PROJECT MANUAL

Repair Firepit Lake Dam
Jay Nixon State Park
Middle Brook, Missouri

Designed By: Reitz & Jens, Inc.
1055 Corporate Square Drive
St. Louis, MO 63132

Date Issued: February 3, 2021

Project No.: X2006-01

STATE of MISSOURI

OFFICE of ADMINISTRATION
Facilities Management, Design & Construction
SECTION 00 0107
PROFESSIONAL SEALS AND CERTIFICATIONS

PART 1 GENERAL

1.01 PROJECT NUMBER: X 2006-01
   A. THE FOLLOWING DESIGN PROFESSIONALS HAVE SIGNED AND SEALED THE ORIGINAL
      PLANS AND SPECIFICATIONS FOR THIS PROJECT, WHICH ARE ON FILE WITH THE
      DIVISION OF DESIGN AND CONSTRUCTION
      Eric Karch, P.E. (2007005040)
      Reitz & Jens, Inc.
      1055 Corporate Square Drive
      St. Louis, MO 63132

1.02 TECHNICAL SPECIFICATIONS (DATED February 3, 2021)
   A. Sections: 014000, 015000, 015713, 022100, 024113,
      036200, 311000, 312200, 320000, 330000

1.03 PROJECT DRAWINGS:

<table>
<thead>
<tr>
<th>TITLE</th>
<th>SHEET #</th>
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<tbody>
<tr>
<td>Cover Sheet</td>
<td>G-001</td>
<td>02/03/2021</td>
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<tr>
<td>Locator, Index, Certification</td>
<td>G-002</td>
<td>02/03/2021</td>
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<tr>
<td>Notes, Survey Info, Coordinate Table</td>
<td>G-003</td>
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<td>Site Plan</td>
<td>C-101</td>
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<td>Profile and Cross Sections</td>
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<tr>
<td>Details</td>
<td>C-501</td>
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<td>C-501</td>
</tr>
</tbody>
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THE ENGINEER (DESIGNER) WHOSE SIGNATURE AND PERSONAL SEAL APPEAR
HEREON ASSUMES RESPONSIBILITY ONLY FOR THE PLAN SHEETS AND
SPECIFICATION SECTIONS INDICATED ABOVE AND DISCLAIMS (PURSUANT TO
SECTION 327.411 RSMO) ANY RESPONSIBILITY FOR ALL OTHER PLANS,
SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS
NOT SEALED BY THE UNDERSIGNED ENGINEER RELATING TO OR INTENDED TO BE
USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

END OF SECTION
<table>
<thead>
<tr>
<th>SECTION</th>
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<td>000000</td>
<td>INTRODUCTORY INFORMATION</td>
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<td>INVITATION FOR BID (IFB) plus Missouri Buys instructions and special notice</td>
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<td>002113</td>
<td>INSTRUCTIONS TO BIDDERS (Includes MBE/WBE/SDVE Information)</td>
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**The following documents may be found on MissouriBUYS at https://missouribuys.mo.gov/**

| 004000    | PROCUREMENT FORMS & SUPPLEMENTS                                      |                 |
| 004113    | Bid Form                                                            |                 |
| 004336    | Proposed Subcontractors Form                                         |                 |
| 004337    | MBE/WBE/SDVE Compliance Evaluation Form                             |                 |
| 004338    | MBE/WBE/SDVE Eligibility Determination                               |                 |
| 004339    | MBE/WBE/SDVE Good Faith Effort (GFE) Determination Forms            |                 |
| 004340    | SDVE Business Form                                                   |                 |
| 004541    | Affidavit of Work Authorization                                      |                 |
| 004545    | Anti-Discrimination Against Israel Act Certification form            |                 |

| 005000    | CONTRACTING FORMS AND SUPPLEMENTS                                    |                 |
| 005213    | Construction Contract                                                | 3               |
| 005414    | Affidavit for Affirmative Action                                     | 1               |
| 006113    | Performance and Payment Bond                                         | 2               |
| 006325    | Product Substitution Request                                         | 2               |
| 006519.16 | Final Receipt of Payment and Release Form                            | 1               |
| 006519.18 | MBE/WBE/SDVE Progress Report                                         | 1               |
| 006519.21 | Affidavit of Compliance with Prevailing Wage Law                      | 1               |

| 007000    | CONDITIONS OF THE CONTRACT                                           |                 |
| 007213    | General Conditions                                                   | 20              |
| 007300    | Supplementary Conditions                                             | 1               |
| 007346    | Wage Rate                                                           | 4               |

**DIVISION 1 - GENERAL REQUIREMENTS**

| 011000    | Summary of Work                                                     | 1               |
| 012600    | Contract Modification Procedures                                     | 2               |
| 013100    | Coordination                                                        | 2               |
| 013115    | Project Management Communications                                    | 4               |
| 013200    | Schedule – Bar Chart                                                | 2               |
| 013300    | Submittals                                                          | 3               |
| 013513.28 | Site Security and Health Requirements (DNR)                         | 2               |
| 014000    | Independent Testing                                                 | 1               |
| 015000    | Construction Facilities and Temporary Controls                      | 4               |
| 015713    | Temporary Erosion and Sediment Control                               | 7               |
| 017400    | Cleaning                                                            | 2               |

**DIVISION 2 – EXISTING CONDITIONS**

| 022100    | Surveys                                                             | 2               |
| 024113    | Selective Site Demolition                                           | 2               |

**DIVISION 3 – CONCRETE**

| 036200    | Non-Shrink Grout Construction                                       | 3               |
## DIVISION 31 – EARTHWORK
- 311000 Site Clearing 2
- 312200 Earthwork 6

## DIVISION 32 – EXTERIOR IMPROVEMENTS
- 320000 Surface Restoration 4

## DIVISION 33 – UTILITIES
- 330000 Utilities – Pipe Sewer Construction 2

## APPENDIX
- A – Dam & Reservoir Safety Council Construction Permit 5
- B – USACE Permit 4
- C – Hennesey Easement 11
- D – Road Easement Agreement 15
- E – Declaration of Easement 11
- F – Sohn Easement 15
- G – Land Disturbance Permit 27
SECTION 00 0115
LIST OF DRAWINGS

PART 1 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract including General and Supplementary
      Conditions, Bid Form, and other Division 1 Specification Sections apply to this Section.

1.02 SUMMARY
   A. This Section provides a comprehensive list of the drawings that comprise the Bid Documents
      for this project.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 LIST OF DRAWINGS
   A. The following list of drawings is a part of the Bid Documents:

   B. TITLE                              SHEET #     DATE       CAD #
       1. Cover Sheet                     G-001       02/03/2021 G-001
       2. Locator, Index, Certification   G-002       02/03/2021 G-002
       3. Notes, Survey Info, Coordinate Table G-003  02/03/2021 G-003
       4. Site Plan                       C-101       02/03/2021 C-101
       5. Profile and Cross Sections      C-301       02/03/2021 C-301
       6. Cross Sections                  C-302       02/03/2021 C-302
       7. Details                         C-501       02/03/2021 C-501

END OF SECTION
1.0 OWNER:
A. The State of Missouri
   Office of Administration,
   Division of Facilities Management, Design and Construction
   Jefferson City, Missouri

2.0 PROJECT TITLE AND NUMBER:
A. Repair Firepit Lake Dam
   Jay Nixon State Park
   Middle Brook, Missouri
   Project No.: X2006-01

3.0 BIDS WILL BE RECEIVED:
A. Until: 1:30 PM, Tuesday, April 27, 2021
B. Only electronic bids on MissouriBUYS shall be accepted: https://missouribuys.mo.gov. Bidder must be registered to bid.

4.0 DESCRIPTION:
A. Scope: Selective demolition (abandonment) of the primary spillway at Jay Nixon State Park and construction of emergency spillway widening/notching and repair of the emergency spillway training berm.
B. MBE/WBE/SDVE Goals: MBE 10%, WBE 10%, and SDVE 3%. **NOTE: Only MBE/WBE firms certified by the State of Missouri Office of Equal Opportunity as of the date of bid opening, or SDVE(s) meeting the requirements of Section 34.074, RSMo and 1 CSR 30-5.010, can be used to satisfy the MBE/WBE/SDVE participation goals for this project.
C. **NOTE: Bidders are provided new Good Faith Effort (GFE) forms on MissouriBUYS.

5.0 PRE-BID MEETING:
A. Place/Time: Time 10:30 AM, April 8, 2021, at Johnson’s Shut-Ins State Park, Black River Visitor Center, 148 Taum Sauk Trail, Middle Brook, MO 63656-9601. It is recommended that contractors bring their own Utility Terrain Vehicles (UTVs) to access the site after the conference portion of the pre-bid meeting. All persons are respectfully requested to wear facial coverings and to social distance per current federal CDC guidelines.
B. Access to State of Missouri property requires presentation of a photo ID by all persons. This facility is closed to the public. All access to the site shall be coordinated through Krista Kennon. She can be reached by phone (573) 546 – 7855 or email Krista.Kennon@dnr.mo.gov.

6.0 HOW TO GET PLANS & SPECIFICATIONS:
A. View Only Electronic bid sets are available at no cost or paper bid sets for a deposit of $30 from American Document Solutions (ADS). MAKE CHECKS PAYABLE TO: American Document Solutions. Mail to: American Document Solutions, 1400 Forum Blvd., Suite 7A, Columbia, Missouri 65203. Phone 573-446-7768, Fax 573-355-5433, https://www.adsplanroom.net. NOTE: Prime contractors will be allowed a maximum of two bid sets at the deposit rate shown above. Other requesters will be allowed only one bid set at this rate. Additional bid sets or parts thereof may be obtained by any bidder at the cost of printing and shipping as required by request to American Document Solutions at the address shown above. **Bidder must secure at least one bid set to become a planholder.**
B. Refunds: Return plans and specifications in unmarked condition within 15 working days of bid opening to American Document Solutions, 1400 Forum Blvd., Suite 7A, Columbia, Missouri 65203. Phone 573-446-7768, Fax 573-355-5433. Deposits for plans not returned within 15 working days shall be forfeited.
C. Information for upcoming bids, including downloadable plans, specifications, Invitation for Bid, bid tabulation, award, addenda, and access to the ADS planholders list, is available on the Division of Facilities Management, Design and Construction’s web site: https://oa.mo.gov/facilities/bid-opportunities/bid-listing-electronic-plans.

7.0 POINT OF CONTACT:
A. Designer: Reitz & Jens, Jeff Bertel, PE, phone # (314) 993-4132
B. Project Manager: Eric Hibdon, PE, phone # (573) 522-0322

8.0 GENERAL INFORMATION:
A. The State reserves the right to reject any and all bids and to waive all informalities in bids. No bid may be withdrawn for a period of 20 working days subsequent to the specified bid opening time. The contractor shall pay not less than the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed, as determined by the Missouri Department of Labor and Industrial Relations and as set out in the detailed plans and specifications.
B. Bid results will be available at https://oa.mo.gov/facilities/bid-opportunities/bid-listing-electronic-plans after it is verified that at least one bid is awardable and affordable.
Very Important MissouriBUYS Instructions to Help Submit a Bid Correctly

A. The bidder shall submit his or her bid and all supporting documentation on MissouriBUYS eProcurement System. No hard copy bids shall be accepted. Go to https://missouribuys.mo.gov and register. The bidder must register before access is granted to the solicitation details and bidding is possible, however, the bidder can review a summary of the project by selecting “Bid Board” and then checking off “Open” under “Status” and “OA-FMDC-Contracts Chapter 8” under “Organization” in the boxes shown on the left margin.

B. Once registered, log in.
2. Under “Filter by Agency” select “OA-FMDC-Contracts Chapter 8.”
4. Above the dark blue bar, select “Other Active Opportunities.”
5. To see the Solicitation Summary, single click the Opp. No. (Project Number) and the summary will open. Single quick click each blue bar to open detailed information.

C. Here are simplified instructions for uploading the bid to MissouriBUYS:
1. Find the solicitation by completing Steps 1 through 4 above.
2. Select the three dots under “Actions.” Select “Add New Response.”
3. When the Quote box opens, give the response a title and select “OK.”
4. The detailed solicitation will open. Select “Check All” for the Original Solicitation Documents, open each document, and select “Accept.” If this step is not completed, a bid cannot be uploaded. Scroll to the bottom of the page and select “Add Attachments.” If you do not see this command, not all documents have been opened and accepted.
5. The Supplier Attachments box will open. Select “Add Attachment” again.
6. The Upload Documents box will open. Read the instructions for uploading. Disregard the “Confidential” check box.
7. Browse and attach up to 5 files at a time. Scroll to bottom of box and select “Upload.” The Supplier Attachments box will open. Repeat Steps 5 through 7 if more than 5 files are to be uploaded.
8. When the Supplier Attachments box opens again and uploading is complete, select “Done.” A message should appear that the upload is successful. If it does not, go to the Bidder Response tab and select “Submit.”
9. The detailed solicitation will open. At the bottom select “Close.”

D. Any time a bidder wants to modify the bid, he or she will have to submit a new one. FMDC will open the last response the bidder submits. The bidder may revise and submit the bid up to the close of the solicitation (bid date and time). Be sure to allow for uploading time so that the bid is successfully uploaded prior to the 1:30 PM deadline; we can only accept the bid if it is uploaded before the deadline.

E. If you want to verify that you are uploading documents correctly, we encourage you to submit a fake bid early. Label the fake bid as such to distinguish it from the real bid. The contracts person you contact will let you know if your “bid” was received successfully. Please contact Paul Girouard: 573-751-4797, paul.girouard@oa.mo.gov OR Mandy Roberson: 573-522-0074.

F. If you are experiencing login issues, please contact Web Procure Support (Proactis) at 866-889-8533 anytime from 7:00 AM to 7:00 PM Central Time, Monday through Friday. If you try using a userid or password several times that is incorrect, the system will lock you out. Web Procure Support is the only option to unlock you! If you forget your userid or password, Web Procure Support will provide a temporary userid or password. Also, if it has been a while since your last successful login and you receive an “inactive” message, contact Web Procure (Proactis). If you are having a registration issue, you may contact Cathy Holliday at 573-751-3491 or by email: cathy.holliday@oa.mo.gov.
IMPORTANT REMINDER REGARDING REQUIREMENT FOR OEO CERTIFICATION

A. SECTION 002113 – INSTRUCTIONS TO BIDDERS: Article 14.0, Section D1:

As of July 1, 2020, all MBE, WBE, and MBE/WBE contractors, subcontractors, and suppliers must be certified by the State of Missouri, Office of Equal Opportunity. No certifications from other Missouri certifying agencies will be accepted.
SECTION 002113 – INSTRUCTIONS TO BIDDERS

1.0 - SPECIAL NOTICE TO BIDDERS

A. If awarded a contract, the Bidder’s employees, and the employees of all subcontractors, who perform the work on the project, will be required to undergo a fingerprint background check and obtain a State of Missouri identification badge prior to beginning work on site. The Bidder should review the information regarding this requirement in Section 013513 – Site Security and Health Requirements prior to submitting a bid.

B. The Bidder’s prices shall include all city, state, and federal sales, excise, and similar taxes that may lawfully be assessed in connection with the performance of work, and the purchased of materials to be incorporated in the work. THIS PROJECT IS NOT TAX EXEMPT.

2.0 - BID DOCUMENTS

A. The number of sets obtainable by any one (1) party may be limited in accordance with available supply.

B. For the convenience of contractors, sub-contractors and suppliers, copies of construction documents are on file at the office of the Director, Division of Facilities Management, Design and Construction and on the Division’s web site - https://oa.mo.gov/facilities/bid-opportunities/bid-listing-electronic-plans.

3.0 - BIDDERS' OBLIGATIONS

A. Bidders must carefully examine the entire site of the work and shall make all reasonable and necessary investigations to inform themselves thoroughly as to the facilities available as well as to all the difficulties involved in the completion of all work in accordance with the specifications and the plans. Bidders are also required to examine all maps, plans and data mentioned in the specifications. No plea of ignorance concerning observable existing conditions or difficulties that may be encountered in the execution of the work under this contract will be accepted as an excuse for any failure or omission on the part of the contractor to fulfill in every detail all of the requirements of the contract, nor accepted as a basis for any claims for extra compensation.

B. Under no circumstances will contractors give their plans and specifications to another contractor. Any bid received from a contractor whose name does not appear on the list of plan holders may be subject to rejection.

4.0 - INTERPRETATIONS

A. No bidder shall be entitled to rely on oral interpretations as to the meaning of the plans and specifications or the acceptability of alternate products, materials, form or type of construction. Every request for interpretation shall be made in writing and submitted with all supporting documents not less than five (5) working days before opening of bids. Every interpretation made to a bidder will be in the form of an addendum and will be sent as promptly as is practicable to all persons to whom plans and specifications have been issued. All such addenda shall become part of the contract documents.

B. Approval for an “acceptable substitution” issued in the form of an addendum as per Paragraph 4A above, and as per Article 3.1 of the General Conditions; ACCEPTABLE SUBSTITUTIONS shall constitute approval for use in the project of the product.

C. An “acceptable substitution” requested after the award of bid shall be approved if proven to the satisfaction of the Owner and the Designer as per Article 3.1, that the product is acceptable in design, strength, durability, usefulness, and convenience for the purpose intended. Approval of the substitution after award is at the sole discretion of the Owner.

D. A request for “Acceptable Substitutions” shall be made on the Section 006325 Substitution Request Form. The request shall be sent directly to the project Designer. A copy of said request should also be mailed to the Owner, Division of Facilities Management, Design and Construction, Post Office Box 809, Jefferson City, Missouri 65102.
5.0 - BIDS AND BIDDING PROCEDURE

A. Bidders shall submit all submission forms and accompanying documents listed in SECTION 004113 – BID FORM, Article 5.0, ATTACHMENTS TO BID by the stated time or their bid will be rejected for being non-responsive.

Depending on the specific project requirements, the following is a GENERIC list of all possible bid forms that may be due with bid submittals and times when they may be due. Please check for specific project requirements on the proposal form (Section 004113). Not all of the following bid forms may be required to be submitted.

Bid Submittal – due before stated date and time of bid opening (see IFB):

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>004113</td>
<td>Bid Form (all pages are always required)</td>
</tr>
<tr>
<td>004322</td>
<td>Unit Prices Form</td>
</tr>
<tr>
<td>004336</td>
<td>Proposed Subcontractors Form</td>
</tr>
<tr>
<td>004337</td>
<td>MBE/WBE/SDVE Compliance Evaluation Form</td>
</tr>
<tr>
<td>004338</td>
<td>MBE/WBE/SDVE Eligibility Determination for Joint Ventures</td>
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<td>MBE/WBE/SDVE GFE Determination</td>
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<td>004545</td>
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</tbody>
</table>

B. All bids shall be submitted without additional terms and conditions, modification or reservation on the bid forms with each space properly filled. Bids not on these forms will be rejected.

C. All bids shall be accompanied by a bid bond executed by the bidder and a duly authorized surety company, certified check, cashier's check or bank draft made payable to the Division of Facilities Management, Design and Construction, State of Missouri, in the amount indicated on the bid form, Section 004113. Failure of the contractor to submit the full amount required shall be sufficient cause to reject his bid. The bidder agrees that the proceeds of the check, draft or bond shall become the property of the State of Missouri, if for any reason the bidder withdraws his bid after closing, or if on notification of award refuses or is unable to execute tendered contract, provide an acceptable performance and payment bond, provide evidence of required insurance coverage and/or provide required copies of affirmative action plans within ten (10) working days after such tender.

D. The check or draft submitted by the successful bidder will be returned after the receipt of an acceptable performance and payment bond and execution of the formal contract. Checks or drafts of all other bidders will be returned within a reasonable time after it is determined that the bid represented by same will receive no further consideration by the State of Missouri. Bid bonds will only be returned upon request.

6.0 - SIGNING OF BIDS

A. A bid from an individual shall be signed as noted on the Bid Form.

B. A bid from a partnership or joint venture shall require only one signature of a partner, an officer of the joint venture authorized to bind the venture or an attorney-in-fact. If the bid is signed by an officer of a joint venture or an attorney-in-fact, a document evidencing the individual's authority to execute contracts should be included with the bid form.

C. A bid from a limited liability company (LLC) shall be signed by a manager or a managing member of the LLC.

D. A bid from a corporation shall have the correct corporate name thereon and the signature of an authorized officer of the corporation manually written. Title of office held by the person signing for the corporation shall appear, along with typed name of said individual. Corporate license number shall be provided and, if a corporation organized in a state other than Missouri, a Certificate of Authority to do business in the State of Missouri shall be attached. In addition, for corporate proposals, the President or Vice-President should sign as the bidder. If the signator is other than the corporate president or vice president, the bidder must provide satisfactory evidence that the signator has the legal authority to bind the corporation.
E. A bid should contain the full and correct legal name of the Bidder. If the Bidder is an entity registered with the Missouri Secretary of State, the Bidder’s name on the bid form should appear as shown in the Secretary of State’s records.

F. The Bidder should include its corporate license number on the Bid Form and, if the corporation is organized in a state other than Missouri, a Certificate of Authority to do business in the State of Missouri shall be attached to the bid form.

7.0 - RECEIVING BID SUBMITTALS

A. It is the bidder’s sole responsibility to assure receipt by Owner of bid submittals by the date and time specified in the Invitation for Bid. Bids received after the date and time specified shall not be considered by the Owner.

B. Bids must be submitted through the MissouriBUYS statewide eProcurement system (https://www.missouribuys.mo.gov/) in accordance with the instructions for that system. The Owner shall only accept bids submitted through MissouriBUYS. Bids received by the Owner through any other means, including hard copies, shall not be considered and will be discarded by the Owner unopened.

C. To respond to an Invitation for Bid, the Bidder must first register with MissouriBUYS by going through the MissouriBUYS Home Page (https://www.missouribuys.mo.gov/), clicking the “Register” button at the top of the page, and completing the Vendor Registration. Once registered, the Bidder accesses its account by clicking the “Login” button at the top of the MissouriBUYS Home Page. Enter your USERID and PASSWORD, which the Bidder will select. Under Solicitations, select “View Current Solicitations.” A new screen will open. Under “Filter by Agency” select “OA-FMDC-Contracts Chapter 8.” Under “Filter by Opp. No.” type in the State Project Number. Select “Submit.” Above the dark blue bar, select “Other Active Opportunities.” To see the Solicitation Summary, single click the Opp. No. (Project Number) and the summary will open. Single quick click each blue bar to open detailed information. The Bidder must read and accept the Original Solicitation Documents and complete all identified requirements. The Bidder should download and save all of the Original Solicitation Documents on its computer so that the Bidder can prepare its response to these documents. The Bidder should upload its completed response to the downloaded documents as an attachment to the electronic solicitation response.

D. Step-by-step instructions for how a registered vendor responds to a solicitation electronically are provided in Section 001116 – Invitation For Bid.

E. The Bidder shall submit its bid on the forms provided by the Owner on MissouriBUYS with each space fully and properly completed, including all amounts required for alternate bids, unit prices, cost accounting data, etc. The Owner may reject bids that are not on the Owner’s forms or that do not contain all requested information.

F. No Contractor shall stipulate in his bid any conditions not contained in the specifications or standard bid form contained in the contract documents. To do so may subject the Contractor’s bid to rejection.

G. The completed forms shall be without interlineations, alterations or erasures.

8.0 - MODIFICATION AND WITHDRAWAL OF BIDS

A. Bidder may withdraw his bid at any time prior to scheduled closing time for receipt of bids, but no bidder may withdraw his bid for a period of twenty (20) working days after the scheduled closing time for receipt of bids.

B. The Bidder shall modify his or her original bid by submitting a revised bid on MissouriBUYS.

9.0 - AWARD OF CONTRACT

A. The Owner reserves the right to reject any and/or all bids and further to waive all informalities in bidding when deemed in the best interest of the State of Missouri.

B. The Owner reserves the right to let other contracts in connection with the work, including but not by way of limitation, contracts for the furnishing and installation of furniture, equipment, machines, appliances and other apparatus.
C. In awarding the contract the Owner may take into consideration the bidder's skill, facilities, capacity, experience, responsibility, previous work record, financial standing and the necessity of prompt and efficient completion of work herein described. Inability of any bidder to meet the requirements mentioned above may be cause for rejection of his bid. However, no contract will be awarded to any individual, partnership or corporation, who has had a contract with the State of Missouri declared in default within the preceding twelve months.

D. Award of alternates, if any, will be made in numerical order unless all bids received are such that the order of acceptance of alternates does not affect the determination of the low bidder.

E. No bid shall be considered binding upon the Owner until the written contract has been properly executed, a satisfactory bond has been furnished, evidence of required insurance coverage, submittal of executed Section 004541, Affidavit of Work Authorization form, documentation evidencing enrollment and participation in a federal work authorization program has been received and an affirmative action plan submitted. Failure to execute and return the contract and associated documents within the prescribed period of time shall be treated, at the option of the Owner, as a breach of bidder's obligation and the Owner shall be under no further obligation to bidder.

F. If the successful bidder is doing business in the State of Missouri under a fictitious name, he shall furnish to Owner, attached to the Bid Form, a properly certified copy of the certificate of Registration of Fictitious Name from the State of Missouri, and such certificate shall remain on file with the Owner.

