the National Pollutant Discharge Elimination System

TO BE COMPLETED BY THE NEW LOT OWNER

I certify, under penalty of law, that I have received a copy of the general NPDES permit referenced below, which authorized the original lot owner or developer to discharge storm water runoff from construction activities, and the Storm Water Pollution Prevention Plan (SWPPP) prepared by the original lot owner or developer. I have reviewed the terms and conditions of the general permit and the SWPPP. I accept responsibility for erosion and sediment control during construction of the home or building for each of the lot(s) listed below. In the event the Missouri Department of Natural Resources notifies the undersigned of water quality violations due to conditions at any lot listed below and I am unable or unwilling to take action within 30 days to further reduce erosion or control sediment, then I agree to allow the original lot owner or developer to have reasonable access to the site to implement erosion and sediment control measures. I understand this certification is an agreement between the purchaser and seller to cooperatively implement the SWPPP and the conditions of the general NPDES permit.

Facility Name: _____
(as listed on permit)

Permit Number: MOR _____

Lot Number(s): _____

New Owner's Signature: _____

Name (typed or printed): _____

Phone Number: _____

Complete Only if New Owner is a Corporation and not an Individual:

Company Name: _____

Company Address: _____

Company Phone #: _____

TO BE COMPLETED BY THE PERMIT HOLDER

As permittee for the overall tract wherein the above listed lot(s) are located, I certify that I have provided the above named lot purchaser with a copy of the general NPDES permit and the Storm Water Pollution Prevention Plan (SWPPP) for the project, and I have informed the lot purchaser of their responsibility to minimize erosion and control sedimentation. I understand this certification does not constitute a transfer of the permit and understand this certification is an agreement between the purchaser and seller to cooperatively implement the SWPPP and the conditions of the general NPDES permit.

Signature: _____

Name (typed or printed): _____

Phone Number: _____

The permittee shall maintain this form on-site, or in a readily available location. The permittee shall provide individual lot certifications forms or a copy of the contract for land sale having the equivalent wording to the Missouri Department of Natural Resources upon request.

Addendum #2

MOR100 Land Disturbance Permit Response to Public Notice Comments

(The Missouri Department of Natural Resources' public notice comment period for this permit expired on May, 30, 2012.)

GENERAL COMMENT RESPONSES

STANDARD LAND DISTURBANCE PERMIT - MORA

The Department received comments related to earlier drafts of the Standard Land Disturbance Permit (MORA) and/or comparisons between the MORA and the current draft MOR100 permit. Until there is one land disturbance permit, the two permits will have differences. The Department will as much as possible keep the number of differences at a minimum. There has been no change to the permit as a result of these comments.

FEDERAL REGULATION 40 CFR 450.21

As the NPDES authorized permitting authority, the Department is required to incorporate into the permit the federal regulation 40 CFR 450.21. These are non-numeric effluent limitations reflecting the best practicable technology currently available (BPT). The Department received a few comments regarding these requirements. These requirements will remain stated in the permit as required by the Environmental Protection Agency (EPA). An additional comment was to replace the word "prevent" located throughout the permit with the word "minimize" in order to be consistent with federal regulation. The draft permit's use of the word "minimize" is consistent with the federal regulation. There has been no change to the permit as a result of these comments.

TYPOS/DEFINITIONS/REFERENCES

The Department received comments regarding typos and similar items in the proposed permit. These entries have been corrected in the final permit. The Department received comments suggesting definition and clarification to several areas of the proposed permit. All suggestions were considered and many have been added to the permit Fact Sheet.

SPECIFIC COMMENT RESPONSES

SECTION A. APPLICABILITY

PERMIT ISSUANCE REQUIREMENT - DEVELOPMENT OF SWPPP

Section A.1. - The Department received a comment on the development of a Stormwater Pollution Prevention Plan (SWPPP) prior to the issuance of the permit. The SWPPP required for permit issuance is a general document written in a manner that can be utilized for any project throughout the governmental jurisdiction as each individual project is planned and designed. Project specific plans, maps, etc. as part of the SWPPP must be developed prior to any land disturbance conducted at the site. The Permit Fact Sheet will include more clarity on this section of the permit. Language has been changed to clarify the requirements.

PERMIT LANGUAGE & STORMWATER REGULATION

Section A.1. - The Department received a few comments regarding the applicability of permit coverage when compared to state stormwater regulations. The Department understands the issue of varying language between the draft permit and the state stormwater regulations. The Department is currently reviewing the stormwater regulations for revision. There has been no change to the draft permit as a result of this comment.

PROJECTS COVERED UNDER THIS PERMIT

Section A.1. - The Department received comments that suggested revisions to paragraph five of this section of the draft permit. The Department has revised the draft permit as suggested in order to better clarify this requirement.

OWNER/OPERATOR

Section A.1. - The Department received comments regarding the owner/operator statement and asked for clarification of primary responsibility for compliance with the permit. All parties are responsible. If there are enforcement actions the Department has the authority to involve all parties as necessary and to the extent possible. There has been no change to the permit as a result of this comment.

SECTION C. REQUIREMENTS

STORMWATER VOLUME

Section C.1. - The Department received a comment regarding this section of the draft permit which requires the permittee to minimize soil erosion through control of stormwater volume. As the NPDES authorized permitting authority, the Department is required to incorporate into the permit the federal regulation 40 CFR 450.21. For additional related discussion please refer to the earlier section of this document titled "General Comment Responses". The commenter questions the maximizing of infiltration in order to control stormwater volume at a land disturbance site. There are ways to reduce volume other than infiltration. The regulation and the permit do not prescribe one BPT over another. The language and goal of these provisions are to reduce

erosion. For example, one way to minimize the stormwater volume at a site is to reduce or eliminate run on to the site from up-hill off-site sources. This effectively reduces the volume of stormwater to be managed on-site. Another example is to reduce volume at individual outlet structures by having multiple outlet structures. This effectively reduces the volume at each individual outlet structure. By managing/directing the flow of runoff at the site you can also reduce the volume of water at individual outlet points. There has been no change to the draft permit as a result of this comment.

QUARTERLY REPORT

Section C.4., - The Department received comments regarding the quarterly report. To accommodate the complexity and number of outfalls associated with transportation projects language was changed to simplify reporting requirements. Instead of identifying each individual outfall, reports can simply refer to the receiving water.

ACCESSIBILITY OF THE SWPPP

Section C.5. The Department received a comment regarding onsite accessibility of the SWPPP. The permit will be revised to include additional wording regarding the SWPPP availability for inspections.

RECEIVING STREAMS & OUTFALL INFORMATION

Section C.5.a., and C.6.c. – The Department received comments concerning the use of outfall as the primary reference point. Often projects have a multitude of outfalls, particularly projects related to road construction. In these cases most outfalls have very similar BMPs, so listing individual outfalls is often not necessary. It was suggested that the Department add the word “primary” when naming the receiving streams in the SWPPP and remove the outfall information from the SWPPP requirement. Language in the permit was changed to simplify the requirements.

SEQUENCING & TIMING

Section C.6.a.2. - The Department received a couple of comments regarding the requirement found in this section of the draft permit. There has been no change as a result of this comment; however the Department will add clarification in the Permit Fact Sheet that “sequencing and timing” can also mean start and completion dates of intended activities.

BUFFER AREA

Section C.6.e. – The Department received a request to define “infeasible” when requiring the construction of a buffer area. The commenter referred to EPA’s Construct General Permit (CGP) as guidance. EPA’s permit defines what is not considered “surface water” and therefore would not require a buffer area. If a buffer area is infeasible, EPA’s permit requires the implementation of other sediment controls which must achieved the same sediment load reduction as a buffer area would have. The Department will add a similar note to the Permit Fact Sheet regarding what is not “surface water”. There has been no change to the permit as a result of these comments.

DISTURBED AREAS

Section C.6.h. – The Department received a comment to remove the word “immediately” from the requirement to initiate temporary and final stabilization of disturbed areas. This requirement is part the federal regulation which are non-numeric effluent limitations reflecting the best practicable technology currently available (BPT). As the NPDES authorized permitting authority, the Department is required to incorporate into the permit the federal regulation 40 CFR 450.21. For additional related discussion please refer to the earlier section of this document titled “General Comment Responses”. The Department also received a suggestion to include guidance as to what constitutes “initiation” of stabilization. The Department will include in the Permit Fact Sheet information similar to EPA’s regarding the context of this provision. There has been no change to the draft permit as a result of this comment.

GOOD ENGINEERING PRACTICES

Section C.6.j. – The Department received a comment to reword this section of the draft permit to include “... similar effective BMPs shall be based on good engineering practices.” The Department will revise the permit accordingly.

ROADWAYS & CURB INLETS

Section C.6.m. - The Department received a couple of comments regarding this section and has made a revision to the draft permit but did not include the additional language regarding the cleaning of inlet protection devices.

RESPONSBLE PERSON

Section C.12. – The department received a comment noting an incorrect reference, and the language was changed to point correctly to the requirements of paragraph 13.

SITE INSPECTION REPORTS

Section C.13. - It was suggested that the Department consider revising this section of the draft permit to include an inspection requirement following a rainfall event of 0.25 inches or greater. The Department currently requires an inspection of BMPs anytime rainfall causes stormwater runoff to occur onsite. Further discussion and review of any proposal to change this requirement will be needed before considering a change to permit. There has been no change to the permit as a result of this comment.

Section C.13. - The Department received a couple of comments regarding site inspection reports kept on site. The Department will include a similar option in the permit, just as EPA has with the GCP that all site inspection reports can be kept at the site or at an easily accessible location so that it can be made available at the time of an onsite inspection or upon request by the Department.

Section C.13. – The Department received a comment suggesting that language be changed so that inspections are only required to occur during a project’s normal hours, so that inspections can occur on the next business day following a long holiday weekend. The language was changed to reflect this suggestion.

SECTION E. SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

Section E. - The Department received a couple of comments suggesting language to better clarify wording in Section E., 1 of the draft permit. The Department has revised the draft permit for better clarity. `

SECTION F. RECORDS

Section F.3. – The Department received a comment requesting that the word “provide” be replaced with the word “ensure” in this section of the permit. The Department has made this change to the permit.

Jefferson County Land Disturbance Permit
Permit Number:
MO-JCLD-PW-COWIDE

In compliance with Jefferson County Unified Development Order Article 10 Land Disturbance and as amended hereinafter, the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Owner: **Jefferson County Government**
Address: **725 Maple St. Hillsboro, MO 63050**

Continuing Authority: **Jefferson County Government**
Address: **725 Maple St. Hillsboro, MO 63050**

Site Name: **Unincorporated Jefferson County**
Site Address: **Jefferson County**

Parcel Number:

Receiving Stream: **Tributaries of Jefferson County**
First Classified Stream and ID:
USGS Basin & Sub-watershed No.:
NPDES Outfall Number: **001-071**

Owner is authorized to discharge from the site described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

All outfalls in accordance with the SWPPP dated : **3/27/2013**

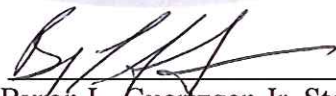
Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone and/or land disturbance activity that is reasonably certain to cause pollutions to the waters of the state and county).

This permit authorizes storm water discharged under Jefferson County Unified Development Order Article 10 Land Disturbance, The Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas.

Issue Date: **3/27/2013**

Expiration Date: **5/30/2017**


Kristi Bales Director


Byron L. Guertzen Jr. Stormwater Analyst

FLOODPLAIN DEVELOPMENT PERMIT/APPLICATION complete thoroughly

Permit/Application #: 193397 Date of Application: _____

1. Applicant Name: Jefferson County Public Works ☐ DEVELOPER ☐ ENGINEER ☒ OWNER
 Applicant Address: 725 Maple Street, P.O. Box 100 City, State, Zip Hillsboro, MO 63050
 Contact Phone #: 636-797-5342 FAX: 636-797-5565

2. Property Owner's Name Jefferson County Public Works Phone: 636-797-5342
 Property Owner's Address: 725 Maple Street, P.O. Box 100, Hillsboro, MO 63050
 Parcel Number: none (County ROW) Adjacent Parcel Number*: Parcel 6

3. Address of Development Site: 10598 Stroup Road 18 3.0 05.0 015.
 Directions to Development Site: Approx. 1.3 miles south of intersection with Plass Road

* for office tracking purposes only

Type of Construction: (ex: bridge, house, etc.) Bridge

☒ New Structure ☐ Addition to ☐ Remodel ☐ Repair
☒ Substantial Improvement ☐ Minor Improvement Construction Cost: \$ _____

Excavation Project: ☒ Filling ☒ Grading

Mobile Home: ☐ Private Property ☐ New or Additional Pads How Many? _____

4. Is property located in a designated floodway? ☒ Yes ☐ No

IF THE PROPOSED CONSTRUCTION SITE IS IN A FLOODWAY, A NO-RISE CERTIFICATE MUST BE PROVIDED PRIOR TO THE ISSUANCE OF THIS PERMIT. THE FLOODWAY AND FLOODPLAIN BOUNDARIES MUST BE SHOWN ON SITE PLAN.

5. Is property located in a designated floodplain? ☒ Yes ☐ No

A. Elevation of the 100-year flood 480.44 MSL/NGVD
 B. Elevation of the proposed development site 488.86 MSL/NGVD Bridge Deck
 C. Elevation/Flood proofing requirement _____ MSL/NGVD

THIS PERMIT IS ISSUED WITH THE CONDITION THAT THE FIRST FLOOR (INCLUDING THE BASEMENT FLOOR) IS CERTIFIED TO BE ELEVATED TO TWO (2') FEET ABOVE THE 100-YEAR FLOOD ELEVATION. IF THE PROPOSED DEVELOPMENT IS A COMMERCIAL BUILDING, THIS PERMIT IS ISSUED WITH THE CONDITION THAT THE FIRST FLOOR (INCLUDING THE BASEMENT FLOOR) IS CERTIFIED TO BE ELEVATED OR FLOODPROOFED TO ONE (1') FOOT ABOVE THE 100-YEAR FLOOD ELEVATION.

D. Subdivision proposals of five acres or fifty lots, whichever is smaller, requires the following additional information:

1. Contour/Grading Plan
2. Location of the floodway and floodplain boundaries
3. Elevation of the 100-year flood
4. Location and lowest floor (including basement floor) elevation of proposed structures
5. Other flood data as required by County's floodplain management official

6. Other permits required: Corps of Engineers (COE) 404 Permit ☒ Yes ☐ No

MoDNR Land Disturbance Permit: ☒ Yes ☐ No Other: _____

This development shall comply with all provisions of the Jefferson County Flood Damage Prevention Ordinance:

Robert T. Russell
 Signature of Developer/Owner

Deborah G. Shuff
 Signature of Engineer or Surveyor

Plans and Specifications approved this 10th day of February 20 16.

Eric Larson
 Authorizing Official

Floodplain Development Permit Memo

Floodplain Permit # 193397

Building Permit #

Planning and Zoning Permit # N/A

Applicant: Jefferson County Public Works

Property Owner: Jefferson County Public Works

Engineer or Surveyor: ABNA Engineering

Property Location: 10600 Stroup Road, P.O Box 100, Hillsboro, MO 63050

Parcel Number: N/A (County R-O-W)

Development location relative to the floodplain: FIRM Map #29099C0355E

Out of the SFHA as shown _____ SFHA Zone __A__

Unstudied SFHA _____ Floodway _____

100 yr. floodplain __x__ 500 yr. floodplain _____

Base Floodplain Elevation: 480.44

Elevation of the proposed site: 488.86

Comments: Approved for the Director's signature for the construction and replacement of the Stroup Road Bridge over Little Creek.