G. Any successful bidder which is a corporation organized in a state other than Missouri shall furnish to the Owner, attached to the Bid Form, a properly certified copy of its current Certificate of Authority to do business in the State of Missouri, such certificate to remain on file with the Owner. No contract will be awarded by the Owner unless such certificate is furnished by the bidder.

H. Any successful bidder which is a corporation organized in the State of Missouri shall furnish at its own cost to the Owner, if requested, a Certificate of Good Standing issued by the Secretary of State, such certificate to remain on file with the Owner.

I. Transient employers subject to Sections 285.230 and 285.234, RSMo, (out-of-state employers who temporarily transact any business in the State of Missouri) may be required to file a bond with the Missouri Department of Revenue. No contract will be awarded by the Owner unless the successful bidder certifies that he has complied with all applicable provisions of Section 285.230-234.

J. Sections 285.525 and 285.530, RSMo, require business entities to enroll and participate in a federal work authorization program in order to be eligible to receive award of any state contract in excess of $5,000. Bidders should submit with their bid an Affidavit of Work Authorization (Section 004541) along with appropriate documentation evidencing such enrollment and participation. Section-004541, Affidavit of Work Authorization is located on the MissouriBUYS solicitation for this project. Bidders must also submit an E-Verify Memorandum before the Owner may award a contract to the Bidder. Information regarding a E-Verify is located at https://www.uscis.gov/e-verify/. The contractor shall be responsible for ensuring that all subcontractors and suppliers associated with this contract enroll in E-Verify.

10.0 - CONTRACT SECURITY

A. The successful bidder shall furnish a performance/payment bond as set forth in General Conditions Article 6.1 on a condition prior to the State executing the contract and issuing a notice to proceed.

11.0 - LIST OF SUBCONTRACTORS

A. If required by “Section 004113 – Bid Form,” each bidder must submit as part of their bid a list of subcontractors to be used in performing the work (Section 004336). The list must specify the name of the single designated subcontractor, for each category of work listed in “Section 004336 - Proposed Subcontractors Form.” If work within a category will be performed by more than one subcontractor, the bidder must provide the name of each subcontractor and specify the exact portion of the work to be done by each. Failure to list the Bidder’s firm, or a subcontractor for each category of work identified on the Bid Form or the listing of more than one subcontractor for any category without designating the portion of work to be performed by each shall be cause for rejection of the bid. If the bidder intends to perform any of the designated subcontract work with the use of his own employees, the bidder shall make that fact clear, by listing his own firm for the subject category. If any category of work is left vacant, the bid shall be rejected.
12.0 - WORKING DAYS

A. Contract duration time is stated in working days and will use the following definition in determining the actual calendar date for contract completion:


13.0 - AMERICAN AND MISSOURI - MADE PRODUCTS AND FIRMS

A. By signing the bid form and submitting a bid on this project, the Bidder certifies that it will use American and Missouri products as set forth in Article 1.7 of the General Conditions. Bidders are advised to review those requirements carefully prior to bidding.

B. A preference shall be given to Missouri firms, corporations or individuals, or firms, corporations or individuals that maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less.

C. Pursuant to Section 34.076, RSMo, a contractor or Bidder domiciled outside the boundaries of the State of Missouri shall be required, in order to be successful, to submit a bid the same percent less than the lowest bid submitted by a responsible contractor or Bidder domiciled in Missouri as would be required for such a Missouri domiciled contractor or Bidder to succeed over the bidding contractor or Bidder domiciled outside Missouri on a like contract or bid being let in the person's domiciliary state and, further, the contractor or Bidder domiciled outside the boundaries of Missouri shall be required to submit an audited financial statement as would be required of a Missouri domiciled contractor or Bidder on a like contract or bid being let in the domiciliary state of that contractor or Bidder.

14.0 – ANTI-DISCRIMINATION AGAINST ISRAEL ACT CERTIFICATION:

A. Pursuant to section 34.600, RSMo, if the Bidder meets the section 34.600, RSMo, definition of a “company” and the Bidder has ten or more employees, the Bidder must certify in writing that the Bidder is not currently engaged in a boycott of goods or services from the State of Israel as defined in section 34.600, RSMo, and shall not engage in a boycott of goods or services from the State of Israel, if awarded a contract, for the duration of the contract. The Bidder is requested to complete and submit the applicable portion of Section 004545 - Anti-Discrimination Against Israel Act Certification with their Bid Form. The applicable portion of the exhibit must be submitted prior to execution of a contract by the Owner and issuance of Notice to Proceed. If the exhibit is not submitted, the Owner shall rescind its Intent to Award and move to the next lowest, responsive, responsible bidder.

15.0 - MBE/WBE/SDVE INSTRUCTIONS

A. Definitions:

1. “MBE” means a Minority Business Enterprise.

2. “MINORITY” has the same meaning as set forth in 1 C.S.R. 10-17.010.

3. “MINORITY BUSINESS ENTERPRISE” has the same meaning as set forth in section 37.020, RSMo.


5. “WOMEN’S BUSINESS ENTERPRISE” has the same meaning as set forth in section 37.020, RSMo.


7. “SERVICE-DISABLED VETERAN” has the same meaning as set forth in section 34.074, RSMo.

8. “SERVICE-DISABLED VETERAN ENTERPRISE” has the same meaning as “Service-Disabled Veteran Business” set forth in section 34.074, RSMo.
B. MBE/WBE/SDVE General Requirements:

1. For all bids greater than $100,000, the Bidder shall obtain MBE, WBE and SDVE participation in an amount equal to or greater than the percentage goals set forth in the Invitation for Bid and the Bid Form, unless the Bidder is granted a Good Faith Effort waiver by the Director of the Division, as set forth below. If the Bidder does not meet the MBE, WBE and SDVE goals, or make a good faith effort to do so, the Bidder shall be non-responsive, and its bid shall be rejected.

2. The Bidder should submit with its bid all of the information requested in the MBE/WBE/SDVE Compliance Evaluation Form for every MBE, WBE, or SDVE subcontractor or material supplier the Bidder intends to use for the contract work. The Bidder is required to submit all appropriate MBE/WBE/SDVE documentation before the stated time and date set forth in the Invitation for Bid. If the Bidder fails to provide such information by the specified date and time, the Owner shall reject the bid.

3. The Director reserves the right to request additional information from a Bidder to clarify the Bidder’s proposed MBE, WBE, and/or SDVE participation. The Bidder shall submit the clarifying information requested by the Owner within two (2) Working Days of receiving the request for clarification.

4. Pursuant to section 34.074, RSMo, a Bidder that is a SDVE doing business as Missouri firm, corporation, or individual, or that maintains a Missouri office or place of business, shall receive a three-point bonus preference in the contract award evaluation process. The bonus preference will be calculated and applied by reducing the bid amount of the eligible SDVE by three percent of the apparent low responsive bidder’s bid. Based on this calculation, if the eligible SDVE’s evaluation is less than the apparent low responsive bidder’s bid, the eligible SDVE’s bid becomes the apparent low responsive bid. This reduction is for evaluation purposes only, and will have no impact on the actual amount(s) of the bid or the amount(s) of any contract awarded. In order to be eligible for the SDVE preference, the Bidder must complete and submit with its bid the Missouri Service Disabled Veteran Business Form, and any information required by the form. The form is available on the MissouriBUYS solicitation for this project.

C. Computation of MBE/WBE/SDVE Goal Participation:

1. A Bidder who is a MBE, WBE, or SDVE may count 100% of the contract towards the MBE, WBE or SDVE goal, less any amounts awarded to another MBE, WBE or SDVE. (NOTE: A MBE firm that bids as general contractor must obtain WBE and SDVE participation; a WBE firm that bids as a general contractor must obtain MBE and SDVE participation; and a SDVE firm that bids as general contractor must obtain MBE and WBE participation.) In order for the remaining contract amount to be counted towards the MBE, WBE or SDVE goal, the Bidder must complete the MBE/WBE/SDVE Compliance Evaluation Form (Section 004337) identifying itself as an MBE, WBE or SDVE.

2. The total dollar value of the work granted to a certified MBE, WBE or SDVE by the Bidder shall be counted towards the applicable goal.

3. Expenditures for materials and supplies obtained from a certified MBE, WBE, or SDVE supplier or manufacturer may be counted towards the MBE, WBE and SDVE goals, if the MBE, WBE, or SDVE assumes the actual and contractual responsibility for the provision of the materials and supplies.

4. The total dollar value of the work granted to a second or subsequent tier subcontractor or a supplier may be counted towards a Bidder’s MBE, WBE and SDVE goals, if the MBE, WBE, or SDVE properly assumes the actual and contractual responsibility for the work.

5. The total dollar value of work granted to a certified joint venture equal to the percentage of the ownership and control of the MBE, WBE, or SDVE partner in the joint venture may be counted towards the MBE/WBE/SDVE goals.

6. Only expenditures to a MBE, WBE, or SDVE that performs a commercially useful function in the work may be counted towards the MBE, WBE and SDVE goals. A MBE, WBE, or SDVE performs a commercially useful function when it is responsible for executing a distinct element of the work and carrying out its responsibilities by actually performing, managing and supervising the work or providing supplies or manufactured materials.
D. Certification of MBE/WBE/SDVE Subcontractors:

1. In order to be counted towards the goals, an MBE or WBE must be certified by the State of Missouri Office of Equal Opportunity and an SDVE must be certified by the State of Missouri, Office of Administration, Division of Purchasing and Material Management or by the Department of Veterans Affairs.

2. The Bidder may determine the certification status of a proposed MBE or WBE subcontractor or supplier by referring to the Office of Equal Opportunity (OEO)’s online MBE/WBE directory (https://apps1.mo.gov/oeo/). The Bidder may determine the eligibility of a SDVE subcontractor or supplier by referring to the Division of Purchasing and Materials Management’s online SDVE directory (http://oa.mo.gov/purchasing/vendor-information/missouri-service-disabled-veteranbusiness-enterprise-sdve-information) or the Department of Veterans Affairs’ directory (https://www.vip.vetbiz.gov/).

3. Additional information, clarifications, etc., regarding the listings in the directories may be obtained by calling the Division at (573)751-3339 and asking to speak to the Contract Specialist of record as shown in the Supplementary Conditions (Section 007300).

E. Waiver of MBE/WBE/SDVE Participation:

1. If a Bidder has made a good faith effort to secure the required MBE, WBE and/or SDVE participation and has failed, the Bidder shall submit with its bid the information requested in MBE/WBE/SDVE Good Faith Effort (GFE) Determination form. The GFE forms are located on the MissouriBUYs solicitation for this project. The Director will determine if the Bidder made a good faith effort to meet the applicable goals. If the Director determines that the Bidder did not make a good faith effort, the bid shall be rejected as being nonresponsive to the bid requirements. Bidders who demonstrate that they have made a good faith effort to include MBE, WBE, and/or SDVE participation will be determined to be responsive to the applicable participation goals, regardless of the percent of actual participation obtained, if the bid is otherwise acceptable.

2. In determining whether a Bidder has made a good faith effort to obtain MBE, WBE and/or SDVE participation, the Director may evaluate the factors set forth in 1 CSR 30-5.010(6)(C) and the following:
   a. The amount of actual participation obtained;
   b. How and when the Bidder contacted potential MBE, WBE, and SDVE subcontractors and suppliers;
   c. The documentation provided by the Bidder to support its contacts, including whether the Bidder provided the names, addresses, phone numbers, and dates of contact for MBE/WBE/SDVE firms contacted for specific categories of work;
   d. If project information, including plans and specifications, were provided to MBE/WBE/SDVE subcontractors;
   e. Whether the Bidder made any attempts to follow-up with MBE, WBE or SDVE firms prior to bid;
   f. Amount of bids received from any of the subcontractors and/or suppliers that the Bidder contacted;
   g. The Bidder’s stated reasons for rejecting any bids;

3. If no bidder has obtained any participation in a particular category (MBE/WBE/SDVE) or made a good faith effort to do so, the Director may waive that goal rather than rebid.
F. Contractor MBE/WBE/SDVE Obligations

1. If awarded a contract, the Bidder will be contractually required to subcontract with or obtain materials from the MBE, WBE, and SDVE firms listed in its bid, in amounts equal to or greater than the dollar amount bid, unless the amount is modified in writing by the Owner.

2. If the Contractor fails to meet or maintain the participation requirements contained in the Contractor's bid, the Contractor must satisfactorily explain to the Director why it cannot comply with the requirement and why failing meeting the requirement was beyond the Contractor's control. If the Director finds the Contractor's explanation unsatisfactory, the Director may take any appropriate action including, but not limited to:
   a. Declaring the Contractor ineligible to participate in any contracts with the Division for up to twelve (12) months (suspension); and/or
   b. Declaring the Contractor be non-responsive to the Invitation for Bid, or in breach of contract and rejecting the bid or terminating the contract.

3. If the Contractor replaces an MBE, WBE, or SDVE during the course of this contract, the Contractor shall replace it with another MBE, WBE, or SDVE or make a good faith effort to do so. All MBE, WBE and SDVE substitutions must be approved by the Director.

4. The Contractor shall provide the Owner with regular reports on its progress in meeting its MBE/WBE/SDVE obligations. At a minimum, the Contractor shall report the dollar-value of work completed by each MBE, WBE, or SDVE during the preceding month and the cumulative total of work completed by each MBE, WBE or SDVE to date with each monthly application for payment. The Contractor shall also make a final report, which shall include the total dollar-value of work completed by each MBE, WBE, and SDVE during the entire contract.
The MBE/WBE Directory for goods and services is maintained by the Office of Equal Opportunity (OEO). The current Directory can be accessed at the following web address:

https://apps1.mo.gov/MWBCertifiedFirms/

Please note that you may search by MBE, WBE, or both as well as by region, location of the business by city or state, as well as by commodity or service.

The SERVICE DISABLED VETERAN ENTERPRISE (SDVE) Directory (s) may be accessed at the following web addresses:

https://oa.mo.gov/sites/default/files/sdvelisting.pdf

https://www.vip.vetbiz.va.gov
THIS AGREEMENT, made (DATE) by and between:

Contractor Name and Address
hereinafter called the "Contractor,"

and the State of Missouri, hereinafter called the "Owner", represented by the Office of Administration, Division of Facilities Management, Design and Construction, on behalf of the Department of Natural Resources, Division of State Parks.

WITNESSETH, that the Contractor and the Owner, for the consideration stated herein agree as follows:

ARTICLE 1. STATEMENT OF WORK

The Contractor shall furnish all labor and materials and perform all work required for furnishing and installing all labor, materials, equipment and transportation and everything necessarily inferred from the general nature and tendency of the plans and specifications for the proper execution of the work for:

Project Name: 
Repair Firepit Lake Dam
Jay Nixon State Park
Middlebrook, Missouri

Project Number: X2006-01

in strict accordance with the Contract Documents as enumerated in Article 7, all of which are made a part hereof.

ARTICLE 2. TIME OF COMPLETION

The contract completion date is October 1, 2021. This time includes ten (10) working days for the Contractor to receive, sign and return the contract form along with required bonding and insurance certificates. Failure of the Contractor to provide correct bonding and insurance within the ten (10) working days shall not be grounds for a time extension. Receipt of proper bonding and insurance is a condition precedent to the formation of the contract and if not timely received, may result in forfeiture of the Contractor's bid security. Work may not commence until the Owner issues a written Notice to Proceed and must commence within seven (7) working days thereafter.

ARTICLE 3. LIQUIDATED DAMAGES

Whenever time is mentioned in this contract, time shall be and is of the essence of this contract. The Owner would suffer a loss should the Contractor fail to have the work embraced in this contract fully completed on or before the time above specified. THEREFORE, the parties hereto realize in order to adjust satisfactorily the damages on account of such failure that it might be impossible to compute accurately or estimate the amount of such loss or damages which the Owner would sustain by reason of failure to complete fully said work within the time required by this contract. The Contractor hereby covenants and agrees to pay the Owner, as and for liquidated damages, the sum of $700 per day for each and every day, Sunday and legal holidays excepted, during which the work remains incomplete and unfinished. Any sum which may be due the Owner for such damages shall be deducted and retained by the Owner from any balance which may be due the Contractor when said work shall have been finished and accepted. But such provisions shall not release the Bond of the Contractor from liability according to its terms. In case of failure to complete, the Owner will be under no obligation to show or prove any actual or specific loss or damage.
ARTICLE 4. CONTRACT SUM

The Owner shall pay the Contractor for the prompt, faithful and efficient performance of the conditions and undertakings of this contract, subject to additions, and deductions as provided herein, in current funds the sum of:

Base Bid: $ 

TOTAL CONTRACT AMOUNT: ($CONTRACT AMOUNT)

UNIT PRICES: The Owner accepts the following Unit Prices:

For changing specified quantities of work from those indicated by the contract drawings and specifications, upon written instructions of Owner, the following unit prices shall prevail. The unit prices include all labor, overhead and profit, materials, equipment, appliances, bailing, shoring, shoring removal, etc., to cover the finished work of the several kinds of work called for. Only a single unit price shall be given and it shall apply for either MORE or LESS work than that shown on the drawings and called for in the specifications or included in the Base Bid. In the event of more or less units than so indicated or included, change orders may be issued for the increased or decreased amount.

ARTICLE 5. PREVAILING WAGE RATE

It is understood and agreed by and between the parties that not less than the prevailing hourly rate of wages shall be paid for work of a similar character in the locality in which the work is performed, and not less than the prevailing hourly rate of wages for legal holiday and overtime work in the locality in which the work is performed, both as determined by the Department of Labor and Industrial Relations or as determined by the court on appeal, to all workmen employed by or on behalf of the Contractor or any subcontractor, exclusive of maintenance work. Only such workmen as are directly employed by the Contractor or his subcontractors, in actual construction work on the site shall be deemed to be employed.

When the hauling of materials or equipment includes some phase of the construction other than the mere transportation to the site of the construction, workmen engaged in this dual capacity shall be deemed to be employed directly on the project and entitled to the prevailing wage.

ARTICLE 6. MINORITY/WOMEN/SERVICE DISABLED VETERAN BUSINESS ENTERPRISE PARTICIPATION

The Contractor has been granted a waiver of the 10% MBE and 10% WBE and 3% SDVE participation goals. The Contractor agrees to secure the MBE/WBE/SDVE participation amounts for this project as follows: (OR)

The Contractor has met the MBE/WBE/SDVE participation goals and agrees to secure the MBE/WBE/SDVE participation amounts for this project as follows:

MBE/WBE/SDVE Firm: Subcontract Amt: $ 
MBE/WBE/SDVE Firm: Subcontract Amt: $ 
MBE/WBE/SDVE Firm: Subcontract Amt: $ 

Total $ 

MBE/WBE/SDVE assignments identified above shall not be changed without a Contract Change signed by the Owner.

The Director of the Division of Facilities Management, Design and Construction or his Designee shall be the final authority to resolve disputes and disagreements between the Contractor and the MBE/WBE/SDVE firms listed above when such disputes impact the subcontract amounts shown above.
ARTICLE 7. CONTRACT DOCUMENTS

Contract documents shall consist of the following component parts:

1. Division 0, with executed forms
2. Division 1
3. Executed Construction Contract Form
4. The Drawings
5. The Technical Specifications
6. Addenda
7. Contractor's Proposal as accepted by the Owner

By signature below, the parties hereby execute this contract document.

APPROVED:

Mark Hill, P.E., Director  
Division of Facilities Management,  
Design and Construction

________________________________________  
Contractor’s Authorized Signature

I, Corporate Secretary, certify that I am Secretary of the corporation named above and that (CONTRACTOR NAME), who signed said contract on behalf of the corporation, was then (TITLE) of said corporation and that said contract was duly signed for and in behalf of the corporation by authority of its governing body, and is within the scope of its corporate powers.

________________________________________

Corporate Secretary
STATE OF MISSOURI
OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

AFFIDAVIT FOR AFFIRMATIVE ACTION

First being duly sworn on oath states: that

he/she is the □ sole proprietor □ partner □ officer or □ manager or managing member of

NAME

□ sole proprietorship □ partnership

□ limited liability company (LLC)

or □ corporation, and as such, said proprietor, partner, or officer is duly authorized to make this

affidavit on behalf of said sole proprietorship, partnership, or corporation; that under the contract known as

PROJECT TITLE

Less than 50 persons in the aggregate will be employed and therefore, the applicable Affirmative Action

requirements as set forth in Article 1.4 of the General Conditions of the State of Missouri have been met.

PRINT NAME & SIGNATURE

DATE

NOTARY INFORMATION

NOTARY PUBLIC EMBOSSER SEAL

STATE OF

COUNTY (OR CITY OF ST. LOUIS)

USE RUBBER STAMP IN CLEAR AREA BELOW

SUBSCRIBED AND SWORN BEFORE ME, THIS

DAY OF

YEAR

NOTARY PUBLIC SIGNATURE

MY COMMISSION EXPIRES

NOTARY PUBLIC NAME (TYPED OR PRINTED)
KNOW ALL MEN BY THESE PRESENTS, THAT we ____________________________________________________
as principal, and ___________________________________________________________________________________
______________________________________________________________________________________________as Surety, are held and firmly bound unto the

STATE OF MISSOURI. in the sum of ____________________________________ Dollars ($                                          )
for payment whereof the Principal and Surety bind themselves, their heirs, executors, administrators and successors, jointly
and severally, firmly by these presents.

WHEREAS, the Principal has, by means of a written agreement dated the ______________________________________

day of______________________________, 20________, enter into a contract with the State of Missouri for

_________________________________________________________________________________________________

(Insert Project Title and Number)

NOW, THEREFORE, if the Principal shall faithfully perform and fulfill all the undertakings, covenants, terms, conditions and
agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the State of
Missouri, with or without notice to the Surety and during the life of any guaranty required under the contract; and shall also faithfully
perform and fulfill all undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said
contract that may hereafter be made with or without notice to the Surety; and shall also promptly make payment for materials
incorporated, consumed or used in connection with the work set forth in the contract referred to above, and all insurance premiums, both
compensation and all other kinds of insurance, on said work, and for all labor performed on such work, whether by subcontractor or
otherwise, at not less than the prevailing hourly rate of wages for work of a similar character (exclusive of maintenance work)  in the
locality in which the work is performed and not less than the prevailing hourly rate of wages for legal holiday and overtime work
(exclusive of maintenance work) in the locality in which the work is performed both as determined by the Department of Labor and
Industrial Relations or determined by the Court of Appeal, as provided for in said contract and in any and all duly authorized
modifications of said contract that may be hereafter made with or without notice to the Surety; then, this obligation shall be void and
of no effect, but it is expressly understood that if the Principal should make default in or should fail to strictly, faithfully and efficiently
do, perform and comply with any or more of the covenants, agreements, stipulations, conditions, requirements or undertakings, as
specified in or by the terms of said contract, and with the time therein named, then this obligation shall be valid and binding upon each
of the parties hereto and this bond shall remain in full force and effect; and the same may be sued on at the instance of any material man,
laborer, mechanic, subcontractor, individual, or otherwise to whom such payment is due, in the name of the State of Missouri, to the use
of any such person.
AND, IT IS FURTHER specifically provided that any modifications which may hereinafter be made in the terms of the contract or in the work to be done under it or the giving by the Owner of any extension of the time for the performance of the contract or any other forbearance on the part of either the Owner or the Principal to the other, shall not in any way release the Principal and the Surety, or either or any of them, their heirs, executors, administrators and successors, from their liability hereunder, notice to the Surety of any such extension, modifications or forbearance being hereby waived.

IN WITNESS WHEREOF, the above bounden parties have executed the within instrument this _________________ day of _______________________, 20____.