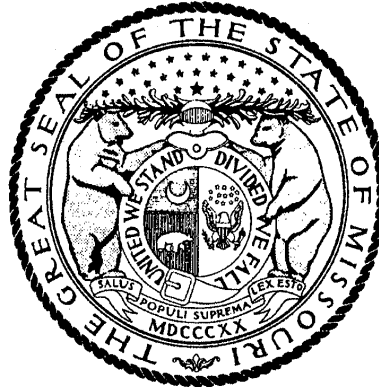
Reviewed by: Greg Smith

Date: 2-5-16

Missouri

Division of Labor Standards

WAGE AND HOUR SECTION



JEREMIAH W. (JAY) NIXON, Governor

Annual Wage Order No. 22

Section 050

JEFFERSON 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

John E. Lindsey, Director
Division of Labor Standards

This Is A True And Accurate Copy Which Was Filed With The Secretary of State: March 10, 2015

Last Date Objections May Be Filed: April 9, 2015

Prepared by Missouri Department of Labor and Industrial Relations

Building Construction Rates for
JEFFERSON County

REPLACEMENT PAGE

Section 050

OCCUPATIONAL TITLE	** Date of Increase	*	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits
Asbestos Worker (H & F) Insulator	1/16		\$38.36	55	60	\$21.41
Boilermaker	9/15		\$32.76	126	7	\$30.10
Bricklayer and Stone Mason	11/15		\$32.50	72	5	\$20.69
Carpenter	6/15	e	\$36.34	77	41	\$15.75
Cement Mason	6/15		\$30.56	80	6	\$17.30
Communication Technician	12/15		\$31.35	44	47	\$9.53 + 31.75%
Electrician (Inside Wireman)	8/15		\$34.20	82	71	\$10.78 + 39.5%
Electrician (Outside-Line Construction\Lineman)	9/15		\$42.52	43	45	\$5.00 + 36.5%
Lineman Operator	9/15		\$36.70	43	45	\$5.00 + 36.5%
Groundman	9/15		\$28.38	43	45	\$5.00 + 36.5%
Elevator Constructor	8/15	a	\$45.09	26	54	\$30.005
Glazier	6/15		\$33.13	87	31	\$19.58 + 10.53%
Ironworker	8/15		\$32.88	11	8	\$23.825
Laborer (Building):						
General		b	\$25.46	73	7	\$12.07
First Semi-Skilled		d	\$26.58	73	7	\$12.07
Second Semi-Skilled		c	\$25.96	73	7	\$12.07
Lather			USE CARPENTER RATE			
Linoleum Layer and Cutter	6/15		\$31.08	92	26	\$15.45
Marble Mason	10/15		\$31.43	76	51	\$14.17
Marble Finisher	10/15		\$26.18	76	51	\$13.47
Millwright	6/15		\$36.34	77	41	\$15.75
Operating Engineer						
Group I	6/15		\$32.16	3	66	\$24.16
Group II	6/15		\$32.16	3	66	\$24.16
Group III	6/15		\$30.26	3	66	\$24.16
Group III-A	6/15		\$32.16	3	66	\$24.16
Group IV	6/15		\$26.80	3	66	\$24.16
Group V	6/15		\$26.80	3	66	\$24.16
Painter	10/15		\$31.65	104	12	\$13.76
Pile Driver			USE CARPENTER RATE			
Pipe Fitter	7/15		\$37.00	91	69	\$26.68
Plasterer	7/15		\$31.06	67	3	\$17.53
Plumber	7/15		\$37.00	91	69	\$26.68
Roofer \ Waterproofer			\$30.70	15	73	\$16.67
Sheet Metal Worker	10/15		\$39.63	32	25	\$21.72
Sprinkler Fitter - Fire Protection	10/15		\$41.96	66	18	\$21.62
Terrazzo Worker	6/15		\$32.11	116	5	\$13.37
Terrazzo Finisher	10/15		\$30.35	116	5	\$11.84
Tile Setter	10/15		\$31.43	76	51	\$14.17
Tile Finisher	10/15		\$26.18	76	51	\$13.47
Traffic Control Service Driver			\$28.775	22	55	\$9.045
Truck Driver-Teamster			\$30.41	35	36	\$10.82

Fringe Benefit Percentage is of the Basic Hourly Rate

**Annual Incremental Increase

Building Construction Rates for
JEFFERSON County Footnotes

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OCCUPATIONAL TITLE	** Date of Increase	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits

* Welders receive rate prescribed for the occupational title performing operation to which welding is incidental.

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

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).

a - Vacation: Employees over 5 years - 8%; Employees under 5 years - 6%

b - Projects over \$1 Million - \$25.46; Projects under \$1 Million - \$23.31

c - Projects over \$1 Million - \$25.96.; Projects under \$1 Million - \$23.81

d - Projects over \$1 Million - \$26.58; Projects under \$1 Million - \$24.83

** e - Projects over \$1 Million - \$36.34; Projects under \$1 Million - \$31.25

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BUILDING CONSTRUCTION OVERTIME SCHEDULE**

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 3: Means the regular workday shall consist of eight (8) consecutive hours, exclusive of a thirty (30) minute lunch period, with pay at the straight time rate. The regular workday shall begin between the hours of 6:00 a.m. and 9:00 a.m. The Employer may have the option to schedule the work week from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be paid at the applicable overtime rate. If the Employer elects to work from Monday through Thursday and is stopped due to inclement weather, holiday or other conditions beyond the control of the Employer, they shall have the option to work Friday at the straight time rate of pay to complete the forty (40) hours for the workweek. All overtime work performed on Monday through Saturday shall be paid at time and one-half (1½) the hourly rate plus an amount equal to one-half (½) of the hourly Total Indicated Fringe Benefits. All work performed on Sundays and recognized holidays shall be paid at double (2) the hourly rate plus an amount equal to the hourly Total Indicated Fringe Benefits. Shifts may be established when considered necessary by the Employer. Shift hours and rates will be as follows. If shifts are established, work on the First Shift will begin between 6:00 a.m. and 9:00 a.m. and consist of eight (8) hours of work plus one-half hour unpaid lunch. Hours worked during the first shift will be paid at the straight time rate of pay. The second shift shall start eight hours after the start of the first shift and consist of eight (8) hours of work plus one-half hour unpaid lunch. Work on the second shift will begin between 2:00 p.m. and 5:00 p.m. and be paid the straight time rate plus \$2.50 per hour. The third shift shall start eight hours after the start of the second shift and consist of eight (8) hours plus one-half hour unpaid lunch. Work on the third shift will begin between 10:00 p.m. and 1:00 a.m. and be paid the straight time rate plus \$3.50 per hour. The additional amounts that are to be paid are only applicable when working shifts. Shifts that begin on Saturday morning through those shifts which end on Sunday morning will be paid at time and one-half these rates. Shifts that begin on Sunday morning through those shifts which end on Monday morning will be paid at double time these rates.

NO. 11: Means eight (8) hours shall constitute a day's work, with the starting time to be established between 6:00 a.m. and 8:00 a.m. from Monday to Friday. Time and one-half (1½) shall be paid for first two (2) hours of overtime Monday through Friday and the first eight (8) hours on Saturday. All other overtime hours Monday through Saturday shall be paid at double (2) time rate. Double (2) time shall be paid for all time on Sunday and recognized holidays or the days observed in lieu of these holidays.

NO. 15: Means the regular working day shall be scheduled to consist of at least eight (8) hours, but no more than ten (10) consecutive hours, exclusive of the lunch period. The regular working day may be scheduled to commence at any time between the hours of 5:00 a.m. and 10:00 a.m. All work performed in excess of forty (40) hours in one work week, or in excess of ten (10) hours in one work day shall be paid at the rate of one and one-half (1½) times the regular hourly wage scale. Any work performed on a Saturday shall be paid for at the rate of one and one-half (1½) times the regular hourly wage scale unless such Saturday work falls under the category of Saturday Make-Up Day. Any work performed by Employees anywhere on Sunday or recognized holidays, shall be paid for at the rate of double (2) time the regular wage scale. If, during the course of a work week, an Employee is unable to work for any reason, and, as a result, that Employee has not accumulated forty (40) hours of compensable time at the straight time rate, the Employer, at his option may offer the Employee the opportunity to work on Saturday at straight time; provided, however, if during the period worked by said Employee on Saturday, the Employee's compensable time at the straight time rate exceeds forty (40) hours, all time worked in excess of the forty (40) hours will be paid at the rate of one and one-half (1½) times the regular hourly wage scale.

NO. 22: Means a regular work week of forty (40) hours will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A workday is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

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NO. 26: Means that the regular working day shall consist of eight (8) hours worked between 6:00 a.m., and 5:00 p.m., five (5) days per week, Monday to Friday, inclusive. Hours of work at each jobsite shall be those established by the general contractor and worked by the majority of trades. (The above working hours may be changed by mutual agreement). Work performed on Construction Work on Saturdays, Sundays and before and after the regular working day on Monday to Friday, inclusive, shall be classified as overtime, and paid for at double (2) the rate of single time. The employer may establish hours worked on a jobsite for a four (4) ten (10) hour day work week at straight time pay for construction work; the regular working day shall consist of ten (10) hours worked consecutively, between 6:00 a.m. and 6:00 p.m., four (4) days per week, Monday to Thursday, inclusive. Any work performed on Friday, Saturday, Sunday and holidays, and before and after the regular working day on Monday to Thursday where a four (4) ten (10) hour day workweek has been established, will be paid at two times (2) the single time rate of pay. The rate of pay for all work performed on holidays shall be at two times (2) the single time rate of pay.

NO. 32: The regular working day shall consist of eight (8) hours of labor on the job between six (6) a.m. and four (4) p.m. and the regular working week shall consist of five (5) consecutive eight (8) hour day's of labor on the job beginning with Monday and ending with Friday of each week. The normal work week is 40 hours. All full-time or part-time labor performed during such hours shall be recognized as regular working hours and paid for at the regular hourly rate. All work performed during regular work hours on Saturdays will be paid at time and one-half (1 ½). All work performed outside of regular working hours and performed during the regular work week, shall be at double (2) times the regular rate, except that the first two (2) hours following the regular work day shall be paid at one and one-half (1½) times the regular rate. An early starting time of 6:00 a.m. may be used mutually agreed upon by the interested parties. **SHIFT RATE:** Shift work would start after 4:00 p.m. to 6:00 a.m. The first 8 hours would be at 115% of the basic wage rate. Overtime Monday through Friday would be at 1 ½ of base shift rate. Saturday regular work day hours – 1½ of base shift rate. Saturday – work after 8 hours – 2 times the basic wage rate. Sunday and Holidays – 2 times the basic wage rate. All work performed on recognized holidays and Sundays shall be paid double (2) time. Appropriate overtime rates to be based on fifteen minute increments.

NO. 35: Means a regular work week of forty (40) hours, will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof maybe worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A work day is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time maybe advanced or delayed if mutually agreed to by the interested parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

NO. 43: Eight (8) hours shall constitute a work day between the hours of 7:00 a.m. and 4:30 p.m. Forty (40) hours within five (5) days, Monday through Friday inclusive, shall constitute the work week. Work performed in the 9th and 10th hour, Monday through Friday, shall be paid at time and one-half (1½) the regular straight time rate of pay. Contractor has the option to pay two (2) hours per day at the time and one-half (1½) the regular straight time rate of pay between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. Work performed outside the regularly scheduled working hours and on Saturdays, Sundays and recognized legal holidays, or days celebrated as such, shall be paid for at the rate of double (2) time.

NO. 44: Means forty (40) hours shall constitute a work week, Monday through Friday. Eight (8) hours shall constitute a work day. Hours of work shall be between the hours of 7:00 a.m. and 4:30 p.m. All work performed before 7:00 a.m. and after 4:30 p.m. and all work performed in excess of eight (8) hours in any one work day, over forty (40) hours in any work week and the first eight (8) hours of work on Saturday, shall be paid at the rate of one and one-half (1½) times the regular rate of pay. All hours worked in excess of eight (8) hours on Saturday, all hours worked on Sunday and on holidays, or days that may be celebrated as such, and as designated by the federal government, shall be paid at two (2) times the regular rate of pay. All shifts for work performed between the hours of 4:30 p.m. and 1:00 a.m. shall receive eight (8) hours pay at the regular hourly rate of pay plus two dollars (\$2.00) per clock hour. All work performed between the hours of 12:30 a.m. and 9:00 a.m. on a third shift shall receive eight (8) hours pay at the regular hourly rate plus four dollars (\$4.00) per clock hour. All overtime work required after the completion of a regular shift shall be paid at one and one-half times (1½ x) the "shift" hourly rate.

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NO. 55: Means the regular work day shall be eight (8) hours between 6:00 a.m. and 4:30 p.m. The first two (2) hours of work performed in excess of the eight (8) hour work day, Monday through Friday, and the first ten (10) hours of work on Saturday, shall be paid at one & one-half (1½) times the straight time rate. All work performed on Sunday, observed holidays and in excess of ten (10) hours a day, Monday through Saturday, shall be paid at double (2) the straight time rate.

NO. 66: Means eight (8) hours shall constitute a day's work beginning at 7:00 a.m. (or 8:00) A.M. and ending at 3:30 (or 4:30) P.M. The work week shall be forty (40) hours beginning Monday at 7:00 a.m. (or 8:00) A.M. and ending Friday at 3:30 (or 4:30) P.M. The Employer at his option may use a flexible starting time between the hours of 6:00 a.m. and 8:00 a.m. All overtime, that is worked outside of the above established working hours of Monday through Friday, shall be paid at double (2) time, including Saturdays, Sundays and Holidays.

NO. 67: Means eight (8) hours shall constitute a day's work, with a flexible starting time to begin between 6:00 a.m. to 8:00 a.m., five (5) days a week, Monday through Friday. Any work over eight (8) hours in any one day shall be at the overtime rate, which is time & one-half (1½). Any work on Saturday shall be at time & one-half (1½), unless a Make-Up Day due to inclement weather is in effect. Any work on Sundays or holidays shall be at double (2) time. Four (4) days, ten (10) hours each day to be worked during Monday through Friday, shall be paid at straight time. A Make-Up Day Due To Inclement Weather Only - Employee(s) will be permitted to work an eight (8) hour make-up day on Saturday only, and the employee will receive the regular straight time wage rate.

NO. 72: Means that except as is otherwise provided herein, the work week shall be determined to begin at 8:00 a.m. Wednesday and end at 4:30 p.m. on the following Tuesday. Except as herein provided, working hours are from 8:00 a.m. to 11:55 a.m. and 12:30 p.m. to 4:25 p.m. and no more than the regular hours shall be worked during the forenoon or afternoon at the regular rate. In the case of days of inclement weather starting time and quitting time may be adjusted so long as the hours worked on such days do not exceed eight (8) and do not extend beyond 4:30 p.m. In circumstances where the Employee or Employees have regularly been working overtime on a particular day or days, no adjustment in the starting time shall operate to deprive Employees of overtime pay, which they would have otherwise received but for the change in the starting time. The parties understand that the application of the provisions of the preceding sentence will result in Employees receiving overtime pay even where they have not worked more than with (8) hours on a particular day. Regardless of the starting time, the forenoon working hours shall end at 11:55 a.m. and the afternoon working hours shall begin at 12:30 p.m. and end 8 hours and 25 minutes after the starting time fixed by the Employer for forenoon hours. Work performed by an employee on a non-holiday Saturday, except as hereinafter provided, or at night or before or after regular working hours on a non-holiday weekday, shall be considered overtime work, for which Employees working during such time shall be paid at the rate of one and one-half (1½) times their regular hourly wage rate for each hour or fraction thereof, worked during such time. Work performed on a Sunday or the recognized holidays shall be considered overtime work for which the Employee shall be paid twice the amount of his or her regular hourly wage rate for each hour or fraction thereof worked on any such day.