AS APPLICABLE:

AN INDIVIDUAL

Name: ______________________________________
Signature: _________________________________

A PARTNERSHIP

Name of Partner: __________________________
Signature of Partner: ______________________

Name of Partner: __________________________
Signature of Partner: ______________________

CORPORATION

Firm Name: _______________________________
Signature of President: _____________________

SURETY

Surety Name: ______________________________
Attorney-in-Fact: __________________________
Address of Attorney-in-Fact: _________________
Telephone Number of Attorney-in-Fact: _________
Signature Attorney-in-Fact: _________________

NOTE: Surety shall attach Power of Attorney
STATE OF MISSOURI  
OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION  

PRODUCT SUBSTITUTION REQUEST  

PROJECT TITLE AND LOCATION  

CHECK APPROPRIATE BOX  

☐ SUBSTITUTE PRIOR TO BID OPENING  
(Minimum of (5) working days prior to receipt of Bids as per Article 4 – Instructions to Bidders)  

☐ SUBSTITUTE FOLLOWING AWARD  
(Maximum of (20) working days from Notice to Proceed as per Article 3 – General Conditions)  

FROM:  BIDDER/CONTRACTOR (PRINT COMPANY NAME)  
TO:  ARCHITECT/ENGINEER (PRINT COMPANY NAME)  

Bidder/Contractor hereby requests acceptance of the following product or systems as a substitution in accordance with provisions of Division One of the Bidding Documents:  

<table>
<thead>
<tr>
<th>SPECIFIED PRODUCT OR SYSTEM</th>
<th>SUBSTITUTION REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFICATION SECTION NO.</td>
<td></td>
</tr>
</tbody>
</table>

SUPPORTING DATA  

☐ Product data for proposed substitution is attached (include description of product, standards, performance, and test data)  
☐ Sample  
☐ Sample will be sent, if requested  

QUALITY COMPARISON  

<table>
<thead>
<tr>
<th>SPECIFIED PRODUCT</th>
<th>SUBSTITUTION REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME, BRAND</td>
<td></td>
</tr>
<tr>
<td>CATALOG NO.</td>
<td></td>
</tr>
<tr>
<td>MANUFACTURER</td>
<td></td>
</tr>
<tr>
<td>VENDOR</td>
<td></td>
</tr>
</tbody>
</table>

PREVIOUS INSTALLATIONS  

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>ARCHITECT/ENGINEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION</td>
<td>DATE INSTALLED</td>
</tr>
</tbody>
</table>

SIGNIFICANT VARIATIONS FROM SPECIFIED PRODUCT  

__________________________________________________________________________  

__________________________________________________________________________  

__________________________________________________________________________  

__________________________________________________________________________  

__________________________________________________________________________  

__________________________________________________________________________
### REASON FOR SUBSTITUTION

(Blank)

### DOES PROPOSED SUBSTITUTION AFFECT OTHER PARTS OF WORK?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**IF YES, EXPLAIN**

(Blank)

### SUBSTITUTION REQUIRES DIMENSIONAL REVISION OR REDESIGN OF STRUCTURE OR A/E WORK

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

### BIDDER'S/CONTRACTOR'S STATEMENT OF CONFORMANCE OF PROPOSED SUBSTITUTION TO CONTRACT REQUIREMENT:

We have investigated the proposed substitution. We believe that it is equal or superior in all respects to specified product, except as stated above; that it will provide the same Warranty as specified product; that we have included complete implications of the substitution; that we will pay redesign and other costs caused by the substitution which subsequently become apparent; and that we will pay costs to modify other parts of the Work as may be needed, to make all parts of the Work complete and functioning as a result of the substitution.

**BIDDER/CONTRACTOR**

(Blank)

**DATE**

### REVIEW AND ACTION

- [ ] Resubmit Substitution Request with the following additional information:

  (Blank)

- [ ] Substitution is accepted.

- [ ] Substitution is accepted with the following comments:

  (Blank)

- [ ] Substitution is not accepted.

**ARCHITECT/ENGINEER**

(Blank)

**DATE**
KNOW ALL MEN BY THESE PRESENT THAT: hereinafter called “Subcontractor” who heretofore entered into an agreement with hereinafter called “Contractor”, for the performance of work and/or furnishing of material for the construction of the project entitled

(PROJECT TITLE, PROJECT LOCATION, AND PROJECT NUMBER)

at

(ADDRESS OF PROJECT)

for the State of Missouri (Owner) which said subcontract is by this reference incorporated herein, in consideration of such final payment by Contractor.

DOES HEREBY:

1. ACKNOWLEDGE that they have been PAID IN FULL all sums due for work and materials contracted or done by their Subcontractors, Material Vendors, Equipment and Fixture Suppliers, Agents and Employees, or otherwise in the performance of the Work called for by the aforesaid Contract and all modifications or extras or additions thereto, for the construction of said project or otherwise.

2. RELEASE and fully, finally, and forever discharge the Owner from any and all suits, actions, claims, and demands for payment for work performed or materials supplied by Subcontractor in accordance with the requirements of the above referenced Contract.

1. REPRESENT that all of their Employees, Subcontractors, Material Vendors, Equipment and Fixture Suppliers, and everyone else has been paid in full all sums due them, or any of them, in connection with performance of said Work, or anything done or omitted by them, or any of them in connection with the construction of said improvements, or otherwise.

DATED this day of , 20 .

NAME OF SUBCONTRACTOR

BY (TYPED OR PRINTED NAME)

SIGNATURE

TITLE

ORIGINAL: FILE/Closeout Documents
## MBE/WBE/SDVE Progress Report

**Submit with all invoices: (please check appropriate box below)**

- ☐ Consultant
- ☐ Construction

### Project Details

- **Project Title:**
- **Project Location:**
- **Firm:**

### Total Contract Amount

$__________

### The Percentage and Dollar Amount of this Project that are to be MBE/WBE/SDVE as indicated in the original contract:

- % and $__________

### Check MBE WBE SDVE

<table>
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<tr>
<th>Item of Work</th>
<th>Total Amount of Subcontract</th>
<th>$ Amount &amp; % Complete (Paid-to-date)</th>
<th>Consultant/Subconsultant or Contractor/Subcontractor/Supplier Name, Address, Contact, and Phone Number</th>
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**MBA, SDVE:** Attach to ALL Progress and Final Payments
STATE OF MISSOURI
OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION
AFFIDAVIT – COMPLIANCE WITH PREVAILING WAGE LAW

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

______________________________
(NAME)

______________________________
(POSITION)

______________________________
(NAME OF THE COMPANY)

(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 workmen employed on public works project have been fully satisfied
and there has been no exception to the full and completed compliance with said provisions and requirements
and with Wage Determination No: __________________________ issued by the

Department of Labor and Industrial Relations, State of Missouri on the ________ day of ________ 20__
in carrying out the contract and working in connection with __________________________

______________________________
(NAME OF PROJECT)

Located at __________________________ in __________________________ County

(NAME OF THE INSTITUTION)

Missouri, and completed on the ________ day of ________ 20__

SIGNATURE

NOTARY INFORMATION

NOTARY PUBLIC EMBOSSEOR OR
BLACK INK RUBBER STAMP SEAL

STATE

COUNTY (OR CITY OF ST. LOUIS)

SUBSCRIBED AND SWORN BEFORE ME, THIS

DAY OF ________ YEAR

USE RUBBER STAMP IN CLEAR AREA BELOW

NOTARY PUBLIC SIGNATURE

MY COMMISSION EXPIRES

NOTARY PUBLIC NAME (TYPED OR PRINTED)

FILE: Closeout Documents
GENERAL CONDITIONS

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SECTION 007213 - GENERAL CONDITIONS

A. These General Conditions apply to each section of these specifications. The Contractor is subject to the provisions contained herein.

B. The General Conditions are intended to define the relationship of the Owner, the Designer and the Contractor thereby establishing certain rules and provisions governing the operation and performance of the work so that the work may be performed in a safe, orderly, expeditious and workmanlike manner.

ARTICLE 1 – GENERAL PROVISIONS

ARTICLE 1.1 - DEFINITIONS

As used in these contract documents, the following terms shall have the meanings and refer to the parties designated in these definitions.

1. "COMMISSIONER": The Commissioner of the Office of Administration.


3. "CONSTRUCTION REPRESENTATIVE:" Whenever the term "Construction Representative" is used, it shall mean the Owner’s Representative at the work site.

4. "CONTRACTOR": Party or parties who have entered into a contract with the Owner to furnish work under these specifications and drawings.

5. "DESIGNER": When the term "Designer" is used herein, it shall refer to the Architect, Engineer, or Consultant of Record specified and defined in Paragraph 2.0 of the Supplemental Conditions, or his duly authorized representative. The Designer may be either a consultant or state employee.

6. "DIRECTOR": Whenever the term "Director" is used, it shall mean the Director of the Division of Facilities Management, Design and Construction or his Designee, representing the Office of Administration, State of Missouri. The Director is the agent of the Owner.


8. “INCIDENTAL JOB BURDENS”: Shall mean those expenses relating to the cost of work, incurred either in the home office or on the job-site, which are necessary in the course of doing business but are incidental to the job. Such costs include office supplies and equipment, postage, courier services, telephone expenses including long distance, water and ice and other similar expenses.

9. "JOINT VENTURE": An association of two (2) or more businesses to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills and knowledge.

10. "OWNER": Whenever the term “Owner” is used, it shall mean the State of Missouri.

11. “PROJECT": Wherever the term “Project” is used, it shall mean the work required to be completed by the construction contract.


13. "SUBCONTRACTOR": Party or parties who contract under, or for the performance of part or this entire Contract between the Owner and Contractor. The subcontract may or may not be direct with the Contractor.

14. "WORK": Labor, material, supplies, plant and equipment required to perform and complete the service agreed to by the Contractor in a safe, expeditious, orderly and workmanlike manner so that the project shall be complete and finished in the best manner known to each respective trade.


ARTICLE 1.2 DRAWINGS AND SPECIFICATIONS

A. In case of discrepancy between drawings and specifications, specifications shall govern. Should discrepancies in architectural drawings, structural drawings and mechanical drawings occur, architectural drawings shall govern and, in case of
conflict between structural and mechanical drawings, structural drawings shall govern.

B. Specifications are separated into titled divisions for convenience of reference only and to facilitate letting of contracts and subcontracts. The Contractor is responsible for establishing the scope of work for subcontractors, which may cross titled divisions. Neither the Owner nor Designer will establish limits and jurisdiction of subcontracts.

C. Figured dimensions take precedence over scaled measurements and details over smaller scale general drawings. In the event of conflict between any of the documents contained within the contract, the documents shall take precedence and be controlling in the following sequence: addenda, supplementary general conditions, general conditions, division 1 specifications, technical division specifications, drawings, bid form and instructions to bidders.

D. Anything shown on drawings and not mentioned in these specifications or vice versa, as well as any incidental work which is obviously necessary to complete the project within the limits established by the drawings and specifications, although not shown on or described therein, shall be performed by the Contractor at no additional cost as a part of his contract.

E. Upon encountering conditions differing materially from those indicated in the contract documents, the Contractor shall promptly notify the Designer and Construction Representative in writing before such conditions are disturbed. The Designer shall promptly investigate said conditions and report to the Owner, with a recommended course of action. If conditions do materially differ and cause an increase or decrease in contract cost or time required for completion of any portion of the work, a contract change will be initiated as outlined in Article 4 of these General Conditions.

E. Only work included in the contract documents is authorized, and the Contractor shall do no work other than that described therein or in accordance with appropriately authorized and approved contract changes.

ARTICLE 1.3 - COMPLIANCE WITH LAWS, PERMITS, REGULATIONS AND INSPECTIONS

A. Since the Owner is the State of Missouri, municipal or political subdivisions, zoning ordinances, construction codes (other than licensing of trades), and other like ordinances are not applicable to construction on Owner’s property, and Contractor will not be required to submit drawings and specifications to any municipal or political subdivision, authority, obtain construction permits or any other licenses (other than licensing of trades) or permits from or submit to inspections by any municipality or political subdivision relating to the construction for this project. All permits or licenses required by municipality or political subdivision for operation on property not belonging to Owner shall be obtained by and paid for by Contractor. Each Contractor shall comply with all applicable laws, ordinances, rules and regulations that pertain to the work of this contract.

B. Contractors, subcontractors and their employees engaged in the businesses of electrical, mechanical, plumbing, carpentry, sprinkler system work, and other construction related trades shall be licensed to perform such work by the municipal or political subdivision where the project is located, if such licensure is required by local code. Local codes shall dictate the level (master, journeyman, and apprentice) and the number, type and ratio of licensed tradesmen required for this project within the jurisdiction of such municipal or political subdivision.

C. Equipment and controls manufacturers and their authorized service and installation technicians that do not maintain an office within the jurisdiction of the municipal or political subdivision but are a listed or specified contractor or subcontractor on this project are exempt from Paragraph 1.3 B above.

D. The Contractor shall post a copy of the wage determination issued for the project and included as a part of the contract documents, in a prominent and easily accessible location at the site of construction for the duration of the project.

E. Any contractor or subcontractor to such contractor at any tier signing a contract to work on this project 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 of Labor and Industrial Relations which is at least as stringent as an approved OSHA program. The contractor shall forfeit as a penalty to the public body on whose behalf the contract is made or awarded, two thousand five hundred dollars plus one hundred dollars for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training.

ARTICLE 1.4 - NONDISCRIMINATION IN EMPLOYMENT

A. The Contractor and his subcontractors will not discriminate against individuals based on race, color, religion, national origin, sex, disability, or
age, but may use restrictions which relate to bona
fide occupational qualifications. Specifically, the
Contractor and his subcontractors shall not
discriminate:

1. Against recipients of service on the basis of
   race, color, religion, national origin, sex, 
disability or age.

2. Against any employee or applicant, for
   employment on the basis of race, color, 
   religion, national origin, sex or otherwise 
   qualified disability status.

3. Against any applicant for employment or 
   employee on the basis of age, where such 
   applicant or employee is between ages 40 and 
   70 and where such Contractor employs at least 
   20 persons.

4. Against any applicant for employment or 
   employee on the basis of that person's status as 
   a disabled or Vietnam-era veteran.

The Contractor and his Subcontractors will take 
affirmative action to insure applicants for 
employment and employees are treated equally 
without regard to race, color, religion, national 
origin, sex, disability, or age. Such action shall 
include, but not be limited to, the following:

- employment, upgrading, demotion and transfer;
- recruitment or recruitment advertising; and
- selection for training, including apprenticeship.

The Contractor and his Subcontractors will give 
written notice of their commitments under this 
clause to any labor union with which they have 
bargaining or other agreements.

B. The Contractor and his subcontractors shall 
develop, implement, maintain and submit in 
writing to the Owner an affirmative action program 
if at least fifty (50) persons in the aggregate are 
employed under this contract. If less than fifty 
(50) persons in the aggregate are to be employed 
under this contract, the Contractor shall submit, in 
lieu of the written affirmative action program, a 
properly executed Affidavit for Affirmative Action 
in the form included in the contract specifications. 
For the purpose of this section, an "affirmative 
action program" means positive action to influence 
all employment practices (including, but not 
limited to, recruiting, hiring, promoting and 
training) in providing equal employment 
opportunity regardless of race, color, sex, national 
origin, religion, age (where the person affected is 
between age 40 and 70), disabled and Vietnam-era 
veteran status, and disability. Such "affirmative 
action program" shall include:

1. A written policy statement committing the 
total organization to affirmative action and 
assigning management responsibilities and 
procedures for evaluation and dissemination;

2. The identification of a person designated to 
handle affirmative action;

3. The establishment of non-discriminatory 
selection standards, objective measures to 
analyze recruitment, an upward mobility 
system, a wage and salary structure, and 
standards applicable to lay-off, recall, 
discharge, demotion and discipline;

4. The exclusion of discrimination from all 
collective bargaining agreements; and

5. Performance of an internal audit of the 
reporting system to monitor execution and to 
provide for future planning.

In the enforcement of this non-discrimination 
clause, the Owner may use any reasonable 
procedures available, including, but not limited to: 
requests, reports, site visits and inspection of 
relevant documents of contractors and 
subcontractors.

C. In the event of the Contractor's or his 
subcontractor's noncompliance with any provisions 
of this Article of the Contract, the Owner may 
cancel this contract in whole or in part or require 
the Contractor to terminate his contract with the 
subcontractor.

ARTICLE 1.5 - ANTI-KICKBACK

No employee of the division, shall have or acquire 
any pecuniary interest, whether direct or indirect, 
in this contract or in any part hereof. No officer, 
employee, designer, attorney, or administrator of or 
for the Owner who is authorized in such capacity 
and on behalf of the Owner to exercise any 
legislative, executive, supervisory or other similar 
functions in connection with the construction of the 
project, shall have or acquire any pecuniary 
interest, whether direct or indirect, in this contract, 
any material supply contract, subcontract, 
insurance contract, or any other contract pertaining 
to the project.

ARTICLE 1.6 - PATENTS AND ROYALTIES

A. The Contractor shall hold and save the Owner and 
its officers, agents, servants and employees 
harmless from liabilities of any nature or kind, 
including cost and expenses, for, or on account of, 
any patented or unpatented invention, process, 
article or appliance manufactured or used in the 
performance of this contract, including its use by 
the Owner, unless otherwise specifically stipulated 
in the contract documents.

B. If the Contractor uses any design, device or 
materials covered by letters, patent or copyright,
the Contractor shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood, without exception, that the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his sureties shall indemnify and save harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract and shall indemnify the Owner for any cost, expense or damage it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

ARTICLE 1.7 - PREFERENCE FOR AMERICAN AND MISSOURI PRODUCTS AND SERVICES

A. By virtue of statutory authority a preference will be given to Missouri labor and to products of mines, forests and quarries of the state of Missouri when they are found in marketable quantities in the state, and all such materials shall be of the best quality and suitable character that can be obtained at reasonable market prices, all as provided for in Section 8.280, Missouri Revised Statutes and Cumulative Supplements.

B. Furthermore, pursuant to Section 34.076 Missouri Revised Statutes and Cumulative Supplements, a preference shall be given to those persons doing business as Missouri firms, corporations, or individuals, or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less. In addition, in order for a non-domiciliary bidder to be successful, his bid must be that same percentage lower than a domiciliary Missouri bidder's bid, as would be required for a Missouri bidder to successfully bid in the non-domiciliary state.

C. In accordance with the Missouri Domestic Products Procurement Act Section 34.350 RSMo and Cumulative Supplements any manufactured goods or commodities used or supplied in the performance of this contract or any subcontract thereto shall be manufactured, assembled or produced in the United States, unless the specified products are not manufactured, assembled or produced in the United States in sufficient quantities to meet the agency's requirements or cannot be manufactured, assembled or produced in the United States within the necessary time in sufficient quantities to meet the contract requirements, or if obtaining the specified products manufactured, assembled or produced in the United States would increase the cost of this contract for purchase of the product by more than ten percent.

ARTICLE 1.8 - COMMUNICATIONS

A. All notices, requests, instructions, approvals and claims must be in writing and shall be delivered to the Designer and copied to the Construction Representative for the project except as required by Article 1.12 Disputes and Disagreements, or as otherwise specified by the Owner in writing as stated in Section 012600. Any such notice shall be deemed to have been given as of the time of actual receipt.

B. The Contractor shall attend on-site progress and coordination meetings, as scheduled by the Construction Representative, no less than once a month.

C. The Contractor shall ensure that major subcontractors and suppliers shall attend monthly progress meetings as necessary to coordinate the work, and as specifically requested by the Construction Representative.

ARTICLE 1.9 - SEPARATE CONTRACTS AND COOPERATION

A. The Owner reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate his work with theirs.

B. The Contractor shall consult the drawings for all other contractors in connection with this work. Any work conflicting with the above shall be brought to the attention of the Owner’s Representative before the work is performed. If the Contractor fails to do this, and constructs any work which interferes with the work of another contractor, the Contractor shall remove any part so conflicting and rebuild same, as directed by the Owner’s Representative at no additional cost to the Owner.

C. Each contractor shall be required to coordinate his work with other contractors so as to afford others reasonable opportunity for execution of their work. No contractor shall delay any other contractor by neglecting to perform contract work at the proper time. If any contractor causes delay to another, they shall be liable directly to that contractor for such delay in addition to any liquidated damages which might be due the Owner.

D. Should the Contractor or project associated subcontractors refuse to cooperate with the instructions and reasonable requests of other Contractors or other subcontractors in the overall
coordinating of the work, the Owner may take such appropriate action and issue directions, as required, to avoid unnecessary and unwarranted delays.

E. Each Contractor shall be responsible for damage done to Owner's or other Contractor's property by him/her or workers in his employ through their fault or negligence.

F. Should a Contractor sustain any damage through any act or omission of any other Contractor having a contract with the Owner, the Contractor so damaged shall have no claim or cause of action against the Owner for such damage, but shall have a claim or cause of action against the other Contractor to recover any and all damages sustained by reason of the acts or omissions of such Contractor. The phrase "acts or omissions" as used in this section shall be defined to include, but not be limited to, any unreasonable delay on the part of any such contractors.

ARTICLE 1.10 - ASSIGNMENT OF CONTRACT

A. No assignment by Contractor of any amount or any part of this contract or of the funds to be received there under will be recognized unless such assignment has had the written approval of the Director and the surety has been given due notice of such assignment and has furnished written consent thereto. In addition to the usual recitals in assignment contracts, the following language must be set forth: "It is agreed that the funds to be paid to the assignee under this assignment are subject to performance by the Contractor of this contract and to claims or liens for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials."

ARTICLE 1.11 - INDEMNIFICATION

A. Contractor agrees to indemnify and save harmless Owner and its respective commissioners, officers, officials, agents, consultants and employees and Designer, their agents, servants and employees, from and against any and all liability for damage arising from injuries to persons or damage to property occasioned by any acts or omissions of Contractor, any subcontractors, agents, servants or employees, including any and all expense, legal or otherwise, which may be incurred by Owner or Designer, its agents, servants or employees, in defense of any claim, action or suit.

B. The obligations of the Contractor under this paragraph shall not extend to the liability of the Designer, his agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, contract changes, design or specifications, or (2) giving of or the failure to give directions or instructions by the Designer, his agents or employees as required by this contract documents provided such giving or failure to give is the primary cause of the injury or damage.

ARTICLE 1.12 - DISPUTES AND DISAGREEMENTS

It is hereby expressly agreed and understood that in case any controversy or difference of opinion arises during construction, best efforts will be given to resolution at the field level. Should those efforts be unsuccessful, the Contractor has the right to appeal in writing, the decision of the Director’s Designee to the Director at Room 730 Truman Building, P.O. Box 809, Jefferson City, Missouri 65102. The decision of the Director shall be final and binding on all parties.

ARTICLE 2 -- OWNER/DESIGNER RESPONSIBILITIES

A. The Owner shall give all orders and directions contemplated under this contract relative to the execution of the work. During progress of work the Owner will be represented at the project site by the Construction Representative and/or Designer, whose responsibilities are to see that this contract is properly fulfilled.

B. The Owner shall at all times have access to the work whenever it is in preparation or progress. The Contractors shall provide proper facilities for such access and for inspection and supervision.

C. All materials and workmanship used in the work shall be subject to the inspection of the Designer and Construction Representative, and any work which is deemed defective shall be removed, rebuilt or made good immediately upon notice. The cost of such correction shall be borne by the Contractor. Contractor shall not be entitled to an extension of the contract completion date in order to remedy defective work. All rejected materials shall be immediately removed from the site of the work.

D. If the Contractor fails to proceed at once with the correction of rejected defective materials or workmanship, the Owner may, by separate contract or otherwise, have the defects remedied or rejected. Materials removed from the site and charge the cost of the same against any monies which may be due the Contractor, without prejudice to any other rights or remedies of the Owner.

E. Failure or neglect on the part of Owner to observe faulty work, or work done which is not in accordance with the drawings and specifications shall not relieve the Contractor from responsibility
for correcting such work without additional compensation.

F. The Owner shall have the right to direct the Contractor to uncover any completed work.

1. If the Contractor fails to adequately notify the Construction Representative and/or Designer of an inspection as required by the Contract Documents, the Contractor shall, upon written request, uncover the work. The Contractor shall bear all costs associated with uncovering and again covering the work exposed.

2. If the Contractor is directed to uncover work, which was not otherwise required by the Contract Documents to be inspected, and the work is found to be defective in any respect, no compensation shall be allowed for this work. If, however, such work is found to meet the requirements of this contract, the actual cost of labor and material necessarily involved in the examination and replacement plus 10% shall be allowed the Contractor.

G. The Designer shall give all orders and directions contemplated under this contract relative to the scope of the work and shall give the initial interpretation of the contract documents.

H. The Owner may file a written notice to the Contractor to dismiss immediately any subcontractors, project managers, superintendents, foremen, workers, watchmen or other employees whom the Owner may deem incompetent, careless or a hindrance to proper or timely execution of the work. The Contractor shall comply with such notice as promptly as practicable without detriment to the work or its progress.

I. If in the Owner’s judgment it becomes necessary at any time to accelerate work, when ordered by the Owner in writing, the Contractor shall redirect resources to such work items and execute such portions of the work as may be required to complete the work within the current approved contract schedule.

ARTICLE 3 -- CONTRACTOR RESPONSIBILITIES

The Contractor shall register and utilize the Owner’s eBuilder digital project management system for submission of documents described in the following sections. This includes but is not limited to submittals as required by designer, payment applications, Request for Information (RFI), construction change orders, Request for Proposals (RFP), Designer Supplemental Instructions (DSI), etc.

ARTICLE 3.1 -- ACCEPTABLE SUBSTITUTIONS

A. The Contractor may request use of any article, device, product, material, fixture, form or type of construction which in the judgment of the Owner and Designer is equal in all respects to that named. Standard products of manufacturers other than those specified will be accepted when, prior to the ordering or use thereof, it is proven to the satisfaction of the Owner and Designer that they are equal in design, strength, durability, usefulness and convenience for the purpose intended.

B. Any changes required in the details and dimensions indicated on the drawings for the substitution of products other than those specified shall be properly made at the expense of the Contractor requesting the substitution or change.

C. The Contractor shall submit a request for such substitutions in writing to the Owner and Designer within twenty (20) working days after the date of the "Notice to Proceed." Thereafter no consideration will be given to alternate forms of accomplishing the work. This Article does not preclude the Owner from exercising the provisions of Article 4 hereof.

D. Any request for substitution by the Contractor shall be submitted in accordance with SECTION 002113 - INSTRUCTIONS TO BIDDERS.