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NO. 73: Means eight (8) hours shall constitute a day's work to begin at 8:00 a.m. and end at 4:30 p.m. The starting time may be advanced one (1) or two (2) hours. Employees shall receive time and one-half (1½) for all time they are required to work before 8:00 a.m., during the lunch period or after 4:30 p.m. unless the starting time is advanced as provided above. Forty (40) hours shall constitute a week's work, Monday through Friday, or any part thereof by reason of inclement weather (rain or mud), Saturday or any part thereof may be worked as a make-up day at the straight time rate. The Employer shall have the option of working five (5) eight (8) hour day's or four (4) ten (10) hour day's Monday through Friday. If an Employer elects to work five (5) eight (8) hour days during any work week, hours worked more than eight (8) per day or forty (40) per week shall be paid at time and one-half (1½) the hourly rate Monday through Friday. If an employer elects to work four (4) ten (10) hour days in any week, work performed more than ten (10) hours per day or forty (40) hours per week shall be paid at time and one-half (1½) the hourly rate Monday through Friday. If an Employer is working ten (10) hour days and loses a day due to inclement weather, he may work ten (10) hours Friday at straight time. All time over the regular workday as defined and all hours worked on Saturday shall be paid at the rate of one and one-half (1½) the regular rate of wages. If workmen are required to work recognized holidays or days observed as such, or on Sunday, they shall receive double (2) the regular rate of pay for such work. If a laborer is assisting another craft on a make-up day and the other craft is receiving overtime pay the laborer shall receive the same overtime multiple as the craft assisted. No overtime rates shall be broken down into less than thirty (30) minute units of time. Projects that cannot be performed during regular workday: Building construction work, if required by the owner, the contractor may perform work outside the normal hours and employees shall be paid applicable straight time hourly wage rate plus a premium of \$1.50 per hour for the first eight hours worked. Any hours worked in excess of eight hours shall be paid at the applicable overtime rate plus \$1.50 per hour premium. Shift work: The Employer may elect to work, one, two or three shifts on any work. When two or more shifts are worked on any operation, the first shift or day shift shall consist of eight (8) hours exclusive of lunch time; the second or swing shift consist of eight (8) hours' work for eight and one-half hours pay, exclusive of lunch time; the third or graveyard shift shall consist of eight (8) hours' work for nine (9) hours' pay exclusive of lunch time. The swing shift shall be paid twenty-five cents (\$.25) per hour above the regular rate of pay. The graveyard shift shall be paid fifty cents (\$.50) per hour above the regular rate of pay. Multiple shift (second or third shift) operation will not be construed on the entire project if at any time it is deemed advisable and necessary for the employer to a specific operation. However, no shift shall be started between midnight and 6:00 a.m. except the graveyard shift on a three (3) shift operation, or except in unusual or emergency, regardless if the project is working one (1) or two (2) shift. Shifts shall be established for a minimum of three (3) consecutive workdays. When 2-10 or 12 hour shifts are worked, the second shift shall receive \$.50 per hour above regular rate of pay. When the employer elects to work 2-10 or 12 hour shifts, the first 8 hours shall be at straight time rates. The remaining 2 or 4 hours shall be at the overtime rate of time and one-half.

NO. 76: Means the standard workday shall consist of eight (8) hours of work between the hours of 8:00 a.m. and 4:30 p.m. with a thirty (30) minute unpaid lunch hour occurring in the middle of the shift. The standard workweek shall consist of five standard workdays commencing on Monday and ending on Friday. The normal starting and quitting times may be changed by mutual consent of interested parties. All time worked before and after the established eight (8) hour workday, Monday through Friday, and all time worked on Saturday, shall be paid for at the rate of time & one-half (1½) the hourly base wage rate in effect. All time worked on Sunday and holidays shall be paid at the rate of double (2) the hourly wage in effect. All work done on Saturday will be done at time & one-half (1½), unless Saturday shall be used as a make-up day. If an employee should lose one or more days in a work week and use Saturday as a make-up day the pay shall be at the regular hourly base wage rate and benefits.

NO. 77: Means the regular workday shall consist of eight (8) consecutive hours, exclusive of a thirty (30) minute lunch period, with pay at the regular straight time hourly rate. The regular workday shall begin on the job site between the hours of 6:00 a.m. and 8:00 a.m. with the starting time to be determined by the Employer, unless project owner requires different starting time. This adjustable starting time can, at the Employer's option, be staggered to permit starting portions of the work force at various times within the prescribed hours. The Employer may establish a four (4) ten (10) hour shift exclusive of the thirty (30) minute lunch period at the straight time wage rate. Forty (40) hours per week shall constitute a week's work Monday through Thursday. In the event a job is down due to weather conditions, safety or other conditions beyond the control of the Employer, then Friday may, at the option of the employer, be worked as a make-up day at the straight time wage rate. Straight time is not to exceed ten (10) hours a day or forty (40) hours per week. Time and one-half (1 ½) shall be paid for all overtime hours worked during the week, Monday through Friday and for all work performed on Saturday. Double (2) time shall be paid for all time worked on Sunday and recognized holidays.

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NO. 80: Means eight (8) hours shall constitute the regular work day and forty (40) hours a work week, Monday through Friday. The Employer shall establish the starting time between 6:30 a.m. through 9:00 a.m. An Employer may further adjust the starting time up to 9:30 a.m. throughout the year. Time and one-half (1½) shall be paid after eight (8) consecutive hours worked after the established starting time and for hours worked before the established starting time. Time and one-half (1½) shall be paid for work performed on Saturdays. Work performed on Sundays and Holidays shall be paid at the double (2) time rate of pay. The Employer when working on Highway and Road Work may have the option to schedule the work week for his paving crew only from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be at the applicable overtime rate of time and one-half (1½). If the Employer elects to work from Monday through Thursday and is stopped due to inclement weather (rain, snow, sleet falling), the Employer shall have the option to work Friday at the straight time rate of pay to complete the forty (40) hours.

NO. 82: Means the work day shall consist of eight (8) hours worked between 7:00 a.m. and 4:30 p.m. Forty (40) hours will constitute the work week from Monday through Friday, inclusive. Up to four (4) hours of overtime work per day performed before or after the assigned normal work day, (twelve (12) continuous hours, starting no earlier than 6:00 a.m., Monday through Friday), shall be paid at a rate of one and one-half times (1.5x) that employee's hourly rate. Any additional overtime, Monday through Friday, shall be paid at two times (2x) the regular rate of pay. The first eight hours of overtime work on Saturday shall be paid at the rate of one and one-half times (1.5x) the regular rate of pay. Hours worked in excess of eight (8) hours on Saturday shall be paid at two times (2x) the regular rate of pay. Double time shall be paid for work performed on Sundays, recognized legal holidays or days that may be celebrated as such as designated by the federal government. All shifts for work performed between the hours of 4:30 p.m. and 1:00 a.m. shall be paid at the regular hourly rate plus two dollars (\$2.00) per clock hour. All shifts for work performed between the hours of 12:30 a.m. and 9:00 a.m. shall be paid at the regular hour rate plus four dollars (\$4.00) per clock hour. All overtime work required after the completion of a regular shift shall be paid at one and one-half times (1.5x) the "shift" hourly rate.