E. When a material has been approved, no change in brand or make will be permitted unless:

1. Written verification is received from the manufacturer stating they cannot make delivery on the date previously agreed, or

2. Material delivered fails to comply with contract requirements.

ARTICLE 3.2 -- SUBMITTALS

A. The Contractor’s submittals must be submitted with such promptness as to allow for review and approval so as not to cause delay in the work. The Contractor shall coordinate preparation and processing of submittals with performance of construction activities.

Coordinate each submittal with fabrication, = purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

Submit four (4) copies to the Designer and additional copies as required for the subcontractors and material suppliers. Also provide copies to meet the requirements for maintenance manuals.

B. All subcontractors' shop drawings and schedules shall be submitted by the Contractor and shall bear evidence that Contractor has received, reviewed, and approved them. Any shop drawings and
schedules submitted without this evidence will be returned to the Contractor for resubmission.

C. The Contractor shall include with the shop drawing, a letter indicating any and all deviations from the drawings and/or specifications. Failure to notify the Designer of such deviations will be grounds for subsequent rejection of the related work or materials. If, in the opinion of the Designer, the deviations are not acceptable, the Contractor will be required to furnish the item as specified and indicated on the drawings.

D. The Designer shall check shop drawings and schedules with reasonable promptness and approve them only if they conform to the design concept of the project and comply with the information given in the contract documents. The approval shall not relieve the Contractor from the responsibility to comply with the drawings and specifications, unless the Contractor has called the Designer's attention to the deviation, in writing, at the time of submission and the Designer has knowingly approved thereof. An approval of any such modification will be given only under the following conditions:

1. It is in the best interest of the Owner
2. It does not increase the contract sum and/or completion time
3. It does not deviate from the design intent
4. It is without prejudice to any and all rights under the surety bond.

E. No extension of time will be granted because of the Contractor's failure to submit shop drawings and schedules in ample time to allow for review, possible resubmission, and approval. Fabrication of work shall not commence until the Contractor has received approval. The Contractor shall furnish prints of approved shop drawings and schedules to all subcontractors whose work is in any way related to the work under this contract. Only prints bearing this approval will be allowed on the site of construction.

F. The Contractor shall maintain a complete file on-site of approved shop drawings available for use by the Construction Representative.

ARTICLE 3.3 – AS-BUILT DRAWINGS

A. The Contractor shall update a complete set of the construction drawings, shop drawings and schedules of all work monthly by marking changes, and at the completion of their work (prior to submission of request for final payment) note all changes and turn the set over to the Construction Representative. The updates shall show all addenda, all field changes that were made to adapt to field conditions, changes resulting from contract changes or supplemental instructions, and all locations of structures, buried installations of piping, conduit, and utility services. All buried and concealed items both inside and outside shall be accurately located as to depth and referenced to permanent features such as interior or exterior walls faces and dimensions shall be given in a neat and legible manner in a contrasting colored pencil or ink. If approved by the Designer, an electronic file format may be provided.

ARTICLE 3.4 – GUARANTY AND WARRANTIES

A. General Guaranty

1. Neither the final certificate of payment nor any provision in the contract documents nor partial use or occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with contract requirements.

2. The Contractor or surety shall remedy any defects in the work and pay for any damage to property resulting there from which appear within a period of one (1) year from the date of substantial completion unless a longer period is otherwise specified or a differing guaranty period has been established in the substantial completion certificate. The Owner will give notice of observed defects with reasonable promptness.

3. In case of default on the part of the Contractor in fulfilling this part of this contract, the Owner may correct the work or repair the damage and the cost and expense incurred in such event shall be paid by or recoverable from the Contractor or surety.

4. The work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's guaranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

B. Extended Warranty

Manufacturer's certificates of warranty shall be obtained for all major equipment. Warranty shall be obtained for at least one year. Where a longer
period is offered at no additional cost or called for in the specific equipment specifications, the longer period shall govern.

ARTICLE 3.5 – OPERATION AND MAINTENANCE MANUALS

A. Immediately after equipment submittals are approved and no later than ten (10) working days prior to the substantial completion inspection, the Contractor shall provide to the Designer three (3) copies of operating instructions and service manuals, containing the following:

1. Start-up and Shut-down Procedures: Provide a step-by-step write up of all major equipment. When manufacturer’s printed start-up, trouble shooting and shut-down procedures are available; they may be incorporated into the operating manual for reference.

2. Operating Instructions: Written operating instructions shall be included for the efficient and safe operation of all equipment.

3. Equipment List: List of all major equipment as installed shall be prepared to include model number, capacities, flow rate, name place data, shop drawings and air and water balance reports.

4. Service Instructions: Provide the following information for all pieces of equipment.
   a. Recommended spare parts including catalog number and name of local supplier or factory representative.
   b. Belt sizes, types, and lengths.
   c. Wiring diagrams.

5. Manufacturer's Certificate of Warranty as described in Article 3.4.

6. Prior to the final payment, furnish to the Designer three (4) copies of parts catalogs for each piece of equipment furnished by him/her on the project with the components identified by number for replacement ordering.

B. Submission of operating instructions shall be done in the following manner.

1. Manuals shall be in quadruplicate, and all materials shall be bound into volumes of standard 8½” x 11” hard binders. Large drawings too bulky to be folded into 8½” x 11” shall be separately bound or folded in envelopes, cross referenced and indexed with the manuals.

2. The manuals shall identify project name, project number, and include the name and address of the Contractor, subcontractors and manufacturers who were involved with the activity described in that particular manual.

3. Internally subdivide the binder contents with permanent page dividers, logically organized with tab titles clearly printed under reinforced laminated plastic tabs.

4. Contents: Prepare a Table of Contents for each volume, with each product or system description identified.

ARTICLE 3.6 – OTHER CONTRACTOR RESPONSIBILITIES

A. The Contractor shall keep on site, during progress of the work, a competent superintendent satisfactory to the Construction Representative. The superintendent shall represent the Contractor and all agreements made by the superintendent shall be binding. The superintendent shall carefully study and compare all drawings, specifications and other instructions and shall promptly notify the Construction Representative and Designer, in writing, any error, inconsistency or omission which may be discovered. The superintendent shall coordinate all work on the project. Any change of the superintendent shall be approved by the Construction Representative.

B. Contractor shall, at all times, enforce strict discipline and good order among his employees, and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him/her.

C. The Contractor shall supply sufficient labor, material, plant and equipment and pay when due any laborer, subcontractor or supplier for supplies furnished and otherwise prosecute the work with diligence to prevent work stoppage and insure completion thereof within the time specified.

D. The Contractor and each of his subcontractors shall submit to the Construction Representative, through the Designer such schedules of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

E. The Contractor, subcontractors, and material suppliers shall upon written request, give the Owner access to all time cards, material invoices, payrolls, estimates, profit and loss statements, and all other direct or indirect costs related to this work.

F. The Contractor shall be responsible for laying out all contract work such as layout of architectural, structural, mechanical and electrical work, which shall be coordinated with layouts of subcontractors.
for general construction work. The Contractor is also responsible for unloading, uncrating and handling of all materials and equipment to be erected or placed by him/her, whether furnished by Contractor or others. No extra charges or compensation will be allowed as a result of failure to verify dimensions before ordering materials or fabricating items.

G. The Contractor must notify the Construction Representative at least one working day before placing concrete or burying underground utilities, pipelines, etc.

H. Contractors shall prearrange time with the Construction Representative for the interruption of any facility operation. Unless otherwise specified in these documents, all connections, alterations or relocations as well as all other portions of the work will be performed during normal working hours.

I. The Contractor shall coordinate all work so there will not be prolonged interruptions of existing equipment operation. Any existing plumbing, heating, ventilating, air conditioning or electrical disconnections necessary for the project, which affect portions of this construction or building or any other building must be scheduled with the Construction Representative to minimize or avoid any disruption of facility operations. In no case, unless previously approved in writing by the Construction Representative, shall utilities be left disconnected at the end of a work day or over a weekend. Any interruption of utilities either intentionally or accidentally shall not relieve the Contractor responsible for the interruption from the responsibility to repair and restore the utility to normal service. Repairs and restoration shall be made before the workers responsible for the repair and restoration leave the job.

J. Contractors shall limit operations and storage of materials to the area within the project, except as necessary to connect to existing utilities, and shall not encroach on neighboring property. The Contractor shall be responsible for repair of their damage to property on or off the project site occurring during construction of project. All such repairs shall be made to the satisfaction of the property owner.

K. Unless otherwise permitted, all materials shall be new and both workmanship and materials shall be of the best quality.

L. Unless otherwise provided and stipulated within these specifications, the Contractor shall furnish, construct, and/or install and pay for materials, devices, mechanisms, equipment, all necessary personnel, utilities including, but not limited to water, heat, light and electric power, transportation services, applicable taxes of every nature, and all other facilities necessary for the proper execution and completion of the work.

M. Contractor shall carefully examine the plans and drawings and shall be responsible for the proper fitting of his material, equipment and apparatus into the building.

N. The Contractor or subcontractors shall not overload, or permit others to overload, any part of any structure during the performance of this contract.

O. All temporary shoring, bracing, etc., required for the removal of existing work and/or for the installation of new work shall be included in this contract. The Contractor shall make good, at no cost to the Owner, any damage caused by improper support or failure of shoring in any respect. Each Contractor shall be responsible for shoring required to protect his work or adjacent property and improvements of Owner and shall be responsible for shoring or for giving written notice to adjacent property owners. Shoring shall be removed only after completion of permanent supports.

P. The Contractor shall provide at the proper time such material as is required for support of the work. If openings are required, whether shown on drawings or not, the Contractor shall see that they are properly constructed.

Q. During the performance of work the Contractor shall be responsible for providing and maintaining warning signs, lights, signal devices, barricades, guard rails, fences and other devices appropriately located on site which will give proper and understandable warning to all persons of danger of entry onto land, structure or equipment.

R. The Contractor shall be responsible for protection, including weather protection, and proper maintenance of all equipment and materials.

S. The Contractor shall be responsible for care of the finished work and shall protect same from damage or defacement until substantial completion by the Owner. If the work is damaged by any cause, the Contractor shall immediately begin to make repairs in accordance with the drawings and specifications. Contractor shall be liable for all damage or loss unless attributable to the acts or omissions of the Owner or Designer. Any claim for reimbursement shall be submitted in accordance with Article 4. After substantial completion the Contractor will only be responsible for damage resulting from acts or omissions of the Contractor or subcontractors through final warranty.

T. In the event the Contractor encounters an unforeseen hazardous material, the Contractor
shall immediately stop work in the area affected and report the condition to the Owner and Designer in writing. The Contractor shall not be required, pursuant to Article 4, to perform, any work relating to hazardous materials.

U. In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 4.

V. Before commencing work, Contractors shall confer with the Construction Representative and facility representative and review any facility rules and regulations which may affect the conduct of the work.

W. Project signs will only be erected on major projects and only as described in the specifications. If no sign is specified, none shall be erected.

ARTICLE 3.7 -- SUBCONTRACTS

A. Subcontractor assignments as identified in the bid form shall not be changed without written approval of the Owner. The Owner will not approve changes of a listed subcontractor unless the Contractor documents, to the satisfaction of the Owner that the subcontractor cannot or will not perform the work as specified.

B. The Contractor is fully responsible to the Owner for the acts and omissions of all subcontractors and of persons either directly or indirectly employed by them.

C. Every subcontractor shall be bound by the applicable terms and provisions of these contract documents, but no contractual relationship shall exist between any subcontractor and the Owner unless the right of the Contractor to proceed with the work is suspended or this contract is terminated as herein provided, and the Owner in writing elects to assume the subcontract.

D. The Contractor shall upon receipt of "Notice to Proceed" and prior to submission of the first payment request, notify the Designer and Construction Representative in writing of the names of any subcontractors to be used in addition to those identified in the bid form and all major material suppliers proposed for all parts of the work.

ARTICLE 4 -- CHANGES IN THE WORK

4.1 CHANGES IN THE WORK

A. The Construction Representative, without giving notice to the surety and without invalidating this contract, may order extra work or make changes by altering, adding to or deducting from the work, this contract sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract. A claim for extension of time caused by any change must be adjusted at the time of ordering such change. No future request for time will be considered.

B. Each Contract Change shall include all costs required to perform the work including all labor, material, equipment, overheads and profit, delay, disruptions, or other miscellaneous expenses. No subsequent requests for additional compensation including claims for delay, disruption, or reduced efficiency as a result of each change will be considered. Values from the Schedule of Values will not be binding as a basis for additions to or deductions from the contract price.

C. The amount of any adjustment in this contract price for authorized changes shall be agreed upon before such changes become effective and shall be determined, through submission of a request for proposal, as follows:

1. By an acceptable fixed price proposal from the Contractor. Breakdowns shall include all takeoff sheets of each Contractor and subcontractor. Breakdown shall include a listing of each item of material with unit prices and number of hours of labor for each task. Labor costs per hour shall be included with labor burden identified, which shall be not less than the prevailing wage rate, etc. Overhead and profit shall be shown separately for each subcontractor and the Contractor.

2. By a cost-plus-fixed-fee (time and material) basis with maximum price, total cost not to exceed said maximum. Breakdown shall include a listing of each item of material with unit prices and number of hours of labor for each task. Labor costs per hour shall be included with labor burden identified, which shall be not less than the prevailing wage rate, etc. Overhead and profit shall be shown separately for each subcontractor and the Contractor.

3. By unit prices contained in Contractor's original bid form and incorporated in the construction contract.

D. Overhead and Profit on Contract Changes shall be applied as follows:

1. The overhead and profit charge by the Contractor and all subcontractors shall be considered to include, but is not limited to: incidental job burdens, small truck (under 1 ton) expense, mileage, small hand tools,
warranty costs, company benefits and general office overhead. Project supervision including field supervision and job site office expense shall be considered a part of overhead and profit unless a compensable time extension is granted.

2. The percentages for overhead and profit charged on Contract Changes shall be negotiated, and may vary according to the nature, extent, and complexity of the work involved. However, the overhead and profit for the Contractor or subcontractor actually performing the work shall not exceed 14%. When one or more tiers of subcontractors are used, in no event shall any Contractor or subcontractor receive as overhead and profit more than 3% of the cost of the work performed by any of his subcontractors. In no case shall the total overhead and profit paid by the Owner on any Contract Changes exceed twenty percent (20%) of the cost of materials, labor and equipment (exclusive of Contractor or any Subcontractor overhead and profit) necessary to put the contract change work in place.

3. The Contractor will be allowed to add the cost of bonding and insurance to their cost of work. This bonding and insurance cost shall not exceed 2% and shall be allowed on the total cost of the added work, including overhead and profit.

4. On proposals covering both increases and decreases in the amount of this contract, the application of overhead and profit shall be on the net change in the cost of the work.

5. The percentage for overhead and profit to be credited to the Owner on Contract Changes that are solely decreases in the quantity of work or materials shall be negotiated, and may vary according to the nature, extent and complexity of the work involved, but in no case shall be less than ten percent (10%). If the percentage for overhead and profit charged for work added by Contract Changes for this contract has been negotiated to less than 10%, the negotiated rate shall then apply to credits as well.

E. No claim for an addition to this contract sum shall be valid unless authorized as aforesaid in writing by the Owner. In the event that none of the foregoing methods are agreed upon, the Owner may order the Contractor to perform work on a time and material basis. The cost of such work shall be determined by the Contractor's actual labor and material cost to perform the work plus overhead and profit as outlined herein. The Designer and Construction Representative shall approve the Contractor's daily time and material invoices for the work involved.

F. If the Contractor claims that any instructions involve extra cost under this contract, the Contractor shall give the Owner's Representative written notice thereof within a reasonable time after the receipt of such instructions, and in any event before proceeding to execute the work. No such claim shall be valid unless so made and authorized by the Owner, in writing.

G. In an emergency affecting the safety of life or of the structure or of adjoining property, the Contractor, without special instruction or authorization from the Construction Representative, is hereby permitted to act at their discretion to prevent such threatened loss or injury. The Contractor shall submit a claim for compensation for such emergency work in writing to the Owner's Representative.

ARTICLE 4.2 – CHANGES IN COMPLETION TIME

A. Extension of the number of work days stipulated in the Contract for completion of the work with compensation may be made when:

1. The contractor documents that proposed Changes in the work, as provided in Article 4.1, extends construction activities critical to contract completion date, OR

2. The Owner suspends all work for convenience of the Owner as provided in Article 7.3, OR

3. An Owner caused delay extends construction activities critical to contract completion (except as provided elsewhere in these General Conditions). The Contractor is to review the work activities yet to begin and evaluate the possibility of rescheduling the work to minimize the overall project delay.

B. Extension of the number of work days stipulated in the Contract for completion of the work without compensation may be made when:

1. Weather-related delays occur, subject to provisions for the inclusion of a specified number of "bad weather" days when provided for in Section 012100-Allowances, OR

2. Labor strikes or acts of God occur, OR

3. The work of the Contractor is delayed on account of conditions which were beyond the control of the Contractor, subcontractors or suppliers, and were not the result of their fault or negligence.

C. No time extension or compensation will be provided for delays caused by or within the control
of the Contractor, subcontractors or suppliers and for concurrent delays caused by the Owner.

D. The Contractor shall notify the Owner promptly of any occurrence or conditions which in the Contractor's opinion results in a need for an extension of time. The notice shall be in writing and shall include all necessary supporting materials with details of any resultant costs and be submitted in time to permit full investigation and evaluation of the Contractor's claim. The Owner shall promptly acknowledge the Contractor's notice and, after recommendation from the Owner’s Representative and/or Designer, shall provide a decision to the Contractor. Failure on the part of the Contractor to provide such notice and to detail the costs shall constitute a waiver by the Contractor of any claim. Requests for extensions of time shall be for working days only.

ARTICLE 5 - CONSTRUCTION AND COMPLETION

ARTICLE 5.1 – CONSTRUCTION COMMENCEMENT

A. Upon receipt of the "Intent to Award" letter, the Contractor must submit the following properly executed instruments to the Owner:

1. Contract;
2. Performance/payment bond as described in Article 6.1;
3. Certificates of Insurance, or the actual policies themselves, showing that the Contractor has obtained the insurance coverage required by Article 6.2.

Above referenced items must be received by the Owner within ten (10) working days after the effective date of the contract. If not received, the Owner may treat the failure to timely submit them as a refusal by the Contractor to accept a contract for this work and pay when due, any worker, subcontractor or supplier and otherwise prosecute the work with such diligence so as to maintain the rate of progress indicated on the progress schedule, prevent work stoppage, and insure completion of the project within the time specified.

ARTICLE 5.2 -- PROJECT CONSTRUCTION

A. Each Contractor shall submit for the Owner's approval, in reproducible form, a progress schedule showing the rate of progress and the order of the work proposed to carry on various phases of the project. The schedule shall be in conformance with the requirements outlined in Section 013200 – Schedules.

B. Contractor shall employ and supply a sufficient force of workers, material, and equipment and shall pay when due, any worker, subcontractor or supplier and otherwise prosecute the work with such faithfulness and energy, and shall complete the entire work on or before the completion time stated in the contract documents or pay to the Owner the damages resulting from the failure to timely complete the work as set out within Article 5.4.

ARTICLE 5.3 -- PROJECT COMPLETION

A. Substantial Completion. A Project is substantially complete when construction is essentially complete and work items remaining to be completed can be done without interfering with the Owner’s ability to use the Project for its intended purpose.

1. Once the Contractor has reached what they believe is Substantial Completion, the Contractor shall notify the Designer and the Construction Representative of the following:
   a. That work is essentially complete with the exception of certain listed work items. The list shall be referred to as the "Contractor’s Punch."
   b. That all Operation and Maintenance Manuals have been assembled and submitted in accordance with Article 3.5A.
   c. That the Work is ready for inspection by the Designer and Construction Representative. The Owner shall be entitled to a minimum of ten working days, the Contractor may consider it approved for purpose of determining when the first monthly Application and Certification for Payment may be submitted.

C. The Contractor may commence work upon receipt of the Division of Facilities Management, Design and Construction’s "Notice to Proceed" letter. Contractor shall prosecute the work with faithfulness and energy, and shall complete the entire work on or before the completion time stated in the contract documents or pay to the Owner the damages resulting from the failure to timely complete the work as set out within Article 5.4.
days notice before the inspection shall be performed.

2. If the work is acceptable, the Owner shall issue a Certificate of Substantial Completion, which shall set forth the responsibilities of the Owner and the Contractor for utilities, security, maintenance, damage to the work and risk of loss. The Certificate shall also identify those remaining items of work to be performed by the Contractor. All such work items shall be complete within 30 working days of the date of the Certificate, unless the Certificate specifies a different time. If the Contractor shall be required to perform tests that must be delayed due to climatic conditions, it is understood that such tests and affected equipment will be identified on the Certificate and shall be accomplished by the Contractor at the earliest possible date. Performance of the tests may not be required before Substantial Completion can be issued. The date of the issuance of the Certificate of Substantial Completion shall determine whether or not the work was completed within the contract time and whether or not Liquidated Damages are due.

3. If the work is not acceptable, and the Owner does not issue a Certificate of Substantial Completion, the Owner shall be entitled to charge the Contractor with the Designer’s and Owner’s costs of re-inspection, including time and travel.

B. Partial Occupancy. Contractor agrees that the Owner shall be permitted to occupy and use any completed or partially completed portions of the Project, when such occupancy and use is in the Owner’s best interest. Owner shall notify Contractor of its desire and intention to take Partial Occupancy as soon as possible but at least ten (10) working days before the Owner intends to occupy. If the Contractor believes that the portion of the work the Owner intends to occupy is not ready for occupancy, the Contractor shall notify the Owner immediately. The Designer shall inspect the work in accordance with the procedures above. If the Contractor claims increased cost of the project or delay in completion as a result of the occupancy, he shall notify the Owner immediately but in all cases before occupancy occurs.

C. Final Completion. The Project is finally complete when the Certificate of Substantial Completion has been issued and all work items identified therein as incomplete have been completed, and when all administrative items required by the contract have been completed. Final Completion entitles the Contractor to payment of the outstanding balance of the contract amount including all change orders and retainage. Within five (5) working days of the date of the Certificate of Substantial Completion, the Contractor shall identify the cost to complete any outstanding items of work. The Designer shall review the Contractor’s estimate and either approve it or provide an independent estimate for all such items. If the Contractor fails to complete the remaining items within the time specified in the Certificate, the Owner may terminate the contract and go to the surety for project completion in accordance with Article 7.2 or release the contract balance to the Contractor less 150% of the approved estimate to complete the outstanding items. Upon completion of the outstanding items, when a final cost has been established, any monies remaining shall be paid to the Contractor. Failure to complete items of work does not relieve the Contractor from the obligation to complete the administrative requirements of the contract, such as the provisions of Article 5.3 FAILURE TO COMPLETE ALL ITEMS OF WORK UNDER THE CONTRACT SHALL BE CONSIDERED A DEFAULT AND BE GROUNDS FOR CONTRACT TERMINATION AND DEBARMENT.

D. Liquidated Damages. Contractor agrees that the Owner may deduct from the contract price and retain as liquidated damages, and not as penalty or forfeiture, the sum stipulated in this contract for each work day after the Contract Completion Date on which work is not Substantially Complete. Assessment of Liquidated Damages shall not relieve the Contractor or the surety of any responsibility or obligation under the Contract. In addition, the Owner may, without prejudice to any other rights, claims, or remedies the Owner may have including the right to Liquidated Damages, charge the Contractor for all additional expenses incurred by the Owner and/or Designer as the result of the extended contract period through Final Completion. Additional Expenses shall include but not be limited to the costs of additional inspections.

E. Early Completion. The Contractor has the right to finish the work before the contract completion date; however, the Owner assumes no liability for any hindrances to the Contractor unless Owner caused delays result in a time extension to the contract completion date. The Contractor shall not be entitled to any claims for lost efficiencies or for delay if a Certificate of Substantial Completion is given on or before the Contract Completion Date.

ARTICLE 5.4 -- PAYMENT TO CONTRACTOR

A. Payments on account of this contract will be made monthly in proportion to the work which has been completed. Request for payment must be submitted on the Owner's forms. No other pay request will
be processed. Supporting breakdowns must be in the same format as Owner’s forms and must provide the same level of detail. The Designer will, within 5 working days from receipt of the contractor’s request for payment either issue a Certificate for Payment to the Owner, for such amount as the Designer determines is properly due, or notify the Contractor in writing of reasons for withholding a Certificate. The Owner shall make payment within 30 calendar days after the "Application and Certification for Payment" has been received and certified by the Designer. The following items are to be attached to the contractor’s pay request:

1. Updated construction schedule
2. Certified payrolls consisting of name, occupation and craft, number of hours worked and actual wages paid for each individual employee, of the Contractor and all subcontractors working on the project

B. The Owner shall retain 5 percent of the amount of each such payment application, except as allowed by Article 5.4, until final completion and acceptance of all work covered by this contract.

C. Each payment made to Contractor shall be on account of the total amount payable to Contractor and all material and work covered by paid partial payment shall thereupon become the sole property of Owner. This provision shall not be construed as relieving Contractor from sole responsibility for care and protection of materials and work upon which payments have been made or restoration of any damaged work or as a waiver of the right of Owner to require fulfillment of all terms of this contract.

D. Materials delivered to the work site and not incorporated in the work will be allowed in the Application and Certification for Payment on the basis of one hundred (100%) percent of value, subject to the 5% retainage providing that they are suitably stored on the site or in an approved warehouse in accordance with the following requirements:

1. Material has previously been approved through submittal and acceptance of shop drawings conforming to requirements of Article 3.2 of General Conditions.
2. Delivery is made in accordance with the time frame on the approved schedule.
3. Materials, equipment, etc., are properly stored and protected from damage and deterioration and remain so - if not, previously approved amounts will be deleted from subsequent pay applications.

4. The payment request is accompanied by a breakdown identifying the material equipment, etc. in sufficient detail to establish quantity and value.

E. The Contractor shall be allowed to include in the Application and Certification for Payment, one hundred (100%) of the value, subject to retainage, of major equipment and material stored off the site if all of the following conditions are met:

1. The request for consideration of payment for materials stored off site is made at least 15 working days prior to submittal of the Application for Payment including such material. Only materials inspected will be considered for inclusion on Application for Payment requests.
2. Materials stored in one location off site are valued in excess of $25,000.
3. That a Certificate of Insurance is provided indicating adequate protection from loss, theft, conversion or damage for materials stored off site. This Certificate shall show the State of Missouri as an additional insured for this loss.
4. The materials are stored in a facility approved and inspected, by the Construction Representative.
5. Contractor shall be responsible for, Owner costs to inspect out of state facilities, and any delays in the completion of the work caused by damage to the material or for any other failure of the Contractor to have access to this material for the execution of the work.

F. The Owner shall determine the amount, quality and acceptability of the work and materials which are to be paid for under this contract. In the event any questions shall arise between the parties, relative to this contract or specifications, determination or decision of the Owner or the Construction Representative and the Designer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

G. Payments Withheld: The Owner may withhold or nullify in whole or part any certificate to such extent as may be necessary to protect the Owner from loss on account of:

1. Defective work not remedied. When a notice of noncompliance is issued on an item or items, corrective action shall be undertaken immediately. Until corrective action is completed, no monies will be paid and no additional time will be allowed for the item or
items. The cost of corrective action(s) shall be borne by the Contractor.

2. A reasonable doubt that this contract can be completed for the unpaid balance.

3. Failure of the Contractor to update as-built drawings monthly for review by the Construction Representative.

4. Failure of the Contractor to update the construction schedule.

When the Construction Representative is satisfied the Contractor has remedied above deficiencies, payment shall be released.

H. Final Payment: Upon receipt of written notice from the Contractor to the Designer and Project Representative that the work is ready for final inspection and acceptance, the Designer and Project Representative, with the Contractor, shall promptly make such inspection. If the work is acceptable and the contract fully performed, the Construction Representative shall complete a final acceptance report and the Contractor will be directed to submit a final Application and Certification for Payment. If the Owner approves the same, the entire balance shall be due and payable, with the exception of deductions as provided for under Article 5.4.

1. Where the specifications provide for the performance by the Contractor of certain tests for the purpose of balancing and checking the air conditioning and heating equipment and the Contractor shall have furnished and installed all such equipment in accordance with the specifications, but said test cannot then be made because of climatic conditions, such test shall may be considered as required under the provisions of the specifications, Section 013300 and this contract may be substantial. Full payment will not be made until the tests have been made and the equipment and system is finally accepted. If the tests are not completed when scheduled, the Owner may deduct 150% of the value of the tests from the final payment.

2. The final payment shall not become due until the Contractor delivers to the Construction Representative:

a) A complete file of releases, on the standard form included in the contract documents as "Final Receipt of Payment and Release Form", from subcontractors and material suppliers evidencing payment in full for services, equipment and materials, as the case may require, if the Owner approves, or a consent from

the Surety to final payment accepting liability for any unpaid amounts.

b) An Affidavit of Compliance with Prevailing Wage Law, in the form as included in this contract specifications, properly executed by each subcontractor, and the Contractor

c) Certified copies of all payrolls

d) As-built drawings

3. If any claim remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such a claim including all costs and a reasonable attorney's fee.

4. Missouri statute requires prompt payment from the Owner to the Contractor within thirty calendar days and from the Contractor to his subcontractors within fifteen calendar days. Failure to make payments within the required time frame entitles the receiving party to charge interest at the rate of one and one half percent per month calculated from the expiration of the statutory time period until paid.

5. The value of all unused unit price allowances and/or 150% of the value of the outstanding work items, and/or liquidated damages may be deducted from the final pay request without executing a Contract Change. Any unit price items which exceed the number of units in the contract may be added by Contract Change.

ARTICLE 6 -- INSURANCE AND BONDS

ARTICLE 6.1 -- BOND

A. Contractor shall furnish a performance/payment bond in an amount equal to 100% of the contract price to guarantee faithful performance of the contract and 100% of the contract price to guarantee the payment of all persons performing labor on the project and furnishing materials in connection therewith under this contract as set forth in the standard form of performance and payment bond included in the contract documents. The surety on such bond shall be issued by a surety company authorized by the Missouri Department of Insurance to do business in the state of Missouri.

B. All Performance/Payment Bonds furnished in response to this provision shall be provided by a bonding company with a rating of B+ or higher as established by A.M. Best Company, Inc. in their most recent publication.
ARTICLE 6.2 – INSURANCE

A. The successful Contractor shall procure and maintain for the duration of the contract issued a policy or policies of insurance for the protection of both the Contractor and the Owner and their respective officers, officials, agents, consultants and employees. The Owner requires certification of insurance coverage from the Contractor prior to commencing work.

B. Minimum Scope and Extent of Coverage

1. General Liability
   Commercial General Liability, ISO coverage form number or equivalent CG 00 01 ("occurrence" basis), or I-SO coverage form number CG 00 02, or ISO equivalent.

   If ISO equivalent or manuscript general liability coverage forms are used, minimum coverage will be as follows: Premises/Operations; Independent Contractors; Products/Completed Operations; personal Injury; Broad Form Property Damage including Completed Operations; Broad Form Contractual Liability Coverage to include Contractor's obligations under Article 1.11 Indemnification and any other Special Hazards required by the work of the contract.

2. Automobile Liability
   Business Automobile Liability Insurance, ISO Coverage form number or equivalent CA 00 01 covering automobile liability, code 1 "ANY AUTO".

3. Workers' Compensation and Employer's Liability
   Statutory Workers' Compensation Insurance for Missouri and standard Employer's Liability Insurance, or the authorization to self-insure for such liability from the Missouri Division of Workers’ Compensation.

4. Builder's Risk or Installation Floater Insurance
   Insurance upon the work and all materials, equipment, supplies, temporary structures and similar items which may be incident to the performance of the work and located at or adjacent to the site, against loss or damage from fire and such other casualties as are included in extended coverage in broad "All Risk" form, including coverage for Flood and Earthquake, in an amount not less than the replacement cost of the work or this contract price, whichever is greater, with loss payable to Contractor and Owner as their respective interests may appear.

   Contractor shall maintain sufficient insurance to cover the full value of the work and materials as the work progresses, and shall furnish Owner copies of all endorsements. If Builder's Risk Reporting- Form of Endorsement is used, Contractor shall make all reports as required therein so as to keep in force an amount of insurance which will equal the replacement cost of the work, materials, equipment, supplies, temporary structures, and other property covered thereby; and if, as a result of Contractor's failure to make any such report, the amount of insurance so recoverable shall be less than such replacement cost, Contractor's interest in the proceeds of such insurance, if any, shall be subordinated to Owner's interest to the end that Owner may receive full reimbursement for its loss.

C. Minimum Limits of Insurance

1. General Liability
   Contractor
   $2,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage
   $2,000,000 annual aggregate

2. Automobile Liability
   $2,000,000 combined single limit per occurrence for bodily injury and property damage

3. Workers' Compensation and Employers Liability
   Workers' Compensation limits as required by applicable State Statutes (generally unlimited) and minimum of $1,000,000 limit per accident for Employer's Liability.

   General Liability and Automobile Liability insurance may be arranged under individual policies for the full limits required or by a combination of underlying policies with the balance provided by a form-following Excess or Umbrella Liability policy.

D. Deductibles and Self-Insured Retentions

   All deductibles, co-payment clauses, and self-insured retentions must be declared to and approved by the Owner. The Owner reserves the right to request the reduction or elimination of unacceptable deductibles or self-insured retentions, as they would apply to the Owner, and their respective officers, officials, agents, consultants and employees. Alternatively, the Owner may request Contractor to procure a bond guaranteeing
payment of losses and related investigations, claims administration, and defense expenses.

E. Other Insurance Provisions and Requirements

The respective insurance policies and coverage, as specified below, must contain, or be endorsed to contain the following conditions or provisions:

1. General Liability

The Owner, and its respective commissioners, officers, officials, agents, consultants and employees shall be endorsed as additional insured’s by ISO form CG 20 26 Additional Insured - Designated Person or Organization. As additional insured’s, they shall be covered as to work performed by or on behalf of the Contractor or as to liability which arises out of Contractor's activities or resulting from the performance of services or the delivery of goods called for by the Contract.

Contractor's insurance coverage shall be primary with respect to all additional insured’s. Insurance of self-insurance programs maintained by the designated additional insured’s shall be in excess of the Contractor's insurance and shall not contribute with it.

Additionally, the Contractor and Contractor's general liability insurer shall agree to waive all rights of subrogation against the Owner and any of their respective officers, officials, agents, consultants or employees for claims, losses, or expenses which arise out of Contractor's activities or result from the performance of services or the delivery of goods called for by the Contract.

Contractor's failure to comply with the terms and conditions of these insurance policies shall not affect or abridge coverage for the Owner, or for any of its officers, officials, agents, consultants or employees.

2. Automobile Insurance

The Owner, and their respective officers, officials, agents, consultants and employees shall be endorsed as additional insured’s by ISO form CG 20 26 - Additional Insured Designated Person or Organization. As additional insured’s, they shall be covered as to work performed by or on behalf of the Contractor or as to liability which arises out of Contractor's activities or resulting from the performance of services or the delivery of goods called for by the Contract.

Contractor's insurance coverage shall be primary with respect to all additional insured’s. Insurance or self-insurance programs maintained by the designated additional insured’s shall be in excess of the Contractor's insurance and shall not contribute with it.

Additionally, the Contractor and Contractor's automobile insurer shall agree to waive all rights of subrogation against the Owner and any of their respective officers, officials, agents, consultants or employees for claims, losses, or expenses which arise out of Contractor's activities or result from the performance of services or the delivery of goods called for by the Contract.

Contractor's failure to comply with the terms and conditions of these insurance policies shall not affect or abridge coverage for the Owner or for any of its officers, officials, agents, consultants or employees.

3. Workers' Compensation/Employer's Liability

Contractor's workers' compensation insurance shall be endorsed with NCCI form WC 00 03 01 A - Alternative Employer Endorsement. The Alternative Employer Endorsement shall designate the Owner as "alternate employers."

4. All Coverages

Each insurance policy required by this section of the Contract shall contain a stipulation, endorsed if necessary, that the Owner will receive a minimum of a thirty (30) calendar day advance notice of any policy cancellation. Ten (10) calendar days advance notice is required for policy cancellation due to non-payment of premium.

F. Insurer Qualifications and Acceptability

Insurance required hereunder shall be issued by an A.M. Best, “B+” rated, Class IX insurance company approved to conduct insurance business in the state of Missouri.

G. Verification of Insurance Coverage

Prior to Owner issuing a Notice to Proceed, the Contractor shall furnish the Owner with Certificate(s) of Insurance and with any applicable original endorsements evidencing the required insurance coverage. The insurance certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements received by the Owner are subject to review and approval by the Owner. The Owner reserves the right to require certified copies of all required policies at any time. If the scope of this contract will exceed one (1) year - or, if any of Contractor's applicable insurance coverage expires prior to completion of the work or services required under this contract -
the Contractor will provide a renewal or replacement certificate before continuing work or services hereunder. If the Contractor fails to provide documentation of required insurance coverage, the Owner may issue a stop work order and no additional contract completion time and/or compensation shall be granted as a result thereof.

ARTICLE 7 – SUSPENSION OR TERMINATION OF CONTRACT

ARTICLE 7.1 - FOR SITE CONDITIONS

When conditions at the site of the proposed work are considered by the Owner to be unsatisfactory for prosecution of the work, the Contractor may be ordered in writing to suspend the work or any part thereof until reasonable conditions exist. When such suspension is not due to fault or negligence of the Contractor, time allowed for completion of such suspended work will be extended by a period of time equal to that lost due to delay occasioned by ordered suspension. This will be a no cost time extension.

ARTICLE 7.2 - FOR CAUSE

A. Termination or Suspension for Cause:
   1. If the Contractor shall file for bankruptcy, or should make a general assignment for the benefit of the creditors, or if a receiver should be appointed on account of insolvency, or if the contractor should persistently or repeatedly refuse or fail to supply enough properly skilled workers or proper materials, or if the contractor should fail to make prompt payment to subcontractors or for material or labor, or persistently disregard laws, ordinances or the instructions of the Owner, or otherwise be guilty of a substantial violation of any provision of this contract, then the Owner may serve notice on the Contractor and the surety setting forth the violations and demanding compliance with this contract. Unless within ten (10) consecutive calendar days after serving such notice, such violations shall cease and satisfactory arrangements for correction be made, the Owner may suspend the Contractor's right to proceed with the work or terminate this contract.
   2. In the event the Owner suspends Contractor's right to proceed with the work or terminates the contract, the Owner may demand that the Contractor's surety take over and complete the work on this contract, after the surety submits a written proposal to the Owner and receives written approval and upon the surety's failure or refusal to do so within ten (10) consecutive calendar days after demand therefore, the Owner may take over the work and prosecute the same to completion by bid or negotiated contract, or the Owner may elect to take possession of and utilize in completing the work such materials, supplies, appliances and plant as may be on the site of the work, and all subcontractors, if the Owner elects, shall be bound to perform their contracts.

B. The Contractor and its surety shall be and remain liable to the Owner for any excess cost or damages occasioned to the Owner as a result of the actions above set forth.

C. The Contractor in the event of such suspension or termination shall not be entitled to receive any further payments under this contract until the work is wholly finished. Then if the unpaid balance under this contract shall exceed all expenses of the Owner as certified by the Director, such excess shall be paid to the Contractor; but, if such expenses shall exceed the unpaid balance as certified by the Director, the Contractor and their surety shall be liable for and shall pay the difference and any damages to the Owner.

D. In exercising Owner's right to secure completion of the work under any of the provisions hereof, the Director shall have the right to exercise Owner's sole discretion as to the manner, methods and reasonableness of costs of completing the work.

E. The rights of the Owner to suspend or terminate as herein provided shall be cumulative and not exclusive and shall be in addition to any other remedy provided by law.

F. The Contractor in the event of such suspension or termination may be declared ineligible for Owner contracts for a minimal period of twelve (12) months. Further, no contract will be awarded to any Contractor who lists in their bid form any subcontractor whose prior performance has contributed, as determined by the Owner, to a breach of a contract. In order to be considered for state-awarded contracts after this period, the Contractor/subcontractor will be required to forward acceptance reports to the Owner regarding successful completion of non-state projects during the intervening twelve (12) months from the date of default. No contracts will be awarded to a subcontractor/Contractor until the ability to perform responsibly in the private sector has been proven to the Owner.

ARTICLE 7.3 -- FOR CONVENIENCE

A. The Owner may terminate or suspend the Contract or any portion of the Work without cause at any time, and at the Owner's convenience. Notification of a termination or suspension shall be in writing.
and shall be given to the Contractor and their surety. If the Contract is suspended, the notice will contain the anticipated duration of the suspension or the conditions under which work will be permitted to resume. If appropriate, the Contractor will be requested to demobilize and re-mobilize and will be reimbursed time and costs associated with the suspension.

B. Upon receipt of notification, the Contractor shall:

1. Cease operations when directed.

2. Take actions to protect the work and any stored materials.

3. Place no further subcontracts or orders for material, supplies, services or facilities except as may be necessary to complete the portion of the Contract that has not been terminated. No claim for payment of materials or supplies ordered after the termination date shall be considered.

4. Terminate all existing subcontracts, rentals, material, and equipment orders.

5. Settle all outstanding liabilities arising from termination with subcontractors and suppliers.

6. Transfer title and deliver to the Owner, work in progress, completed work, supplies and other material produced or acquire for the work terminated, and completed or partially completed plans, drawings information and other property that, if the Contract had been completed, would be required to be furnished to the Owner.

C. For termination without cause and at the Owner's convenience, in addition to payment for work completed prior to date of termination, the Contractor may be entitled to payment of other documented costs directly associated with the early termination of the contract. Payment for anticipated profit and unapplied overhead will not be allowed.
SECTION 007300 - SUPPLEMENTARY CONDITIONS

1.0 GENERAL:
   A. These Supplementary General Conditions clarify, add, delete, or otherwise modify standard terms and conditions of DIVISION 0, BIDDING AND CONTRACTING REQUIREMENTS.

2.0 CONTACTS:
   Designer: Jeff Bertel
   Reitz & Jens, Inc
   1055 Corporate Square Drive
   Telephone: (314) 993-4132
   Email: jbertel@reitzjens.com

   Construction Representative: Kevin Hultberg
   Division of Facilities Management, Design and Construction
   10325 Business 21 North
   Hillsboro, Missouri 63050
   Telephone: (636) 524-8528
   Email: Kevin.Hultber@oa.mo.gov

   Project Manager: Eric Hibdon, PE
   Division of Facilities Management, Design and Construction
   301 West High Street, Room 730
   Jefferson City, Missouri 65102
   Telephone: (573) 522-0322
   Email: Eric.Hibdon@oa.mo.gov

   Contract Specialist: Paul Girouard
   Division of Facilities Management, Design and Construction
   301 West High Street, Room 740
   Jefferson City, Missouri 65102
   Telephone: (573) 751-4797
   Email: Paul.Girouard@oa.mo.gov

3.0 NOTICE: ALL BID MATERIALS ARE DUE AT THE TIME OF BID SUBMITTAL. THERE IS NO SECOND SUBMITTAL FOR THIS PROJECT.

4.0 FURNISHING CONSTRUCTION DOCUMENTS:
   A. The Owner will furnish the Contractor with approximately 5 complete sets of drawings and specifications at no charge.
   B. The Owner will furnish the Contractor with approximately 5 sets of explanatory or change drawings at no charge.
   C. The Contractor may make copies of the documents as needed with no additional cost to the Owner.

5.0 SAFETY REQUIREMENTS
   Contractor and subcontractors at any tier shall comply with RSMo 292.675 and Article 1.3, E, of Section 007213, General Conditions.
Annual Wage Order No. 27

Section 090
REYNOLDS 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.

Filed With Secretary of State: March 10, 2020

Last Date Objections May Be Filed: April 9, 2020

Prepared by Missouri Department of Labor and Industrial Relations
# Building Construction Rates for REYNOLDS County

**Section 090**

<table>
<thead>
<tr>
<th>OCCUPATIONAL TITLE</th>
<th><strong>Prevailing Hourly Rate</strong></th>
</tr>
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<tbody>
<tr>
<td>Asbestos Worker</td>
<td>$20.38</td>
</tr>
<tr>
<td>Boilermaker</td>
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<tr>
<td>Bricklayer</td>
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<td>Carpenter</td>
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<tr>
<td>Lather</td>
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<td>Linoleum Layer</td>
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<tr>
<td>Pile Driver</td>
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<td>Cement Mason</td>
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<td>Plasterer</td>
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<tr>
<td>Communications Technician</td>
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<td>Electrician Outside Lineman</td>
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</tr>
<tr>
<td>Lineman Operator</td>
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<tr>
<td>Lineman - Tree Trimmer</td>
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<tr>
<td>Groundman</td>
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<tr>
<td>Groundman - Tree Trimmer</td>
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<tr>
<td>Elevator Constructor</td>
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<td>Glazier</td>
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<td>Ironworker</td>
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<td>Laborer</td>
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<td>General Laborer</td>
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<tr>
<td>First Semi-Skilled</td>
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<td>Second Semi-Skilled</td>
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<tr>
<td>Mason</td>
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<tr>
<td>Marble Mason</td>
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<td>Marble Finisher</td>
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<td>Terrazzo Worker</td>
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<tr>
<td>Tile Setter</td>
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<td>Tile Finisher</td>
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<td>Operating Engineer</td>
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<td>Group I</td>
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<td>Group II</td>
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<tr>
<td>Group IV</td>
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<td>Painter</td>
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<td>Plumber</td>
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<td>Pipe Fitter</td>
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<td>Roofer</td>
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<td>Sheet Metal Worker</td>
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<td>Sprinkler Fitter</td>
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<td>Truck Driver</td>
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<tr>
<td>Truck Control Service Driver</td>
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<tr>
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*The Division of Labor Standards received less than 1,000 reportable hours for this occupational title.

Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.
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Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

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

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

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

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

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

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

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

HOLIDAYS

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

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.
SECTION 01 1000
SUMMARY OF WORK

PART 1  GENERAL

1.01  RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 1 Specification Sections apply to this Section.

1.02  WORK COVERED BY CONTRACT DOCUMENTS
   A. The Project consists of: selective demolition (abandonment) of the primary spillway at Jay Nixon State Park and construction of emergency spillway widening/notching and repair of the emergency spillway training berm.
      1. Project Location: unincorporated area near Middlebrook, MO, 63656.
      2. Owner: State of Missouri, Office of Administration, Division of Facilities Management, Design and Construction, Harry S Truman State Office Building, Post Office Box 809, 301 West High Street, Jefferson City, Missouri 65102.
   B. Contract Documents, dated February 3, 2021 were prepared for the Project by Reitz & Jens, Inc, 1055 Corporate Square Drive, St. Louis, MO 63132.
   C. The Work consists of, but is not limited to, the following tasks including furnishing all labor, equipment, tools, parts, materials, and incidental work pertinent to completing these tasks as described in the Contract Documents.
   D. The Work will be constructed under a single prime contract and complete by October 1, 2021.

1.03  DESIGNER’S ESTIMATE OF CONSTRUCTION COSTS
   A. The project designer has prepared this cost estimate. It is intended to provide an indication of the relative amounts of work by division and section only. The State of Missouri makes no guarantee regarding the accuracy of the values contained herein nor does the State of Missouri intend to imply that the values associated with any specification section are accurate or in any way reflect actual costs required to perform the work represented by the specifications and drawings. The contractor should not rely on this estimate in any way while preparing a bid for this project or otherwise.
      Total Estimate = $230,000 to $320,000

1.04  CONTRACTOR USE OF PREMISES
   A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
      1. Owner Occupancy: Allow for Owner occupancy.
      2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner’s employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
      3. Maintain existing lake level (normal pool elevation) unless the contractor prepares and submits a dewatering plan to the Owner’s Representative and receives approval from the Owner to dewater the lake in accordance with the approved dewatering plan.

PART 2 PRODUCTS (NOT APPLICABLE)
PART 3  EXECUTION (NOT APPLICABLE)

END OF SECTION
SECTION 01 2600

CONTRACT MODIFICATION PROCEDURES

PART 1  GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.

1.02 SUMMARY

A. This Section specifies administrative and procedural requirements for handling and processing Contract Modifications.

B. Related Sections include the following:
   1. Division 1, Section 012100 "Allowances“ for procedural requirements for handling and processing Allowances.
   2. Division 0, Section 007213, Article 3.1 "Acceptable Substitutions“ for administrative procedures for handling Requests for Substitutions made after Contract award.
   3. Division 0, Section 007213, Article 4.0 "Changes in the Work“ for Contract Change requirements.

1.03 REQUESTS FOR INFORMATION

A. In the event that the Contractor or Subcontractor, at any tier, determines that some portion of the Drawings, Specifications, or other Contract Documents requires clarification or interpretation, the Contractor shall submit a “Request for Information“ (RFI) in writing to the Designer. A RFI may only be submitted by the Contractor and shall only be submitted on the RFI forms provided by the Owner. The Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed. In the RFI, the Contractor shall set forth an interpretation or understanding of the requirement along with reasons why such an understanding was reached.

B. Responses to RFI shall be issued within ten (10) working days of receipt of the Request from the Contractor unless the Designer determines that a longer time is necessary to provide an adequate response. If a longer time is determined necessary by the Designer, the Designer will, within five (5) working days of receipt of the request, notify the Contractor of the anticipated response time. If the Contractor submits a RFI on a time sensitive activity on the current project schedule, the Contractor shall not be entitled to any time extension due to the time it takes the Designer to respond to the request provided that the Designer responds within the ten (10) working days set forth above.

C. Responses from the Designer will not change any requirement of the Contract Documents. In the event the Contractor believes that a response to a RFI will cause a change to the requirements of the Contract Document, the Contractor shall give written notice to the Designer requesting a Contract Change for the work. Failure to give such written notice within ten (10) working days, shall waive the Contractor’s right to seek additional time or cost under Article 4, “Changes in the Work“ of the General Conditions.

1.04 MINOR CHANGES IN THE WORK

A. Designer will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Amount or the Contract Time, on "Designer’s Supplemental Instructions“ (DSI).