NO. 87: Means eight (8) hours starting between 6:00 a.m. and 8:00 a.m. and ending between 2:30 p.m. and 4:30 p.m. at the Employers discretion shall constitute a day's work. Any work prior to 6:00 a.m. or after eight (8) hours shall be paid at the overtime rate. Five (5) days from Monday through Friday inclusive shall constitute a regular work week. All hours before and after these regular hours shall be considered overtime and shall be paid for at the rate of double (2) time. All work on Saturday and Sunday shall be paid at double (2) the prevailing scale of wages.

NO. 91: Means eight (8) hours shall constitute a day's work commencing at 7:00 a.m. and ending at 3:30 p.m., allowing one-half (½) hour for lunch. The option exists for the Employer to use a flexible starting time between the hours of 6:00 a.m. and 9:00 a.m. The regular workweek shall consist of forty (40) hours of five (5) workdays, Monday through Friday. The workweek may consist of four (4) ten (10) hour days from Monday through Thursday, with Friday as a make-up day. If the make-up day is a holiday, the employee shall be paid at the double (2) time rate. The employees shall be paid time and one-half (1½) for work performed on Saturdays, before the regular starting time or after the regular quitting time or over eight (8) hours per work day (unless working a 10-hour work day, then time and one-half (1½) is paid for work performed over ten (10) hours a day) or over forty (40) hours per work week. Work performed on Sundays and recognized holidays shall be paid at the double (2) time rate of pay. **SHIFT WORK:** When it is necessary for the project to operate in shifts, there will be three (3) eight (8) hour shifts commencing at 8:00 a.m. Shift work must continue for a period of not less than three (3) consecutive work days, two (2) days which must be regular work days (Monday through Friday). In the event the second or third shift of any regular work day shall fall into a Saturday or a holiday, such extension into a Saturday or holiday shall be considered as part of the previous workday and employees shall be paid at the regular shift rate. The first day shift shall work a regular eight (8) hour day at regular rates. The second shift shall be eight (8) hours regular time pay plus \$2.50 per hour premium for eight (8) hours work. Third shift will be for eight (8) hours regular time pay plus \$3.00 per hour premium for eight (8) hours work.

NO. 92: Means all work performed from 8:00 a.m. to 4:30 p.m., Monday through Friday, will be at straight time pay up to forty (40) hours per week. All work performed Monday through Friday before 8:00 a.m. and after 4:30 p.m. will be done at time and one-half (1½). All work done on Saturday will be done at time and one-half (1½), unless the employer and employee agree that Saturday shall be used as a make-up day. The Employer may use a flexible starting time of 7:00 a.m. to 8:00 a.m., and quitting time of 3:30 p.m. to 4:30 p.m., and any such different work starting time shall determine whether wages are payable at the straight rate or the premium rate. All work performed on Saturday shall be paid for at time and one-half (1½), unless the Saturday has been used as a make-up day. All work performed on Sunday and holidays shall be paid for at the rate of double (2) time.

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JEFFERSON COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

NO. 104: Means eight (8) hours per day shall constitute a standard work day between the hours of 6:00 a.m. and 8:00 p.m. The standard work week shall be forty (40) hours between 6:00 a.m. on Monday and ending 8:00 p.m. on Friday. An overtime rate of time and one-half ($1\frac{1}{2}$) the base hourly rate shall be paid on all hours in excess of eight (8) hours in a day Monday through Friday. Saturdays shall be considered overtime and work done on Saturday shall be paid at time and one-half ($1\frac{1}{2}$) the prevailing scale. Sundays and holidays shall be considered overtime and work done on these days shall be paid at double (2) the prevailing scale.

NO. 116: Means the standard work day shall consist of eight (8) hours of work between the hours of 8:00 a.m. and 4:30 p.m. The standard work week shall consist of five standard work days commencing on Monday and ending on Friday inclusive. All time worked before and after the established eight (8) hour work day, Monday through Friday, and all time worked on Saturdays, shall be paid for at the rate of time & one-half ($1\frac{1}{2}$) the hourly base wage rate in effect. All time worked on Sundays and recognized holidays shall be paid for at the rate of double (2) the hourly base wage rate in effect.

NO. 126: Means eight (8) hours per day shall constitute a day's work and forty (40) hours per week, Monday through Friday, shall constitute a week's work. The regular starting time shall be 8:00 a.m. If a second or third shift is used, the regular starting time of the second shift shall be 4:30 p.m. and the regular starting period for the third shift shall be 12:30 a.m. These times may be adjusted by the employer. The day shift shall work a regular eight (8) hours shift as outlined above. Employees working a second shift shall receive an additional \$0.25 above the regular hourly rate and perform seven and one-half ($7\frac{1}{2}$) hours work for eight (8) hours pay. Third shift employees shall be paid an additional \$0.50 above the regular hourly rate and work seven (7) hours for eight (8) hours pay. When circumstances warrant, the Employer may change the regular workweek to four (4) ten-hour days at the regular time rate of pay. All time worked before and after the established workday of eight (8) hours, Monday through Friday, and all time worked on Saturday shall be paid at the rate of time and one-half ($1\frac{1}{2}$) except in cases where work is part of an employee's regular Friday shift. All time worked on Sunday and recognized holidays shall be paid at the double (2) time rate of pay except in cases where work is part of an employee's previous day's shift. For all overtime hours worked \$28.81 of the fringe benefits portion of the prevailing wage shall be paid at the same overtime rate at which the cash portion of the prevailing wage is to be paid. The remaining \$1.29 of the fringe benefit portion of the prevailing wage may be paid at straight time.

**JEFFERSON COUNTY
HOLIDAY SCHEDULE – BUILDING CONSTRUCTION**

NO. 3: All work done on New Year's Day, Decoration Day, July 4th, Labor Day, Veteran's Day, Thanksgiving and Christmas shall be compensated at the double (2) time rate of pay. When any of these holidays fall on a Sunday, the following Monday shall be observed.

NO. 5: All work that shall be done on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day shall be paid at the double (2) time rate of pay.

NO. 6: The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day and any additional holidays which may be mutually agreed upon. Whenever any such holiday falls on a Sunday, the following Monday shall be recognized and observed as the holiday. Work performed on Sundays and holidays shall be paid at the double time rate of pay. No work shall be performed on Labor Day.

NO. 7: The following days are assigned days and are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This is applied to protect Labor Day. When a holiday falls during the normal workweek, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week. However, no reimbursement for these eight (8) hours is to be paid to the workman unless worked. If workman are required to work the above enumerated holidays or days observed as such, or on Sunday, they shall receive double (2) the regular rate of pay for such work.

NO. 8: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day, or the days observed in lieu of these holidays, shall be paid at the double time rate of pay.

NO. 12: All work done on New Year's Day, Decoration Day, Independence Day, Veteran's Day, Thanksgiving Day and Christmas Day shall be paid at the double time rate of pay. Should any of these days fall on Sunday, then the following day shall be observed as the holiday. Under no circumstances shall employees be permitted to work on Labor Day.

NO. 18: All work done on New Year's Day, Memorial Day, July 4th, Labor Day, Veteran's Day, Thanksgiving Day, the Friday following Thanksgiving and Christmas Day shall be paid at the double time rate of pay. When one of the above holidays falls on Sunday, the following Monday shall be considered the holiday, and when one of the above holidays falls on Saturday, the preceding Friday shall be considered the holiday, and all work performed on said day(s) shall be paid at the double time rate.

NO. 25: All work done on New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving, Christmas Day, Presidential Election Day, or days locally observed as such, and Saturday and Sunday shall be recognized as holidays and shall be paid at the double (2) time rate of pay. If a named holiday falls on a Saturday, the holiday will be observed on the preceding Friday. When a named holiday falls on Sunday, the Monday after will be observed as the holiday. Appropriate overtime rates to be based on fifteen minute increments.

NO. 26: All work done on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day shall be paid at the double time rate of pay. When a Holiday occurs on Saturday it shall not be observed on either the previous Friday or the following Monday. Such days shall be regular work days. If such a holiday occurs on Sunday it shall be observed on the following Monday.

NO. 31: All work done on New Year's Day, Presidents Day, Good Friday, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, and Employee's Birthday shall be paid at the double time rate of pay. If a holiday falls on Sunday, the following Monday will be observed as the recognized holiday. If a holiday falls on Saturday, the preceding Friday will be observed as the recognized holiday.

JEFFERSON COUNTY HOLIDAY SCHEDULE – BUILDING CONSTRUCTION

NO. 36: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make-up day when an observed holiday occurs during the work week. Employees have the option to work that make-up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 41: The following days shall be observed as legal holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day. No work shall be performed on the Fourth of July, Labor Day or Christmas Day. Any work performed on the above holidays shall be paid for at two (2) times the regular straight time rate of pay. When any of the above holidays fall on Sunday, the following Monday shall be observed as such holiday. If a holiday falls on Saturday, it shall not be considered to be observed on the previous Friday or following Monday. Such days shall be regular workdays.

NO. 45: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving, the day before Christmas, and Christmas Day, shall be paid at the double time rate of pay.

NO. 47: The following holidays are recognized: New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving and Christmas Day. When a holiday listed above falls on Saturday, it shall be celebrated on the Friday preceding the holiday. When a holiday falls on Sunday, the following Monday shall be observed. Holidays referred to above shall be paid for at the double (2) time rate of pay when worked.

NO. 51: All time worked on Sundays and recognized holidays shall be paid for at the rate of double (2) the hourly base wage rate in effect. The Employer agrees to recognize the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day. If the holiday falls on Sunday, it shall be recognized on the following Monday. If the holiday falls on a Saturday, it shall be recognized as a Saturday only holiday.

NO. 54: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day shall be paid at the double (2) time rate of pay. When a holiday falls on Saturday, it shall be observed on Friday. When a holiday falls on Sunday, it shall be observed on Monday.

NO. 55: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 60: All work performed on New Year's Day, Armistice Day (Veteran's Day), Decoration Day (Memorial Day), Independence Day (Fourth of July), Thanksgiving Day and Christmas Day shall be paid at the double time rate of pay. No work shall be performed on Labor Day except when triple (3) time is paid. When a holiday falls on Saturday, Friday will be observed as the holiday. When a holiday falls on Sunday, the following Monday shall be observed as the holiday.

**JEFFERSON COUNTY
HOLIDAY SCHEDULE – BUILDING CONSTRUCTION**

NO. 66: All work performed on Sundays and the following recognized holidays, or the days observed as such, of New Year's Day, Decoration Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) the hourly rate plus an amount equal to the hourly Total Indicated Fringe Benefits. Whenever any such holidays fall on a Sunday, the following Monday shall be observed as a holiday.

NO. 69: All work performed on New Year's Day, Memorial Day, July Fourth, Labor Day, Veteran's Day, Thanksgiving Day or Christmas Day shall be compensated at double (2) their straight-time hourly rate of pay. Friday after Thanksgiving and the day before Christmas are also holidays, however, if the employer chooses to work the normal work hours on these days, the employee will be paid at straight -time rate of pay. If a holiday falls on a Saturday, the holiday will be observed on Saturday; if a holiday falls on a Sunday, the holiday will be observed on the following Monday.

NO. 71: All work performed on the following recognized holidays, or days that may be celebrated as such, shall be paid at the double (2) time rate of pay: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving and Christmas Day. If a holiday falls on Sunday, it shall be celebrated on Monday. If a holiday falls on Saturday, it shall be celebrated on the Friday proceeding such Saturday.

NO. 73: The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day (or mutually agreed date of the Friday after Thanksgiving Day may be substituted for Veteran's Day), Thanksgiving Day and Christmas Day, or in the event that any of said Holidays falls on Sunday, then the day or days generally recognized as such. Any work performed anywhere on any of the aforesaid Holidays, or on the day or days recognized and observed as such, shall be paid for at double (2) time the regular hourly rate.

Heavy Construction Rates for
JEFFERSON County

REPLACEMENT PAGE

Section 050

OCCUPATIONAL TITLE	* Date of Increase	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits
Carpenter	6/15	\$35.68	23	16	\$15.55
Cement Mason	6/15	\$30.56	17	11	\$17.30
Electrician (Outside-Line Construction\Lineman)	9/15	\$42.52	9	12	\$5.00 + 36.5%
Lineman Operator	9/15	\$36.70	9	12	\$5.00 + 36.5%
Lineman - Tree Trimmer	10/15	\$24.99	32	31	\$9.95 + 3%
Groundman	9/15	\$28.38	9	12	\$5.00 + 36.5%
Groundman - Tree Trimmer	10/15	\$19.80	32	31	\$8.10 + 3%
Laborer					
General Laborer	6/15	\$29.11	2	4	\$12.82
Skilled Laborer	6/15	\$29.71	2	4	\$12.82
Millwright	6/15	\$35.68	23	16	\$15.55
Operating Engineer					
Group I	6/15	\$32.16	10	9	\$24.16
Group II	6/15	\$32.16	10	9	\$24.16
Group III	6/15	\$30.86	10	9	\$24.16
Group IV	6/15	\$27.40	10	9	\$24.16
Oiler-Driver	6/15	\$27.86	10	9	\$24.16
Pile Driver	6/15	\$35.68	23	16	\$15.55
Traffic Control Service Driver		\$28.775	26	25	\$9.045
Truck Driver-Teamster		\$30.41	25	21	\$10.82

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.

**REPLACEMENT PAGE
JEFFERSON COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION**

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 2: Means a regular workweek shall be forty (40) hours and will start on Monday and end on Friday. The Employer shall have the option of working five 8-hour days or four 10-hour days Monday through Friday. If an Employer elects to work five 8-hour days during any workweek, hours worked more than eight (8) per day or 40 per week shall be paid at time and one-half the hourly rate Monday through Friday. If an Employer elects to work four 10-hour days in a week, work performed more than ten (10) hours per day or 40 hours per week shall be paid at time and one-half the hourly rate Monday through Friday. When working a five 8-hour day schedule and an Employer is prevented from working forty (40) hours Monday through Friday, or any part thereof, by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. If an Employer is working a four 10-hour day schedule and loses a day due to inclement weather, he may work 10 hours Friday at straight time. All hours worked over the 40 hours Monday through Friday will be paid at 1 ½ overtime rate. A workday shift is to begin at the option of the Employer, between 6:00 a.m. and not later than 9:00 a.m. However, the project starting time may be advanced or delayed if required. If workmen are required to work the enumerated holidays or days observed as such or Sundays, they shall receive double (2) the regular rate of pay for such work. Overtime shall be computed at one-half (1/2) hour intervals. Shift: The Contractor may elect to work one, two or three shifts on any work. When operating on more than one shift, the shifts shall be known as the day shift, swing shift, and graveyard shift as such terms are recognized in the industry. When two shifts are worked on any operation, the shifts will consist of eight (8) or ten (10) hours exclusive of lunchtime. When three shifts are worked the first day or day shift will consist of eight (8) hours exclusive of lunchtime. The second or swing shift shall consist of seven and one-half (7 1/2) hours work for eight hours pay, exclusive of lunchtime, and the third or the graveyard shift shall consist of seven (7) hours work for eight (8) hours pay, exclusive of the lunchtime. All time in excess of normal shifts shall be considered overtime. Multiple shift (the two or three shift) operation will not be construed on the entire project if at anytime it is deemed advisable and necessary for the Employer to multiple shift a specific operation. However, no shift shall be started between midnight and six a.m. except the graveyard shift on a three-shift operation, or except in an unusual or emergency situation. If an Employer starts a shift between midnight and 6 a.m. except the graveyard shift on a three-shift operation, he shall reimburse all employees for the entire shift at the double time rate. Completion of the second shift on a two-shift operation or completion of the graveyard shift on a three-shift operation that carries over into Saturday morning, shall be at the straight time rate. Overtime shall be computed at ½ hour intervals.