1.05 PROPOSAL REQUESTS

A. The Designer or Owner Representative will issue a detailed description of proposed Changes in the Work that may require adjustment to the Contract Amount or the Contract Time. The proposed Change Description will be issued using the “Request for Proposal“ (RFP) form. If necessary, the description will include supplemental or revised Drawings and Specifications.
1. Proposal Requests issued by the Designer or Owner Representative are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.

2. Within ten (10) working days after receipt of Proposal Request, submit a proposal for the cost adjustments to the Contract Amount and the Contract Time necessary to execute the Change. The Contractor shall submit his proposal on the appropriate Contract Change Detailed Breakdown form. Subcontractors may use the appropriate Contract Change Detailed Breakdown form or submit their proposal on their letterhead provided the same level of detail is included. All proposals shall include:
   a. A detailed breakdown of costs per Article 4.1 of the General Conditions.
   b. If requesting additional time per Article 4.2 of the General Conditions, include an updated Contractor's Construction Schedule that indicates the effect of the Change including, but not limited to, changes in activity duration, start and finish times, and activity relationship.

1.06 CONTRACT CHANGE PROCEDURES
   A. On Owner's approval of a Proposal Request, the Designer or Owner Representative will issue a Contract Change for signatures of Owner and Contractor on the “Contract Change” form.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 REFERENCED FORMS
   A. The following forms can be found on our website at https://oa.mo.gov/facilities/vendor-links/architectengineering-forms or https://oa.mo.gov/facilities/vendor-links/contractor-forms:
      1. Request for Information
      2. Designer's Supplemental Instructions
      3. Request for Proposal
      4. Contract Change
      5. Contract Change Detailed Breakdown - SAMPLES
      6. Contract Change Detailed Breakdown - General Contractor (GC)
      7. Contract Change Detailed Breakdown - Subcontractor (SUB)

END OF SECTION
SECTION 01 3100
COORDINATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.

1.02 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Projects including, but not limited to, the following:
   1. Coordination Drawings.
   2. Administrative and supervisory personnel.
   3. Project meetings.

B. Related Sections include the following:
   1. Division 1, Section 013200 "Schedules" for preparing and submitting Contractor's Construction Schedule.
   3. Article 5.4.H of Section 007213 "General Conditions" for coordinating Closeout of the Contract.

1.03 COORDINATION

A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections, which depend on each other for proper installation, connection, and operation.
   1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
   2. Coordinate installation of different components with other Contractors to ensure maximum accessibility for required maintenance, service, and repair.
   3. Make adequate provisions to accommodate items scheduled for later installation.
   4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components including mechanical and electrical.

B. Prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
   1. Prepare similar memoranda for Owner and separate Contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other Contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
   1. Preparation of Contractor's Construction Schedule.
   2. Preparation of the Schedule of Values.
   4. Installation and removal of temporary facilities and controls.
   5. Delivery and processing of submittals.
   6. Progress meetings.
   7. Project Closeout activities.

D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.04 PROJECT MEETINGS

A. The Owner's Construction Representative will schedule a Pre-Construction Meeting prior to beginning of construction. The date, time, and exact place of this meeting will be determined after Contract Award and notification of all interested parties. The Contractor shall arrange to have the Job Superintendent and all prime Subcontractors present at the meeting. During the Pre-Construction Meeting, the construction procedures and information necessary for submitting payment requests will be discussed and materials distributed along with any other pertinent information.

   1. Minutes: Designer will record and distribute meeting minutes.

B. Progress Meetings: The Owner's Construction Representative will conduct Monthly Progress Meetings as stated in Articles 1.8.B and 1.8.C of Section 007213 “General Conditions”.

   1. Minutes: Designer will record and distribute to Contractor the meeting minutes.

PART 2 PRODUCTS (NOT USED)
PART 3 EXECUTION (NOT USED)

END OF SECTION
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions, Bid Form, and other Division 1 Specification Sections apply to this Section.

B. Division 1, Section 013300 - Submittals

C. Division 1, Section 012600 – Contract Modification Procedures

1.2 SUMMARY

A. Project Management Communications: The Contractor shall use the Internet web based project management communications tool, E-Builder® ASP software, and protocols included in that software during this project. The use of project management communications as herein described does not replace or change any contractual responsibilities of the participants.

1. Project management communications is available through E-Builder® as provided by "e-Builder®" in the form and manner required by the Owner.

2. The project communications database is on-line and fully functional. User registration, electronic and computer equipment, and Internet connections are the responsibility of each project participant. The sharing of user accounts is prohibited.

B. Support: E-Builder® will provide on-going support through on-line help files.

C. Copyrights and Ownership: Nothing in this specification or the subsequent communications supersedes the parties’ obligations and rights for copyright or document ownership as established by the Contract Documents. The use of CAD files, processes or design information distributed in this system is intended only for the project specified herein.

D. Purpose: The intent of using E-Builder® is to improve project work efforts by promoting timely initial communications and responses. Secondly, to reduce the number of paper documents while providing improved record keeping by creation of electronic document files.

E. Authorized Users: Access to the web site will be by individuals who are authorized users.

1. Individuals shall complete the E-Builder New Company/User Request Form located at the following web site: https://oa.mo.gov/facilities/vendor-links/contractor-forms.
Completed forms shall be emailed to the following email address: OA.FMDCE-BuilderSupport@oa.mo.gov.

2. Authorized users will be contacted directly and assigned a temporary user password.

3. Individuals shall be responsible for the proper use of their passwords and access to data as agents of the company in which they are employed.

F. Administrative Users: Administrative users have access and control of user licenses and all posted items. DO NOT POST PRIVATE OR YOUR COMPANY CONFIDENTIAL ITEMS IN THE DATABASE! Improper or abusive language toward any party or repeated posting of items intended to deceive or disrupt the work of the project will not be tolerated and will result in deletion of the offensive items and revocation of user license at the sole discretion of the Administrative User(s).

G. Communications: The use of fax, email and courier communication for this project is discouraged in favor of using E-BUILDER® to send messages. Communication functions are as follows:

1. Document Integrity and Revisions:
   a. Documents, comments, drawings and other records posted to the system shall remain for the project record. The authorship time and date shall be recorded for each document submitted to the system. Submitting a new document or record with a unique ID, authorship, and time stamp shall be the method used to make modifications or corrections.
   b. The system shall make it easy to identify revised or superseded documents and their predecessors.
   c. Server or Client side software enhancements during the life of the project shall not alter or restrict the content of data published by the system. System upgrades shall not affect access to older documents or software.

2. Document Security:
   a. The system shall provide a method for communication of documents. Documents shall allow security group assignment to respect the contractual parties communication except for Administrative Users. DO NOT POST PRIVATE OR YOUR COMPANY CONFIDENTIAL ITEMS IN THE DATABASE!

3. Document Integration:
   a. Documents of various types shall be logically related to one another and discoverable. For example, requests for information, daily field reports, supplemental sketches and photographs shall be capable of reference as related records.

4. Reporting:
   a. The system shall be capable of generating reports for work in progress, and logs for each document type. Summary reports generated by the system shall be available for team members.

5. Notifications and Distribution:
   a. Document distribution to project members shall be accomplished both within the extranet system and via email as appropriate. Project document distribution to parties outside of the project communication system shall be
accomplished by secure email of outgoing documents and attachments, readable by a standard email client.

6. Required Document Types:
   a. RFI, Request for Information.
   b. Submittals, including record numbering by drawing and specification section.
   c. Transmittals, including record of documents and materials delivered in hard copy.
   d. Meeting Minutes.
   e. Application for Payments (Draft or Pencil).
   f. Review Comments.
   g. Field Reports.
   h. Construction Photographs.
   i. Drawings.
   j. Supplemental Sketches.
   k. Schedules.
   l. Specifications.
   m. Request for Proposals
   n. Designer’s Supplemental Instructions
   o. Punch Lists

H. Record Keeping: Except for paper documents, which require original signatures and large format documents (greater than 8½ x 11 inches), all other 8½ x 11 inches documents shall be submitted by transmission in electronic form to the E-Builder® web site by licensed users.

a. The Owner and his representatives, the Designer and his consultants, and the Contractor and his Sub Contractors and suppliers at every tier shall respond to documents received in electronic form on the web site, and consider them as if received in paper document form.

b. The Owner and his representatives, the Designer and his consultants, and the Contractor and his Sub Contractors and suppliers at every tier reserves the right to and shall reply or respond by transmissions in electronic form on the web site to documents actually received in paper document form.

c. The Owner and his representatives, the Designer and his consultants, and the Contractor and his Sub Contractors and suppliers at every tier reserves the right to and shall copy any paper document into electronic form and make same available on the web site.

I. Minimum Equipment and Internet Connection: In addition to other requirements specified in this Section, the Owner and his representatives, the Construction Manager and his representatives, the Architect and his consultants, and the Contractor and his subcontractors and suppliers at every tier required to have a user license(s) shall be responsible for the following:
1. Providing suitable computer systems for each licensed user at the users normal work location\(^1\) with high-speed Internet access, i.e. DSL, local cable company's Internet connection, or T1 connection.

2. Each of the above referenced computer systems shall have the following minimum system\(^2\) and software requirements:
   a. Desktop configuration (Laptop configurations are similar and should be equal to or exceed desktop system.)
      1) Operating System: Windows XP or newer
      2) Internet Browser: Internet Explorer 6.01SP2+ (Recommend IE7.0+)
      3) Minimum Recommend Connection Speed: 256K or above
      4) Processor Speed: 1 Gigahertz and above
      5) RAM: 512 mb
      6) Operating system and software shall be properly licensed.
      7) Internet Explorer version 7 (current version is a free distribution for download). This specification is not intended to restrict the host server or client computers provided that industry standard HTTP clients may access the published content.
      8) Adobe Acrobat Reader (current version is a free distribution for download).
      9) Users should have the standard Microsoft Office Suite (current version must be purchased) or the equivalent.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable.)

END OF SECTION 013115

\(^1\) The normal work location is the place where the user is assigned for more than one-half of his time working on this project.

\(^2\) The minimum system herein will not be sufficient for many tasks and may not be able to process all documents and files stored in the E-Builder® Documents area.
PART 1 GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract including General and Supplementary Conditions, Bid Form, and other Division 1 Specification Sections apply to this Section.

1.02 SUMMARY
A. This Section includes requirements for a Bar Chart Schedule for the project construction activities, schedule of submittals, and schedule for testing.

PART 2 PRODUCTS - (NOT APPLICABLE)

PART 3 EXECUTION

3.01 SUBMITTAL PROCEDURES
A. The Contractor shall submit to the Designer, within ten (10) working days following the Notice to Proceed, a Progress Schedule including Schedule of Values showing the rate of progress the Contractor agrees to maintain and the order in which he proposed to carry out the various phases of Work. No payments shall be made to the Contractor until the Progress Schedule has been approved by the Owner.

B. The Contractor shall submit an updated Schedule for presentation at each Monthly Progress Meeting. The Schedule shall be updated by the Contractor as necessary to reflect the current Schedule and its relationship to the original Schedule. The updated Schedule shall reflect any changes in the logic, sequence, durations, or completion date. Payments to the Contractor shall be suspended if the Progress Schedule is not adequately updated to reflect actual conditions.

C. The Contractor shall submit Progress Schedules to Subcontractors to permit coordinating their Progress Schedules to the general construction Work. The Contractor shall coordinate preparation and processing of Schedules and reports with performance of other construction activities.

3.02 CONSTRUCTION PROGRESS SCHEDULE - BAR CHART SCHEDULE
A. Bar-Chart Schedule: The Contractor shall prepare a comprehensive, fully developed, horizontal bar chart-type Contractor's Construction Schedule. The Contractor for general construction shall prepare the Construction Schedule for the entire Project. The Schedule shall show the percentage of work to be completed at any time, anticipated monthly payments by Owner, as well as significant dates (such as completion of excavation, concrete foundation work, underground lines, superstructure, rough-ins, enclosure, hanging of fixtures, etc.) which shall serve as check points to determine compliance with the approved Schedule.

1. The Contractor shall provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week.
   a. If practical, use the same Schedule of Values breakdown for schedule time bars.

2. The Contractor shall provide a base activity time bar showing duration for each construction activity. Each bar is to indicate start and completion dates for the activity. The Contractor is to place a contrasting bar below each original schedule activity time for indicating actual progress and planned remaining duration for the activity.

3. The Contractor shall prepare the Schedule on a minimal number of separate sheets to readily show the data for the entire construction period.

4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on schedule with other construction activities. Include minor elements involved in the overall sequence of the Work. Show each activity in
proper sequence. Indicate graphically the sequences necessary for completion of related portions of the Work.

5. Coordinate the Contractor’s Construction Schedule with the Schedule of Values, list of subcontracts, Submittal Schedule, progress reports, payment requests, and other required schedules and reports.

6. Indicate the Intent to Award and the Contract Substantial Completion dates on the schedule.

END OF SECTION
SECTION 01 3300
SUBMITTALS

PART 1 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY
   A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
      1. Shop Drawings.
      2. Product Data.
      3. Test Reports
      4. Grout Plan
      5. Lake Dewatering Plan, if dewatering is proposed
      6. Record Photographs.
   B. Administrative Submittals: Refer to General and Supplementary Conditions other applicable Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
      1. Construction Progress Schedule including Schedule of Values.
      2. Performance and Payment Bonds.
      3. Insurance certificates.
      4. Applications for Payment.
      5. Certified Payroll Reports.
      6. Partial and Final Receipt of Payment and Release Forms.
      7. Affidavit Compliance with Prevailing Wage Law.
      8. Record Drawings.
   C. The Contractor is obliged and responsible to check all shop drawings and schedules to assure compliance with contract plans and specifications. The Contractor is responsible for the content of the shop drawings and coordination with other contract work. Shop drawings and schedules shall indicate, in detail, all parts of an item or work, including erection and setting instructions and integration with the work of other trades.
   D. The Contractor shall at all times make a copy, of all approved submittals, available on site to the Construction Representative.

1.03 SUBMITTAL PROCEDURES
   A. The Contractor shall comply with the General and Supplementary Conditions and other applicable sections of the Contract Documents. The Contractor shall submit, with such promptness as to cause no delay in his work or in that of any other contractors, all required submittals indicated in Part 3.1 of this section and elsewhere in the Contract Documents. Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
      1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
      2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
         a. The Designer reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
   B. Each drawing and/or series of drawings submitted must be accompanied by a letter of transmittal giving a list of the titles and numbers of the drawings. Each series shall be
numbered consecutively for ready reference and each drawing shall be marked with the following information:
1. Date of Submission
2. Name of Project
3. Location
4. Section Number of Specification
5. State Project Number
6. Name of Submitting Contractor
7. Name of Subcontractor
8. Indicate if item is submitted as specified or as a substitution

1.04 SHOP DRAWINGS
A. Comply with the General Conditions, Article 3.2.
B. The Contractor shall submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
C. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
   1. Dimensions.
   2. Identification of products and materials included by sheet and detail number.
   3. Compliance with specified standards.
   4. Notation of coordination requirements.
   5. Notation of dimensions established by field measurement.
   6. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8 ½”x11” but no larger than 36” x 48”.

1.05 PRODUCT DATA
A. The Contractor shall comply with the General Conditions, Article 3.2.
B. The Contractor shall collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer’s installation instructions, material properties, gradations, and mix designs.
   1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
      a. Manufacturer’s printed recommendations.
      b. Manufacturer’s installation instructions
      c. Compliance with trade association standards.
      d. Compliance with recognized testing agency standards.
      e. Application of testing agency labels and seals.
      f. Notation of dimensions verified by field measurement.
      g. Notation of coordination requirements.
   2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

1.06 QUALITY ASSURANCE DOCUMENTS
A. The Contractor shall comply with the General Conditions, Article 3.2
B. The Contractor shall submit quality control submittals, including design data, certifications, manufacturer’s instructions, manufacturer’s field reports, and other quality-control submittals as required under other Sections of the Specifications.
C. Certifications: Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer or contractor certifying compliance with specified requirements.
1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to contractually bind the company.

D. Inspection and Test Reports: The Contractor shall submit the required inspection and test reports from independent testing agencies as specified in this section and in other sections of the Contract Documents.

E. Record Photographs: The Contractor shall submit record construction photographs as specified in this section and in other sections of the Contract Documents.
   1. The Contractor shall submit two (2) sets of prints, black and white, glossy; 8”x10” size; mounted on 8 ½ “ x 11” soft card stock with let edge binding margin for 3-hole punch.
   2. The Contractor shall identify each photograph with project name, location, number, date, time and orientation.
   3. The Contractor shall take four (4) photographs from differing directions and a minimum of five (5) interior photographs indicating the relative progress of the Work.

1.07 OPERATING AND MAINTENANCE MANUALS AND WARRANTIES

A. The Contractor shall submit all required manufacturer’s operating instructions, maintenance/service manuals and warranties in accordance with the General Conditions Article 3.5 and Supplementary Conditions and this and other sections of the Contract Documents.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 REQUIRED SUBMITTALS

A. Contractor shall submit the following information for materials and equipment to be provided under this contract.

**Type of Submittal:**

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<th>Section</th>
<th>Description</th>
<th>Schedule of Values</th>
<th>Construction Schedule</th>
<th>Shop Drawings</th>
<th>Product Data</th>
<th>Certifications</th>
<th>Test Report</th>
<th>Record Photographs</th>
<th>As-Built Drawing</th>
<th>Maintenance Data</th>
<th>Grout Plan</th>
<th>Blasting Plan</th>
<th>Lake Dewater Plan</th>
<th>Warranty</th>
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END OF SECTION
SECTION 01 3513.28
SITE SECURITY AND HEALTH REQUIREMENTS (DNR)

PART 1 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract including General and Supplementary
      Conditions, Bid Form, and other Division 1 Specification Sections apply to this Section.

1.02 SUBMITTALS
   A. List of required submittals:
      1. Materials Safety Data Sheets for all hazardous materials to be brought onsite.
      2. Schedule of proposed shutdowns, if applicable.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 ACCESS TO THE SITE
   A. The Contractor shall arrange with the Construction Representative and appropriate Facility
      Representatives for the controlled entry of construction personnel, materials, and equipment
      into the work areas.
   B. The Contractor shall establish regular working hours with the Construction Representative and
      the Facility. Working hour changes or overtime are to be reported and approved (48) hours
      ahead of time. Emergency overtime is to be reported as soon as it is evident that overtime is
      needed.
   C. The Contractor shall provide the name and phone number of the individual(s) who is in charge
      onsite and who can be contacted in case of an emergency. This individual(s) must be able to
      furnish names and addresses of all construction personnel upon request.

3.02 FIRE PROTECTION, SAFETY, AND HEALTH CONTROLS
   A. The Contractor shall be responsible and take all necessary precautions to guard against and
      eliminate possible fire hazards. Onsite burning is prohibited.
   B. Store all flammable or hazardous materials in proper container located outside the buildings or
      offsite, if possible.
   C. Provide and maintain in good order, during construction, all fire extinguishers as required by the
      National Fire Protection Association. In areas of flammable liquids, asphalt, or electrical
      hazards, extinguishers of the 15-pound carbon dioxide type or 20-pound dry chemical type
      shall be provided.
   D. Fire exits, alarm systems, and sprinkler systems shall remain fully operational at all times
      unless written approval is received from the Construction Representative and the appropriate
      Facility Representative at least (24) hours in advance. The Contractor shall submit a written
      time schedule for any proposed shutdowns.
   E. Conduct operations and removal of debris to ensure minimum interference with roads, streets,
      walks, and other adjacent facilities. Do not obstruct streets or walks or use facilities without
      permission from the Facility.
   F. Construction personnel shall not exceed the Facility speed limit of 15mph unless posted
      otherwise.
   G. Take all necessary reasonable measures to reduce air and water pollution by any material or
      equipment use during construction. Keep volatile wastes in covered containers. Do not
      dispose of volatile wastes or oils in storm or sanitary drains.
H. Keep project neat, orderly, and in a safe condition at all times. Immediately remove all hazardous waste. Do not allow rubbish to accumulate. Provide onsite containers for collection of rubbish and dispose of it at frequent intervals during progress of Work.

I. For all hazardous materials brought onsite, Material Safety Data Sheets shall be on site and readily available upon request at least a day before delivery.

J. Intoxicating beverages or narcotics shall not be brought upon the premises nor shall Contractor’s personnel be under the influence of these substances while on the premises.

3.03 DISRUPTION OF UTILITIES

A. The Contractor shall give minimum (72) hours written notice to the Construction Representative and Facility Representative before disconnecting electric, gas, water, fire protection, or sewer service to any building.

B. The contractor shall give minimum (72) hours written notice to the Construction Representative and Facility Representative before closing any access drives and shall make temporary access available if possible. Do not obstruct streets, walks, or parking.

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Submittals.
   B. Quality assurance.
   C. Independent Geotechnical Design and Testing agencies and services.

1.02 RELATED REQUIREMENTS
   A. Section 31 2200 - Earthwork
   B. Section 32 0000 - Surface Restoration
   C. Section 33 0000 – Utilities - Pipe Sewer Construction
   D. Section 03 6200 – Non-Shrink Grout Construction

1.03 SUMMARY
   A. Contractor shall hire the following independent testing agencies and services:
      1. Independent Materials Testing Engineer to perform concrete testing associated with, non-shrink grout installed per with Sheet G003 “Existing Storm Sewers to be Grouted Full and Abandoned.”
      2. Independent Geotechnical Engineer to perform density testing associated with backfill on dam crest.
      3. Independent agricultural laboratory Topsoil analysis and amendment recommendations.

1.04 SUBMITTALS
   A. See Section 01 3300 - Submittals, for submittal procedures.

1.05 QUALITY ASSURANCE
   A. Testing Agency Qualifications:
      1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
   B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in Missouri.
   C. Section 32 0000 Surface Restoration details the requirements for the independent laboratory and guidelines for the testing and recommendation report for topsoil.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 TESTING AND INSPECTION
   A. See individual specification sections for testing and inspection required.

END OF SECTION
SECTION 01 5000
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY
   A. This Section includes requirements for construction facilities and temporary controls including temporary utilities, support facilities, security, and protection.
   B. Temporary utilities include, but are not limited to, the following:
      1. Lake Dewatering Plan - dewatering facilities and drains. See Part 3 Control of Water.
   C. Support facilities include, but are not limited to, the following
      1. Temporary roads and paving.
      2. Temporary enclosures.
   D. Security and protection facilities include, but are not limited to, to following:
      1. Barricades, warning signs, and lights.
      2. Environmental protection.

1.03 SUBMITTALS
   A. Temporary Utilities: If the contractor proposes to dewater the lake level, the contractor shall submit a Lake Dewatering Plan to the Owner's Representative for approval prior to performing the work.

1.04 QUALITY ASSURANCE
   A. Regulations: Comply with industry standards and applicable laws and regulations including, but not limited to, the following:
      1. Health and safety regulations.
   B. No temporary electric, water or other buried or overhead utilities shall be installed for this Work without prior approval of the Construction Administrator

1.05 PROJECT CONDITIONS
   A. Temporary Utilities: If the contractor proposes to dewater the lake level, the contractor shall submit a Lake Dewatering Plan to the Owner's Representative for approval prior to performing the work. The contractor's Lake Dewatering Plan shall include a schedule indicating dates for implementation and termination of each temporary utility. In addition, the Dewatering Plan should include detailed descriptions and drawings or sketches of the proposed dewatering method including materials, equipment, alignment, point of discharge, operation and surveillance and plans for removal and restoration.
   B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist onsite.
      1. Contractor is responsible for cleanliness of contractor-provided temporary toilets, but not State Parks-owners toilets.

PART 2 PRODUCTS

2.01 MATERIALS
   A. General: Provide new materials. If acceptable to the Designer, the Contractor may use undamaged, previously used materials in serviceable condition. Provide materials suitable for use intended.
2.02 EQUIPMENT
A. General: Provide new equipment. If acceptable to the Designer, the Contractor may use undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.
B. Water Hoses: Provide ¾” (19 mm), heavy-duty, abrasion-resistant, flexible rubber hoses 100’ (30m) long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at hose discharge.
C. Electrical Power Cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage rating.
D. Temporary Toilet Units: Provide self-contained, single-occupant toilet units of the chemical, aerated re-circulation, or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.
E. Fire Extinguishers: Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers, or a combination of extinguishers of NFPA-recommended classes for the exposures.
   1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

PART 3 EXECUTION
3.01 INSTALLATION
A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
B. Provide each Facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY UTILITY INSTALLATION
A. Temporary Toilets: Install self-contained toilet units. Use of pit-type privies will not be permitted. Comply with regulations and health codes for the type, number, location, operation, and maintenance of fixtures and facilities. Install where facilities will best serve the Project’s needs.
B. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up for a health and sanitary condition. Dispose of drainage properly. Supply cleaning compounds appropriate for each condition.
C. Drinking-Water Facilities: Provide containerized, tap-dispenser, bottled-water drinking-water units, including paper supply.