NO. 9: Eight (8) hours shall constitute a work day between the hours of 7:00 a.m. and 4:30 p.m. Forty (40) hours within five (5) days, Monday through Friday inclusive, shall constitute the work week. Work performed in the 9th and 10th hour, Monday through Friday, shall be paid at time and one-half (1½) the regular straight time rate of pay. Contractor has the option to pay two (2) hours per day at the time and one-half (1½) the regular straight time rate of pay between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. Work performed in the first eight (8) hours on Saturday shall be paid at the rate of one and eight tenths (1.8) the regular straight time rate. Work performed outside these hours and on Sundays and recognized legal holidays, or days celebrated as such, shall be paid for at the rate of double (2) time.

**REPLACEMENT PAGE
JEFFERSON COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION**

NO. 10: Means the regular workday for which employees shall be compensated at straight time hourly rate of pay shall, unless otherwise provided for, begin at 8:00 a.m. and end at 4:30 p.m. The regular workweek shall consist of five (5) days, Monday through Friday, beginning at 8:00 a.m. and ending at 4:30 p.m. except as may be modified. The starting time may be either advanced or delayed one hour or two hours at the discretion of the Employer. The Employer may have the option to schedule his work week from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be at the applicable overtime rate. If the Employer elects to work Monday through Thursday and is stopped due to inclement weather, holidays or other conditions beyond the control of the Employer, he shall have the option to work Friday at the straight time rate of pay to complete the forty (40) hour workweek. All necessary overtime and work performed on Saturday, shall be paid at time and one-half (1½) the hourly rate, plus an amount equal to one-half (½) of the hourly Total Indicated Fringe Benefits. All work performed on Sundays and recognized holidays shall be paid at double (2) the hourly rate, plus an amount equal to the hourly Total Indicated Fringe Benefits. Shifts may be established when considered necessary by the Employer. Shift hours and rates will be as follows. If shifts are established, work on the First Shift will begin between 6:00 a.m. and 9:00 a.m. and consist of eight (8) hours of work plus one-half hour unpaid lunch. Hours worked during the first shift will be paid at the straight time rate of pay. The second shift shall start eight hours after the start of the first shift and consist of eight (8) hours of work plus one-half hour unpaid lunch. Work on the second shift will begin between 2:00 p.m. and 5:00 p.m. and be paid the straight time rate plus \$2.50 per hour. The third shift shall start eight hours after the start of the second shift and consist of eight (8) hours plus one-half hour unpaid lunch. Work on the third shift will begin between 10:00 p.m. and 1:00 a.m. and be paid the straight time rate plus \$3.50 per hour. The additional amounts that are to be paid are only applicable when working shifts. Shifts that begin on Saturday morning through those shifts which end on Sunday morning will be paid at time and one-half these rates. Shifts that begin on Sunday morning through those shifts which end on Monday morning will be paid at double time these rates.

NO. 17: Means eight (8) hours shall constitute the regular work day and forty (40) hours a work week, Monday through Friday. The Employer shall establish the starting time between 6:30 a.m. through 9:00 a.m. An Employer may further adjust the starting time up to 9:30 A.M. throughout the year. Time and one-half (1½) shall be paid after eight (8) consecutive hours worked after the established starting time and for hours worked before the established starting time. Time and one-half (1½) shall be paid for work performed on Saturdays. Work performed on Sundays and Holidays shall be paid at the double (2) time rate of pay. The Employer when working on Highway and Road Work may have the option to schedule the work week for his paving crew only from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be at the applicable overtime rate of time and one-half (1½). If the Employer elects to work from Monday through Thursday and is stopped due to inclement weather (rain, snow, sleet falling), the Employer shall have the option to work Friday at the straight time rate of pay to complete the forty (40) hours.

NO. 23: Means the regular workweek shall start on Monday and end on Friday, except where the Employer elects to work Monday through Thursday, (10) hours per day. All work over ten (10) hours in a day or forty (40) hours in a week shall be at the overtime rate of one and one-half (1½) times the regular hourly rate. The regular workday shall be either eight (8) or ten (10) hours. If a job can't work forty (40) hours Monday through Friday because of inclement weather or other conditions beyond the control of the Employer, Friday or Saturday may be worked as a make-up day at straight time (if working 4-10's). Saturday may be worked as a make-up day at straight time (if working 5-8's). An Employer, who is working a four (4) ten (10) hour day work schedule may use Friday as a make-up day when a workday is lost due to a holiday. A workday is to begin at the option of the Employer but not later than 11:00 a.m. except when inclement weather, requirements of the owner or other conditions beyond the reasonable control of the Employer prevent work. Except as worked as a make-up day, time on Saturday shall be worked at one and one-half (1½) times the regular rate. Work performed on Sunday shall be paid at two (2) times the regular rate. Work performed on recognized holidays or days observed as such, shall also be paid at the double (2) time rate of pay. **For all overtime hours worked during the week or on Saturday \$14.55 of the fringe benefits portion of the prevailing wage shall be paid at time and one-half (1½). For all overtime hours worked on Sundays or recognized holidays \$14.55 of the fringe benefits portion of the prevailing wage shall be paid double time. The remaining \$.50 of the fringe benefit portion of the prevailing wage shall be paid at straight time.**

REPLACEMENT PAGE
JEFFERSON COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION

NO. 25: Means a regular work week of forty (40) hours, starting on Monday and ending on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A work day is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. All hours worked on recognized holidays, or days observed as such, double (2) time shall be paid.

NO. 26: Means a regular work week of forty (40) hours will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A workday is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

NO. 32: Means the overtime rate shall be time and one-half the regular rate for work over forty (40) hours per week. Sundays and Holidays shall be paid at double the straight time rate.

**JEFFERSON COUNTY
HOLIDAY SCHEDULE – HEAVY CONSTRUCTION**

NO. 4: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, or observed as such, shall be paid at the double time rate of pay. When a Holiday falls on a Sunday, Monday shall be observed. No work shall be performed on Labor Day, except in case of jeopardy to life or property. This is applied to protect Labor Day.

NO. 9: All work performed on Sundays and the following recognized holidays, or the days observed as such, of New Year's Day, Decoration Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) the hourly rate plus an amount equal to the hourly Total Indicated Fringe Benefits. Whenever any such holidays fall on a Sunday, the following Monday shall be observed as a holiday.

NO. 11: Means all work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day, and any additional holidays which may be mutually agreed upon shall be paid at the double (2) time rate of pay. Whenever any such holiday falls on a Sunday, the following Monday shall be recognized and observed as the holiday. No work shall be performed on Labor Day.

NO. 12: All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day, or days celebrated as such, shall be paid at the double time rate of pay. When one of the foregoing holidays falls on Sunday, it shall be celebrated on the following Monday. When one of the foregoing holidays falls on Saturday, it shall be celebrated on the Friday before the holiday.

NO. 16: The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on Sunday, it shall be observed on the following Monday. If a holiday falls on Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid to the worker unless worked. If workers are required to work the above recognized holidays or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 21: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make-up day when an observed holiday occurs during the work week. Employees have the option to work that make-up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 25: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 31: All work performed on New Year's Day, Presidents' Day, Veterans' Day, Good Friday, Decoration Day, Fourth of July, Labor Day, Christmas Eve Day, Christmas Day, Thanksgiving Day and Day after Thanksgiving or days celebrated for the same.