3.03 SUPPORT FACILITIES INSTALLATION
A. Storage Facilities: Limited areas for storage of building materials are available onsite. The Contractor shall provide his own security. Specific locations for storage will be discussed at the Pre-Bid Meeting and the Pre-Construction Meeting.
B. Construction Parking: Parking at the site will be provided in the areas designated at the Pre-Construction Meeting.
C. Dewatering Facilities and Drains: For temporary drainage and dewatering facilities and operations not directly associated with construction activities included under individual Sections, comply with dewatering requirements of applicable Division 2 Sections. Where feasible, utilize the same facilities. Maintain the site, excavations, and construction free of water.
1. Dewatering and pumping associated with Wastewater System Control Plan contains separate requirements (permits, waste disposal, etc.) as detailed on the drawings.

D. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than seven (7) days during normal weather or three (3) days when the temperature is expected to rise above 80°F (27°C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material lawfully.

3.04 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting including flashing red or amber lights.

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted or that other undesirable effects might result. Avoid use of tools and equipment that produce harmful noise. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms near the site.

3.05 OPERATION, TERMINATION AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.

B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
   1. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. Termination and Removal: Unless the Designer requests that it be maintained longer, remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
   1. Materials and facilities that constitute temporary facilities are the Contractor's property.

3.06 WORK WITHIN AREA OF ACTIVE FLOW

A. The existing primary spillway (24” CMP) is deficient and is to be abandoned. The existing emergency spillway is the proposed primary spillway. Both spillways receive active flow from rainwater entering the lake during most storm events. The 1-year storm is an event with a 100% chance of occurrence in any given year and generates approximately 6 inches of flow depth across the entire width of the existing emergency spillway. The 2-year storm is an event with a 50% chance of occurrence in any given year and generates approximately 12 inches of flow depth across the entire width of the existing emergency spillway. During periods of rainfall, flow thru the spillways may increase rapidly.

B. The Contractor's equipment, materials, personnel, and the uncompleted construction will be vulnerable to damage from storm runoff thru the spillways. The Contractor shall be responsible for being informed of weather conditions, forecasts and lake stage predictions, and shall plan work to minimize the possibility of damage from flooding.

C. All measures shall be taken to prevent damage from water inundation. The Contractor shall be solely responsible for any damage during periods of storm water runoff, which includes and is not limited to all equipment, materials, personnel, and work sites.

D. No staging or stockpiling of material or equipment is permitted within the existing emergency spillway between station 0+50A and 1+50A. Between station 1+50A and 3+50A, a 20 feet wide
channel in the existing emergency spillway shall be kept open and operational during all construction work.

E. No additional payment shall be made for demobilization/remobilization required as a result of changing lake levels or rain events.

3.07 CONTROL OF WATER

A. The contractor shall consider the lake level, which changes due to rain events, when executing the work. See Work Within Active Flow for additional detail. Lake levels exceeding the normal pool elevation will require temporary interruptions in work progress to allow lake levels to recede to the normal pool elevation. The contractor may choose to dewater the lake level as needed to complete the work. If the contractor proposes dewater the lake level, the contractor shall submit a Lake Dewatering Plan to the Owner’s Representative for approval prior to performing the work. The contractor’s Lake Dewatering Plan shall include a schedule indicating dates for implementation and termination of each temporary utility. In addition, the Dewatering Plan should include detailed descriptions and drawings or sketches of the proposed dewatering method including materials, equipment, alignment, point of discharge, operation and surveillance and plans for removal and restoration. All costs for providing all labor, tools, equipment, materials, and other requirements for the Control of Water shall be considered incidental to the bid price of the project, and shall be provided at no additional cost to the Owner.

B. All gutters, pipes, drains, conduits, culverts, catch basins, stormwater inlets, ditches, creeks, and other stormwater facilities shall be kept in operation, or their flows be satisfactorily diverted and provided for during construction. Any facilities disturbed during construction shall be restored to the satisfaction of the Owner’s representative. All costs of handling water and providing a stable subbase during construction shall be considered incidental to the costs of excavation.

C. Protect subgrades and foundation soils from softening and damage by rain or water accumulation and from freezing temperatures or frost.

END OF SECTION
SECTION 01 5713
TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Installation of temporary water pollution control measures to prevent discharge of pollutants such as chemicals, fuels, lubricants, bitumen, raw sewage, or other harmful material from the project.
B. Other related documents.

1.02 GENERAL
A. The Contractor shall manage his operations to control water pollution in accordance with this specification and applicable State regulations. Construction of permanent drainage facilities and other contract work, contributing to control of erosion, shall be scheduled at the earliest practicable time.
B. The Contractor shall furnish, install, maintain, and remove temporary erosion control measures. The Contractor shall prevent silt or polluted storm water discharge from the site.
C. The Owner's Representative may require installation of additional erosion control facilities, by the Contractor, if in the sole opinion of the Owner's Representative, the Contractor's efforts are inadequate.

1.03 DEFINITIONS
A. General Permit: The General Permit for storm water discharges associated with construction activity (Missouri State Parks Land Disturbance General Permit No. MO-R100038) issued to FMDC as a blanket permit by the Missouri Department of Natural Resources, Water Pollution Program.
B. Storm Water Pollution Prevention Plan (SWPPP): A plan required by the General Permit that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the storm water, and a description of measures or practices to control these pollutants.
C. Best Management Practice (BMP): Any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution.
D. Temporary Berm: A temporary ridge of compacted soil, with or without a shallow ditch, constructed at the top of slopes or transverse to the centerline of a slope. The berm diverts storm runoff to temporary outlets to discharge water with minimal erosion.
E. Temporary Slope Drain: A temporary facility used to carry water down a slope.
F. Ditch Check: An obstruction placed at frequent intervals across ditches, creating small ponds to cause sediment to settle and be contained.
G. Sediment Basin: An excavated or dammed storage area to trap and store sediment and prevent the discharge of silt.
H. Temporary Seeding and Mulching: Placement of a quick ground cover to reduce erosion in areas expected to be re-disturbed.
I. Straw Bales: Standard agricultural bales used to filter the flow of water, trap, deposit sediment, and/or divert water.
J. Silt Fence: A geotextile barrier fence to contain sediment by removing suspended particles from water passing through the fence.
K. Temporary Pipe: Conduit utilized to carry water under haul roads, silt fences, etc., and prevent equipment from direct contact with water when crossing an active or intermittent stream.
L. Sediment Removal: Removal of accumulated sediment to restore the efficiency of sediment control features.
1.04 SUBMITTALS
A. Shop Drawing - The Contractor shall develop and submit an “Erosion and Sediment Control Plan” (Stormwater Pollution Prevention Plan) for review and approval by the Owner’s Representative. Approval of the plan does not relieve the Contractor of his contractual responsibility to prevent the discharge of pollutants into the receiving drainage ways.

1.05 RELATED SECTIONS
A. Section 32 0000 - Surface Restoration

PART 2 PRODUCTS
2.01 MATERIALS
A. Temporary slope drains: Stone, concrete or asphalt gutters, half-round pipe, metal pipe, plastic pipe or flexible rubber pipe.
B. Ditch Checks:
1. Rock ditch checks: 2" to 3" clean gravel or limestone.
2. Straw bale ditch checks: Rectangular wheat straw bales in good condition. Other foliage may be substituted for straw in accordance with MoDOT 802.2.1.
3. Silt fence ditch checks: Geotextile meeting the requirements of this specification.
C. Riprap for Temporary Erosion Control: Type 1 Rock Blanket conforming to MoDOT 611.32.
D. Pipe: Corrugated metal (16 Ga.) or ADS N12 Corrugated Plastic.
E. Temporary Seeding:
1. December 1 to March 1: 50 lbs oats/acre.
2. March 1 to December 1: 50 lbs cereal rye or wheat.
3. Mulch shall be wheat straw.
F. Wire Supported and Self Supporting Silt Fence:
1. Geotextile Fabric
   a. Fibers used in geotextiles shall consist of longchain synthetic polymers, composed of at least 85 percent by weight polyolefins, polyesters, or polyamides. They shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including selvages.
   b. The geotextile shall be free of any treatment or coating which might adversely alter its physical properties after installation.
   c. Geotextile shall be furnished in 36" width rolls.
   d. Geotextile rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure.
   e. Each roll shall be labeled or tagged to provide product identification sufficient for inventory.
   f. Rolls shall be stored in a manner, which protects them from the elements.
   g. Geotextile shall conform to the following:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Wire Fence Supported Requirements</th>
<th>Self Supported Requirements</th>
</tr>
</thead>
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<tr>
<td>Tensile Strength, Lbs.</td>
<td>ASTM D4632</td>
<td>90 Minimum²</td>
<td>90 Minimum²</td>
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<tr>
<td>Elongation at 50% Minimum</td>
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<td></td>
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<tr>
<td>Tensile Strength (45 Lbs.)</td>
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<td>Filtering Efficiency, %</td>
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<tr>
<td>Flow Rate gal/ft/min</td>
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<tr>
<td>Ultraviolet Degradation at 500 hrs.</td>
<td>ASTM D4355</td>
<td>Minimum 70% Strength Retained</td>
<td>Minimum 70% Strength Retained</td>
</tr>
</tbody>
</table>

Notes:
1) All numerical values represent minimum average roll value.
   (a) When tested in any principal direction.
2) Posts: Wood, steel or synthetic posts may be used. Posts shall have a
   minimum length of 36” plus embedment depth (24” min.). Posts shall have
   sufficient strength to resist damage during installation and to support applied
   loads.
3) Support Fence: Wire or other support fence shall be at least 24” high and
   strong enough to support applied loads.
4) Prefabricated Fence: Prefabricated fence systems may be used provided they
   meet all of the above material requirements.

2.02 CERTIFICATION AND SAMPLING:
   A. The Contractor shall furnish a manufacturer’s certification, stating the material conforms to the
      requirements of these specifications.
   B. The certification shall include, or have attached, typical results of tests for the specified
      properties, representative of the materials supplied.
   C. The Owner’s Representative reserves the right to sample and test any material offered for use.

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS
   A. The Owner’s Representative may limit the surface area of erodible earth material exposed by
      clearing and grubbing, excavation, borrow, or fill operations.
   B. The Owner’s Representative may direct the Contractor to provide immediate permanent or
      temporary pollution control measures to prevent contamination of adjacent streams, other
      watercourses, lakes, ponds, or other areas of water impoundment. Work may involve the
      construction of temporary berms, dikes, dams, sediment basins, slope drains, use of temporary
      mulches, seeding or other control devices or methods to control erosion.
   C. The Contractor shall incorporate permanent erosion control features at the earliest practicable
      time.
   D. The Contractor at no additional cost shall provide temporary pollution control measures needed
      to control erosion during normal construction practices to the Owner.
   E. Contractor shall designate trained and knowledgeable personnel to coordinate all SWPPP
      activities, and identify these personnel to the Owner’s Representative during construction.
      Missouri Department of Natural Resources offers training classes in Erosion Control free of
      charge in Jefferson City. Contact for training: David Goggins at (573) 751-2556.
   F. The SWPPP is a living document. As the conditions of the site changes, the SWPPP should be
      updated by the Contractor.
   G. The SWPPP is subject to random inspection by the Owner. The SWPPP should be kept up to
      date by the Contractor and available for inspection at any time.
   H. If Contractor determines that any BMP should need modification, the changes shall be dated
      and documented, and all necessary field changes performed.

3.02 LIMITATION OF AREA DISTURBED:
   A. The Contractor’s operations shall be scheduled to install permanent erosion control features
      immediately after clearing and grubbing, and grading.
   B. The surface area of erodible earth material exposed at one time by clearing and grubbing,
      excavating, fill, or borrow shall not exceed 200,000 square feet without written approval of the
      Owner’s Representative.
   C. The Owner’s Representative may limit the area of clearing and grubbing, excavation, borrow,
      and embankment operations commensurate with the Contractor’s capability and progress in
      completing the finish grading, mulching, seeding, and other such permanent pollution control
      measures current.
D. The Contractor shall respond to seasonal variations. If required by weather, temporary erosion control measures shall be taken immediately.

3.03 RIVERS, STREAMS, AND IMPOUNDMENTS:
A. Construction operations in rivers, streams, and impoundments shall be restricted to areas, which must be entered for the construction of temporary or permanent structures.
B. Rivers, streams, and impoundments shall be promptly cleared of falsework, piling, debris, or other obstructions as soon as practical.
C. Frequent fording of live streams with construction equipment will not be permitted.
D. Temporary bridges or other structures shall be used when the Contractor’s operations include cycling of equipment across streams, rivers, or impoundments.
E. Mechanized equipment shall not be operated in flowing streams except as required to construct channel changes and temporary or permanent structures.

3.04 BORROW AND WASTE AREAS
A. Material pits other than commercially operated sources and material spoil areas shall be subject to pollution control measures of this specification. An offsite location does not relieve the Contractor of his contractual obligation to prevent the introduction of silt or other pollutants into receiving waterways.

3.05 CONFLICT WITH FEDERAL, STATE OR LOCAL LAWS, RULES OR REGULATIONS
A. In case of conflict between these requirements and pollution control laws, rules, or regulations or other Federal, State or local agencies, the more restrictive laws, rules, or regulations shall apply.

3.06 TEMPORARY BERMS
A. Temporary berms shall be constructed at the top of newly constructed slopes and / or transverse to grade to divert runoff and prevent erosion until permanent controls are installed and / or slopes are stabilized. Two types of temporary berms will be utilized under conditions listed below:
   1. Type “A“ Berm: At the end of each day’s operations on embankments.
   2. Type “B“ Berm: At shut down of embankment operations for the winter season or discontinuation of work at the direction of, or with concurrence of the Owner’s Representative.
B. Interceptor berms transverse to centerline may be used when temporary berms are installed on grades in excess of 1 percent and at locations where water is to be carried down the fill slope by temporary or permanent slope drains.
C. Construction Requirements:
   1. Type A Berms shall be constructed to the approximate dimensions indicated on the drawings. Berms shall be machine compacted with a minimum of one pass over the entire width with a bulldozer tread, grader wheel, or other approved method.
   2. Type “B” Berms shall be constructed to the approximate dimensions indicated on the drawings. These berms shall be machine compacted with a minimum of three passes over the entire width with a bulldozer tread, grader wheel, or other approved method.
   3. Type “A” and Type “B” Berms must drain to a compacted outlet at a slope drain. The top width of these berms may be wider and the side slopes flatter on transverse berms to allow equipment to pass over these berms with a minimal disruption.

3.07 TEMPORARY SLOPE DRAINS
A. General:
   1. Temporary slope drains are required to concentrate water flowing down a slope prior to installation of permanent facilities. Slope drains shall be placed at approximately 500-foot intervals or as directed by the Owner’s Representative.
   2. General Requirements
a. The Contractor shall install a temporary silt fence in locations shown on the drawings, around inlets that accept flow carrying silt, and other locations necessary to prevent the discharge of silt from the site.
b. Installation shall conform to the drawing detail.
c. Fence construction shall be adequate to handle the stress from hydraulic and sediment loading.

3. Construction Requirements:
   a. Temporary slope drains shall be anchored to prevent disruption by the force of the water flowing in the drain.
   b. The inlet end shall be constructed to channel water into the drain.
   c. The outlet ends of these temporary slope drains shall have some means of dissipating the energy of this water to reduce erosion downstream.
   d. Unless otherwise directed by the Owner’s Representative, temporary slope drains shall be removed when no longer necessary and the site restored to match the surroundings.

3.08 DITCH CHECKS

A. General:
   1. Rock ditch checks may be used on ditches with grades of 4 percent or less.
   2. Straw bale ditch checks may be used on all ditches.
      a. The silt fence fabric may be eliminated for grades of 2 percent or less.
   3. Silt fence ditch check may be used on all ditches.
   4. A straw bale ditch check or a silt fence ditch check may be used in lieu of a sediment basin for drainage areas less than two acres. The basin shall have a volume of 1,815 CF per acre of contributing drainage area.

B. Construction Requirements:
   1. Construct rock ditch checks in accordance with the drawing detail.
      a. Achieve complete coverage of the ditch or swale and insure the center of the check is lower than the edges.
   2. Construct straw bale ditch checks in accordance with the drawing detail.
   3. Construct silt fence ditch checks in accordance with the drawing detail.

C. Maintenance:
   1. Inspect ditch checks for sediment accumulation after each rainfall.
   2. Sediment shall be removed when it reaches one-half of the original height.
      a. Regular inspections shall insure that the center of a rock check is lower than the edges. Correct erosion caused by high flows around the edges of the check immediately.

3.09 SEDIMENT BASIN

A. General
   1. Sediment basins are used for drainage areas of two (2) to five (5) acres or for a roadway ditch exceeding 1,000 consecutive feet in length. Break larger drainage areas or longer ditches into smaller areas.

B. Construction Requirements:
   1. The area where a sediment basin is to be constructed shall be cleared of vegetation. Temporary sediment basins shall not be located on the dam embankment or within 50 feet of the downstream toe or east and west groins.
   2. Construct the inlets of sediment basins with a wide cross-section and a minimum grade to prevent turbulence and allow deposition of soil particles.
      a. The minimum depth is 2'; the maximum depth is 6'.
      b. The minimum width is 5'; the maximum width is 20'.
      c. The minimum length is 25'; the maximum length is 200'.
      d. The minimum volume shall be 1,815 CF per acre of drainage area.
3. Sediment basins shall remain in service until all disturbed areas draining into the structure have been stabilized.
4. When use of sediment basin is discontinued, backfill all excavations and compact fill. Fill material shall be removed and the existing ground restored to the original or plan grade.
5. Maintenance
6. When the depth of sediment reaches 1/3 of the depth of structure in any part of the pool, all accumulation shall be removed.
7. Removed sediment shall be disposed of in locations that the sediment will not erode into the construction areas or into natural waterways. The same holds true for excavated material removed during construction of the sediment basin.

3.10 TEMPORARY SEEDING AND MULCHING

A. General
1. This item is applicable to all projects.
2. Seeding and/or mulching shall be a continuous operation on all cut slopes, fill slopes, and borrow pits during the construction process. All disturbed areas shall be seeded and mulched within five (5) working days after the last construction activity in all locations where necessary to eliminate erosion.

B. Construction Requirements:
1. Permanent seeding and mulching following temporary seeding will be performed during the favorable seeding seasons only.
2. Temporary seeding mixtures and planting season:
   a. December 1 to March 1: 50 lbs. oat grain per acre
   b. March 1 to December 1: 50 lbs. (cereal rye or wheat) per acre
3. Temporary mulch, fertilizer, and lime for seeding:
   a. Fertilizer and mulch for temporary seed mixtures shall be applied in accordance with Section 02921.
   b. Fertilizer shall be applied at the rate specified for permanent seeding.
   c. Lime will not be required for temporary seeding.

3.11 STRAW BALES

A. General
1. Install at the bottom of embankment slopes less than 10' high to divert runoff from sheet flow and intercept some of the sediment in the sheet flow.
2. Install as ditch checks in small ditches and drainage areas.
3. Install on the lower side of cleared areas to catch sediment from sheet flow.

B. Construction Requirements:
1. Bales of straw shall be utilized to control erosion, trap sediment, and divert runoff.
2. Bales must be adequately braced from behind.

3.12 SILT FENCE

A. General
1. Install along the toe of fills over 10' in height, along the right-of-way line, parallel to streams or around an inlet to prevent sediment from entering the pipe system.

B. General Requirements:
1. The Contractor shall install a temporary silt fence in locations shown on the drawings, around inlets that accept flows containing silt, and other locations necessary to prevent the discharge of silt from the site.
2. Installation shall conform to the detail at the end of this section.
3. Fence construction shall be adequate to handle the stress from hydraulic and sediment loading.

C. Installation
1. Geotextile at the bottom of the fence shall be buried as indicated on the detail.
2. The trench shall be backfilled and the soil compacted over the geotextile. The geotextile shall be spliced together as indicated on the detail.

3. Post Installation
   a. Post spacing shall not exceed 8' for wire support fence installation or 5' for self supported installations.
   b. Posts shall be driven a minimum of 24" into the ground. Where rock is encountered, posts shall be installed in a manner approved by the Owner's Representative.
   c. Closer spacing, greater embedment depth and/or wider posts shall be used in low areas, soft, or swampy ground to ensure adequate resistance to applied loads.

4. When support fence is used, the mesh shall be fastened securely to the upstream side of the post.
   a. The mesh shall extend into the trench a minimum of 2" and extend a maximum of 36" above the original ground surface.

5. When self-supported fence is used, the geotextile shall be securely fastened to fence posts.

6. Maintenance
   a. The Contractor shall maintain the integrity of silt fences as long as they are necessary to contain sediment runoff.
   b. The Contractor shall inspect all temporary silt fences immediately after each rainfall and at least daily, during prolonged rainfall.
   c. The Contractor shall immediately correct deficiencies.
   d. The Contractor shall make a daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that the silt fences are properly located for effectiveness.
   e. Where a single fence is not adequate to handle the volume of silt or flows are not completely intercepted, additional silt fences shall be installed.

7. The Contractor shall remove and dispose of sediment deposits when the deposit approaches one-half the height of the fence.

8. The silt fence shall remain in place until the upstream surface is stabilized. Upon removal, the Contractor shall remove the silt fence, dispose of excess silt, and restore the disturbed area in accordance with Section 02921.

3.13 TEMPORARY PIPE
   A. General:
      1. The Contractor shall install temporary pipes and fill at locations, to be crossed by the Contractor's equipment, which carry a concentrated flow during rain events.

   B. Construction Requirements:
      1. All temporary pipes shall be installed in the same manner as permanent pipe is installed on the project to assure that the water does not cause erosion around the pipe.
      2. Material to backfill the pipe should be placed in 6" lifts and mechanically compacted. Compaction testing will not be required.

3.14 SEDIMENT REMOVAL
   A. General
      1. Sediment deposits shall be removed when:
         a. The deposits reach approximately one-half the height of a ditch check, straw bale barrier or silt fence.
         b. The sediments have reduced the ponded volume of sediment basins to one-third of the original volume.
         c. Requested by the Owner's Representative.

   B. Sediment removed from erosion control features shall be deposited in a location where it will not erode into construction areas or watercourses.

END OF SECTION
SECTION 01 7400
CLEANING

PART 1 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY
   A. This Section includes administrative and procedural requirements for cleaning during the Project.
   B. Environmental Requirements: Conduct cleaning and waste-disposal operations in compliance with local laws and ordinances. Comply fully with federal and local environmental and anti-pollution regulations.
      1. Burning or burying of debris, rubbish, or other waste material on the premises is not permitted.

PART 2 PRODUCTS

2.01 MATERIALS
   A. Cleaning Agents: Use cleaning materials and agents recommended by the manufacturer or fabricator for the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 EXECUTION

3.01 PROGRESS CLEANING
   A. General
      1. Retain all stored items in an orderly arrangement allowing maximum access, not impending drainage or traffic, and providing the required protection of materials.
      2. Do not allow the accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
      3. At least once each month, and more often if directed by the Construction Administrator, completely remove all scrap, debris, and waste material from the job site.
      4. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection and protection of the ecology.
      5. Contractor shall clean off-road Vehicles and Motorized Equipment prior to mobilization to site with the goal to prevent the spread of exotic and invasive species. Contractor shall provide 1 week notice to Construction Representative prior to mobilization to schedule a date for Construction Representative or their designee to inspect off-road Vehicles and Motorized Equipment and approve cleaning. If not clean, additional cleaning and inspection will be required.
   B. Site:
      1. Daily, inspect the site and pick up all scrap, debris, and waste material. Remove all such items to the place designated for their storage.
      2. Weekly, inspect all arrangements of materials stored on the site. Re-stack, tidy, or otherwise service all material arrangements.
      3. Maintain the site in a neat and orderly condition at all times.

3.02 FINAL CLEANING
   A. General: Provide final cleaning operations when indicated. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of Work to the condition expected from a commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
   B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for the entire Project or a portion of the Project.
1. Clean the Project Site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and foreign substances.
2. Remove petrochemical spills, stains, and other foreign deposits.
3. Remove tools, construction equipment, machinery, and surplus material from the site.
4. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
5. Leave the Project clean and ready for occupancy.

C. Removal of Protection: Remove temporary protection and facilities installed during construction to protect previously completed installations during the remainder of the construction period.

D. Compliances: Comply with governing regulations and safety standards for cleaning operations. Remove waste materials from the site and dispose of lawfully.

1. Where extra materials of value remain after Final Acceptance by the Owner, they become the Owner’s property.

END OF SECTION
SECTION 02 2100
SURVEYS

PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Surveying for laying out the work.

1.02 RELATED REQUIREMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section
   B. Section 01 1000 – Summary of Work
   C. Section 01 3300 - Submittals
   D. Section 01 3100 - Coordination
   E. Section 02 4113 - Selective Demolition
   F. Section 31 2200 - Earthwork
   G. Section 32 0000 - Surface Restoration
   H. Section 33 0000 - Utilities - Pipe Sewer Construction

1.03 SUBMITTALS
   A. See Section 01 3300 - Submittals
   B. Contractor shall provide As-Built Drawing

1.04 QUALIFICATIONS
   A. For surveying work, employ a land surveyor registered in Missouri and acceptable to Designer. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to ongoing construction activities.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 EXAMINATION
   A. Contractor shall examine and verify specific conditions described in individual specification sections.
   B. Contractor shall take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or mis-fabrication.
   C. Contractor shall verify that utility services are available, of the correct characteristics, and in the correct locations.

3.02 SURVEYING FOR LAYING OUT THE WORK
   A. Verify locations of survey control points prior to starting work.
   B. Promptly notify Designer of any discrepancies discovered.
   C. Control datum for survey is that indicated on drawings.
   D. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
   E. Promptly report to Designer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
   F. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Designer.
   G. Utilize recognized engineering survey practices.
H. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means.

I. Periodically verify layouts by same means.

J. Maintain a complete and accurate log of control and survey work as it progresses.

K. As-built drawing: The contractor shall maintain one clean set of marked plans showing all changes and "as built" information. All changes to the Drawings shall be approved by the Designer. Minor changes that are approved by the designer will not require as-built survey. Said plans shall be submitted to the Owner's Representative upon completion of work. Significant changes that are approved by the Designer require as-built survey by a registered engineer or land surveyor and Record Drawings that are certified by the Designer. The bid price assumes any changes to the Drawings will be considered by the Designer to be minor changes, and will not require an as-built survey.

END OF SECTION
SECTION 02 4113
SELECTIVE DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.
B. Related Sections include the following:
   1. 01 1000 - Summary of Work
   2. 01 3513.28 - Site Security and Health Requirements (DNR)
   3. 01 5000 – Construction Facilities and Temporary Controls
   4. 01 7400 - Cleaning
   5. 31 2200 - Earthwork

1.02 SUMMARY
A. This Section includes the requirements for the demolition, removal and disposal of selected utilities and installed equipment as shown on the Contract Drawings.

1.03 DEFINITIONS
A. Remove: Detach items from existing construction and legally dispose of them off site, unless indicated to be "removed and salvaged" or "removed and reused."
B. Remove and Salvage: Detach items from existing construction and deliver them to Owner ready for reuse.
C. Remove and Reuse: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
E. To Be Abandoned And Filled (TBAF): See drawings under Existing Storm Sewers to be Grouted Full and Abandoned.

1.04 SUBMITTALS
A. Schedule of Selective Demolition Activities - indicate the following:
   1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure operations are uninterrupted.

1.05 QUALITY ASSURANCE
A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
B. Standards: Comply with ANSI A10.6 (Safety And Health Program Requirements For Demolition Operations) and NFPA 241 (Standard for Safeguarding Construction, Alteration, and Demolition Operations).

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 EXAMINATION
A. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
B. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Construction Administrator.
C. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.
D. An existing water valve is located on the dam embankment approximately 125 feet from the primary spillway. The function of this water valve is unknown. The Contractor shall attempt to determine the function of this water valve and where it is connected to, and discuss findings with the Owner’s Representative. Proceed with applying waste rock within 10 feet of the water valve only after approval by Owner’s Representative.

3.02 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS
   A. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

3.03 PREPARATION
   A. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

3.04 SELECTIVE DEMOLITION, GENERAL
   A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
   B. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
   C. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
   D. Maintain adequate ventilation when using cutting torches.
   E. Dispose of demolished items and materials promptly.
   F. Stockpile topsoil to be re-used on site, in accordance with Section 312200 Earthwork.
   G. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Owner, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

3.05 DISPOSAL OF DEMOLISHED MATERIALS
   A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in accordance with all applicable Federal, State and local regulations.
   B. Do not allow demolished materials to accumulate on-site.
   C. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
   D. Burning: Do not burn demolished materials.

END OF SECTION
SECTION 03 6200
NON-SHRINK GROUT CONSTRUCTION

PART 1 GENERAL

1.01 RELATED REQUIREMENTS
   A. Section 01 4000 – Independent Testing
   B. Section 33 0000 – Utilities - Pipe Sewer Construction

1.02 SUMMARY
   A. Work required under this section consists of furnishing all labor, equipment, and materials necessary to complete the work described in this specification
   B. Section includes
      1. Quality assurance
      2. Independent Geotechnical Testing agencies and services.

1.03 REFERENCES
   B. ASTM C476 – Specification for Grout for Masonry
   C. ASTM C531 – Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes
   D. ASTM C1107 – Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)
   E. ASTM C144 – Standard Specification for Aggregate for Masonry Mortar

1.04 QUALITY ASSURANCE
   A. Perform all work in accordance with ASTM C1107.

1.05 TESTS
   A. Submit proposed mix design for review prior to commencement of work.
   B. Contractor will take cylinders in accordance with ASTM C1019.
   C. Performance data in accordance with ASTM C1107 shall be submitted to verify that the expected performance of the mix meets project specifications. Contractor shall submit testing data to engineer for approval before beginning installation of grout. Contractor shall submit test data in accordance with ASTM C1107 for compressive strength and shrinkage to the engineer for approval before beginning installation of grout.
   D. During installation of grout, three test cylinders will be taken for every 100 (or less) cubic yards of grout placed each day.
   E. If specified strength of grout is not attained per cylinder tests, Contractor will be notified. He shall take appropriate measures (totally at his own cost) to prove the adequacy of grout. The Owner’s Representative shall be provided with copies of test results from these actions.

1.06 GROUT PLAN
   A. See Drawings Sheet G003 "Existing Primary Spillway to be Grouted Full and Abandoned" for details on the installation of non-shrink grout to abandon the existing primary spillway pipe.
   B. Contractor shall submit to the Engineer and Owner for approval a Grout Plan for abandonment and grouting full the pipe at least 10 days prior to commencing grout operations. The Contractor's Grout Plan shall:
      1. detail the contractor's grout mix equipment, setup, procedures, sequencing, plan for handling waste, method for communication, and method for sealing and bulkheading upstream and downstream ends of the pipes.
      2. include removal of debris found during visual inspection of the pipes.
specify a maximum operating pressure, and state that this pressure will not be exceeded

Once the Contractor's Grout Plan is approved by the Engineer and Owner, the Contractor shall proceed with abandoning and grouting full the pipe. Abandonment of the primary spillway shall begin after the excavation for the spillway widening is complete between baseline station 0+50A and 1+50A and shall be complete before the training berm is complete.

PART 2 PRODUCTS

2.01 NON-SHRINK GROUT MATERIALS

A. The Contractor's Grout Plan shall include use a grout mix with a water (ASTM C 94) to cement (ASTM C 150) ratio of approximately 0.7:1 to 0.5:1. A grout fluidifier (ASTM C 937) may be needed to promote flowability, reduce water requirements, reduce bleeding, reduce segregation, increase strength, and eliminate grout shrinkage during setting of the grout mix. Performance data in accordance with ASTM C1107 shall be submitted to verify that the expected performance of the mix meets project specifications. The 28-day compressive strength shall be 3,000 psi.

PART 3 EXECUTION

3.01 GROUT.

A. Preparation

1. All surfaces to receive non-shrink grout shall be cleaned of all oil, grease, and dirt.
2. The contractor shall conduct video or visual inspections to verify the interior of the pipe is free of dirt and debris, and provide a copy of the video to the Owner's Representative upon request. The interior of the pipe shall be cleaned or flushed if excessive dirt and debris are observed.
3. Voids and section loss are present in the connection of the spillway conduit and drop structure. Prior to grouting the contractor will have to place concrete fill to close the voids. The concrete fill should have adequate strength and thickness to resist grout pressures.

B. Bulkheads/Formwork

1. Bulkheads or forms shall be furnished and placed to confine the non-shrink grout. The forms shall be strong enough to resist buckling and tight enough to prevent leakage.

C. Grout.

1. Grout will be described in the specifications or on the drawings with the item for which it is used. Retempered grout shall not be used. Grout shall be kept in a uniformly mixed condition during placing.

D. Grout Installation Procedure.

1. The Contractor’s Grout Plan shall indicate that grout shall be installed in one continuous pour that completely fills all voids within the interior of pipes. Grout shall be placed from the downstream end of the pipe to the upstream end. The pressure at the crown of the conduit as measured at the vent pipe should not exceed 5 lb/in². Grouting is stopped when the air return pipe in the crown flows full with grout, and the concrete spillway structure is full. Trowel finish the grout to meet flush with the top of the concrete spillway structure. Cap the grout and air return pipes. Remove temporary or excessive material used as bulkhead or formwork upon completion of grouting operations, unless approved by the Owner. Upon completion of grouting operations, all wasted and excess grout deposited during grouting operations shall be removed and disposed of site.

E. Pumping Grout

1. Grout shall be pumped into position in such a manner as to avoid air pockets and to fill the entire void.

F. Repair and Cleanup

1. Upon completion of grouting operations, all wasted and excess grout deposited during grouting operations shall be removed and disposed of site.
2. Upon completion of grouting, the Contractor shall remove all grout supply connections. Grout holes shall be sealed in accordance with the Drawings.
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Clearing and protection of vegetation.
   B. Removal of existing debris.

1.02 RELATED REQUIREMENTS
   A. Section 01 1000 - Summary of Work
   B. Section 01 5000 - Construction Facilities and Temporary Controls
   C. Section 01 5713 - Temporary Erosion and Sediment Control
   D. Section 02 4113 - Selective Demolition

1.03 REFERENCE STANDARDS

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 SITE CLEARING
   A. Note that tree clearing available dates are restricted by the 404 Nationwide Permits as follows:
      1. The project site contains suitable summer roosting habitat for the endangered Indiana Bat (Myotis sodalis) and threatened Northern Long-eared Bat (Myotis septentrionalis). Tree clearing must not occur between April 1 and October 31 in order to prevent any incidental take of these species during the summer roosting period.

3.02 EXISTING UTILITIES AND BUILT ELEMENTS
   A. Existing utilities located within the limits of work are private utilities owned by Owner.
   B. Protect existing utilities to remain from damage.
   C. Protect existing structures and other elements that are not to be removed.

3.03 VEGETATION
   A. Scope: Remove trees, shrubs, brush, and stumps in areas to be covered by riprap.
   B. Limits of clearing are shown on the demolition sheets of the Drawings.
   C. Do not remove or damage vegetation beyond the limits indicated on drawings.
   E. Pruning shall consist of pruning limbs of trees adjacent to clearing limits as needed to perform required clearing while not damaging adjacent trees to remain.
      1. Prune trees as recommended in ANSI A300 Part 1.
   D. Clearing shall consist of the felling, trimming, and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal, including downed timber, snags, brush, and rubbish occurring within the areas to be cleared.
      1. Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut flush with or below the ground surface.
   E. Vegetation Removed: Do not burn, bury, landfill, or leave on site, except as indicated.
      1. Chip, grind, crush, or shred vegetation for mulching, composting, or other purposes; preference should be given to on-site uses where approved by Owner.
   I. Restoration: If vegetation outside removal limits or within specified protective fences is damaged or destroyed due to subsequent construction operations, replace at no cost to Owner.

3.04 DEBRIS
   A. Remove debris, junk, and trash from site.
B. Leave site in clean condition, ready for subsequent work.
C. Clean up spillage and wind-blown debris from public and private lands.
D. Keep roads, walks, trails and parking lots free of dirt and debris at all times

END OF SECTION
PART 1 GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
B. Section 01 4000 - Independent Testing
C. Section 01 5000 – Construction Facilities and Temporary Controls
D. Section 02 2100 - Surveys
E. Section 02 4113 - Selective Demolition
F. Section 32 0000 - Surface Restoration
G. Section 33 0000 - Utilities - Pipe Sewer Construction
H. MODOT Missouri Standard Specifications for Highway Construction
   1. Division 600 Incidental Construction
   2. Division 800 Roadside Development.

1.02 SUMMARY
A. This section includes the following:
   1. Excavating and backfilling for spillway, training berm, dam crest, filter diaphragm, and underground utilities.

1.03 REFERENCES
A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.
B. ASTM International (ASTM)

<table>
<thead>
<tr>
<th>ASTM Reference #</th>
<th>Description</th>
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<tbody>
<tr>
<td>C136- 01</td>
<td>Sieve Analysis of Fine and Coarse Aggregates</td>
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<tr>
<td>D698</td>
<td>Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/cu. ft. (600 kN-m/cu.m.))</td>
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<tr>
<td>D2487-00</td>
<td>Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)</td>
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<td>D2922-01</td>
<td>Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)</td>
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<td>D422-02</td>
<td>Particle-Size Analysis of Soils</td>
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<td>D4253-00</td>
<td>Maximum Index Density and Unit Weight of Soils Using a Vibratory Table</td>
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<td>D4254-00</td>
<td>Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density</td>
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<td>D4318-00</td>
<td>Liquid Limit, Plastic Limit, and Plasticity Index of Soils</td>
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<tr>
<td>D7928</td>
<td>Standard Test Method for Particle-Size Distribution (Gradation) of Fine Grained Soils using the Sedimentation (Hydrometer Analysis)</td>
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1.04 SUBMITTALS
A. See Section 01 3300 - Submittals, for submittal procedures.
B. Material Certificates: signed by the manufacturer and Contractor, certifying that each material complies with or exceeds requirements, may be submitted in lieu of material field and/or laboratory testing when acceptable to Construction Administrator.
C. Quarry gradations for borrow granular material.
D. Gradations for field-produced material: if requested by the Owner’s Representative, Contractor shall provide at no additional cost to the Owner the following for granular materials that are produced in the field by the Contractor using material excavated for spillway widening and notching. For Dam Crest Fill and Riprap Bedding, the contractor shall perform sampling, or have samples processed off-site, and provide gradations (table and plot). For Training Berm Material and Bulk Riprap Fill Material, Contractor shall provide equipment and an operator to assist the Owner’s Representative in quantifying samples of the material. Sampling the Training Berm Material and Bulk Riprap Fill Material will be per the following process, or similar. Contractor will generate a representative stockpile of the required material, use an excavator to pull a sample from a representative portion of the stockpile as selected by the Owner’s Representative, and spread the sample into a square 8 feet x 8 feet x 1 particle thick. Owner’s Representative will quantify the particles within the sample and generate gradations (table and plot).

D. Laboratory Test Reports including soil classifications, grain size analysis, proctor curves, and relative density calculations for each type of material used.

G. Daily Field Quality Control Test Reports including all test results.

H. Blasting monitoring data as described in Part 3, if blasting is used.

1.05 DEFINITIONS
A. Excavation consists of the removal of material encountered to subgrade elevations and the reuse or disposal of materials removed.
B. Subgrade: The uppermost surface of an excavation or the top surface of a fill or backfill immediately below base course or topsoil materials.
C. Borrow: Material obtained off-site when sufficient approved material is not available from excavations.
D. General Fill: Borrow and job-excavated material that meets the requirements for satisfactory material.
E. Unacceptable stone material is shale and material that contains cracks, fractures, bedding, seams or other defects that would tend to increase deterioration. Unacceptable stone material shall be considered Excess Waste Rock.
F. Waste Rock: Waste Rock from the spillway excavation shall be used to rebuild the Emergency Spillway Training Berm, the West Branch Fill, and portions of the Filter Diaphragm. Waste Rock is defined as either Training Berm Material, Bulk Riprap Fill Material, Riprap Bedding, or Excess Waste Rock. The Drawings provides definitions and gradations for the Training Berm Material and Bulk Riprap Fill Material.
G. Unauthorized excavation consists of removing materials beyond indicated subgrade elevations or dimensions without direction by the Construction Representative. Unauthorized excavation, as well as remedial work directed by the Construction Representative, shall be at the contractor's expense.
H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below ground surface.
I. Utilities include on-site underground or above ground pipes, conduits, ducts, cables, and underground services within building lines.

1.06 CLASSIFICATION OF EXCAVATION
A. No consideration will be given to the nature of the materials, and all excavation will be designated as unclassified excavation. Project Conditions defines the nature of the bedrock spillway that will be excavated by the contractor.

1.07 QUALITY ASSURANCE
A. Codes and Standards: Perform earthwork complying with the requirements of the Drawings and specifications.
B. Testing and Inspection Service: Contractor shall employ a qualified Independent Testing Agency at the Contractor's cost to classify proposed on-site and borrow materials to verify that materials comply with specified requirements and to perform all required field and laboratory testing required by the contract drawings.

C. If blasting is used to excavate rock, the contractor shall submit a blasting plan to the Owner and Engineer for approval prior to conducting any blasting operations. All blasting operations shall comply with 11 CSR 40-7.010, and include monitoring, per Part 3.

1.08 PROJECT CONDITIONS

A. Subsurface Data: No subsurface soil or rock investigation was performed. The Missouri Department of Natural Resources provided a 1979 Phase I Investigation of Firepit Lake Dam performed by the U.S. Army Corps of Engineers National Dam Safety Program which indicated that the right dam abutment (looking north/downstream) and spillway are founded on erosion-resistant rhyolite bedrock.

PART 2 PRODUCTS

2.01 SOIL AND ROCK MATERIALS

A. See Drawings for gradations of Training Berm Material, Bulk Riprap Material, Dam Crest Fill, and Riprap Bedding. This material gradation shall be created by the Contractor on site using Waste Rock, and/or rock meeting the specified material and gradation imported from a quarry as Borrow. The contractor's choice to use imported material shall create no additional expense to the owner.

B. Sand for Filter Diaphragm shall meet ASTM C-33.

C. General Fill, Topsoil shall be clean and uniform material. It shall be clean fill, as defined by 10 CSR 80-2.010 and further refined as follows, to be uncontaminated soil, rock, sand, gravel, and inert solids as approved by rule or policy of the department for fill, reclamation or other beneficial use. It shall be free of ashes, stones greater than 1 inch, frozen or other objectionable materials that will interfere with placement and compaction.

D. Satisfactory Soil Materials: Unless otherwise specified, Satisfactory Soil Materials shall be ASTM D 2487 soil classification groups GM, GC, SC, SW, SP, SM, CL and ML, free of rock or gravel larger than 1 inch in any dimension, debris, waste, frozen materials, vegetation, or other deleterious matter. All materials used will have a plasticity index less than 25 (ASTM 4318) and liquid limit less than 50 (ASTM D 2487).

E. Unsatisfactory Soil Materials: Unless otherwise specified, Unsatisfactory Soil Materials shall be ASTM D 2487 soil classification groups MH, CH, OL, OH, and PT.

PART 3 EXECUTION

3.01 PROTECTION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

B. Care shall be exercised to ensure that the dam is not disturbed during the construction work, other than the work required on the Drawings.
3.02 BLASTING

A. If blasting is used to excavate rock, the contractor shall submit a blasting plan to the Owner and Engineer for approval prior to conducting any blasting operations. All blasting operations shall comply with 11 CSR 40-7.010.

The contractor’s blasting plan shall include a monitoring plan. At a minimum the contractors monitoring should include the following:
1. A seismic monitoring instrument shall be placed on the center of the dam crest during all blasting operations to ensure that a minimum particle velocity of one (1) inch per second is not exceeded; and
2. Two rows of metal stakes shall be installed on the dam prior to the start of blasting operations. One row shall be installed at the downstream shoulder of the dam and one row shall be placed on the downstream slope of the embankment midway between the crest and the toe. The stakes shall run longitudinal to the centerline of the dam and be set at 50 foot intervals. The stakes shall be embedded a minimum of 2 feet into the embankment and have a projection of at least 4 feet. The stakes shall be plumb and aligned using a reference point on the west abutment.

C. The embankment shall be monitored during each blast, and inspected after each blast. During blasting should the contractors monitoring plan measure a peak particle velocity exceeding one (1) inch per second, or if movement is detected with the metal stakes, the Contractor shall immediately notify the Engineer and Dam and Reservoir Safety.

B. All costs for providing all labor, tools, equipment, materials, and other requirements for the monitoring shall be considered incidental to the bid price of the project, and shall be provided at no additional cost to the Owner.

3.03 EXCAVATION

A. Unclassified Excavation: Unclassified Excavation will consist of the excavation of all materials of whatever character encountered in the work.

B. Excavate for structures, pavements, and walks to indicated elevations and dimensions. Widen excavations to permit placing and removing concrete formwork, installing services and other construction, and for inspections. Trim subgrades to required lines and grades to leave solid base to receive other work.

C. Stockpile topsoil to be re-used on site.

D. Store excavated and borrow soil materials acceptable for backfill and fill in shaped, graded, drained, and covered stockpiles. Locate stockpiles away from edge of excavations and not on the Dam Crest.

3.04 BACKFILL AND FILL

A. Backfill excavations promptly following acceptance of affected work below final grade.

B. Fill Preparation:
1. Slopes that are steeper than six horizontal to one vertical shall be continuously benched in not less than 12-inch rises as the work is brought up in layers. Benching shall be of sufficient width to permit placing and compacting operations. Each horizontal cut shall begin at the intersection of the ground line and the vertical side of the previous bench.
2. Uniformly moisten or aerate fill or backfill material as needed to achieve the minimum percent of maximum density specified.
3. Remove and replace, or scarify and air dry, satisfactory soil material that is too wet to compact to specified density.

C. Rock Placement
1. Waste Rock from the spillway excavation shall be used on site to rebuild the Emergency Spillway Training Berm, the West Branch Fill, and the Filter Diaphragm. Waste Rock may be used for the Dam Crest Gravel Road Fill. Any remaining (i.e. excess) waste rock shall be placed on the upstream slope of the dam for wave protection.
2. Filter Diaphragm
   a. After removing all stumps, boulders, concrete rubble, and pointed rocks, the subgrade for the Filter Diaphragm shall be trimmed and shaped to allow the finished surface to conform to the line and grades shown on the Drawings.
   b. The Contractor shall provide the Owner’s Representative opportunity to approve the foundation preparation, and after subgrade is approved, a layer of geotextile fabric shall be installed. The geotextile fabric shall be placed loosely upon or against the surface to receive the fabric, and secured as necessary, so that the fabric conforms to the surface without damage when the bedding and Bulk Riprap Fill material is placed. The filter fabric shall be placed such that it overlaps the adjacent section of fabric a minimum of 24-inches at all joints. Vertical overlaps shall be made so that the higher section overlaps the lower section. Horizontal overlaps shall be made with the upstream matting overlapping the downstream matting. Equipment or vehicles shall not be operated or driven directly on the filter fabric. Filter fabric damaged during placement shall be replaced or repaired, as directed by the Owner’s Representative, by the Contractor at the Contractor’s expense. Repairing damaged fabric shall consist of placing new fabric over the damaged area with a minimum overlap of 3-feet from the edge of the damaged area.
   c. Filter fabric for Filter Diaphragm shall as specified on the Drawings. Filter fabric shall be placed between all interfaces between soil and rock and between soil and sand including the bottom, sides, ends, and above rock, if applicable.
   d. Bedding material shall be spread uniformly on the geotextile fabric in a satisfactory manner to the neat lines, grades, and thicknesses shown on the Drawings. The purpose of the bedding is to protect the geotextile fabric from damage when placing the large rock lining material. Placing of the bedding 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 base or the geotextile fabric during placing of the bedding shall be shall be repaired before proceeding with the work. Compaction of the bedding layer will not be required, but it shall be finished to present a reasonably even surface free from mounds, windrows, or depressions.

3. Training Berm Material and Bulk Riprap Fill Material shall be distributed by blading or dozing in a manner to ensure proper placement in final position in the embankment. The spalls and smaller stone fragments shall be left on the surface of each layer as formed. The finished Rock Lining shall conform to the elevations and dimensions shown on the Construction Plans, and the slopes shall present a dense, finished appearance free from segregation and with a proportionate quantity of the large pieces showing.

3.05 COMPACTION

A. See Drawings for compaction of Dam Crest Fill.

B. Where not otherwise directed, general compaction requirements are as follows:
   1. Place backfill and fill materials in layers not more than 12 inches in loose depth for material compacted by heavy compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers. Place evenly alongside structures and utilities to required elevations.
   2. Compact satisfactory soil materials to not less than the following percentages of maximum dry density according to ASTM D 698:
      a. Under structures, slabs, and pavements, compact each layer of backfill or fill material to 95 percent.
      b. Under lawn or unpaved areas, compact each layer of General Fill material to 90 percent.
      c. Compaction of topsoil shall be achieved using a reasonable number of passes with low-pressure tire or tracked equipment to achieve nominally compacted and stable (non-raveling, competent) conditions, to the satisfaction of the Owner’s Representative.
   3. Jetting shall not be used to compact backfill.
3.06 GRADING
A. Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross-sections, lines, and elevations indicated. Tolerances shall be as specified on the Drawings.

3.07 FIELD QUALITY CONTROL
A. Backfill compaction testing for pipes and structures shall be as defined on the Drawings and Section 330000 Utilities - Pipe Sewer Construction.

B. Quality control for additional Earthwork shall be as follows. Contractor shall retain and pay for a qualified Independent Testing Agency to perform all quality control testing. The testing Agency shall submit daily reports to the Construction Administrator and Designer of the results of any tests, and any other observations regarding the quality of the work. Allow the Testing Agency to inspect and test each subgrade and each fill or backfill layer. Do not proceed until test results for previously completed work verify compliance with requirements.
   1. Provide a soil classification (ASTM D-2487), and standard Proctor compaction curve (ASTM D-698) for each type of soil or non-free-draining crushed rock material used. Provide a gradation (ASTM D-1140) or relative density determination (ASTM D-4253 & 4254) for each type of free-draining crushed rock backfill to be used.
   2. Perform field in-place density tests according to ASTM D 1556 (sand cone method), ASTM D 2167 (rubber balloon method), ASTM D 2922 (nuclear method), or ASTM D 2937 (drive cylinder method), as applicable.
   3. In each compacted fill layer, perform one test per every 1000 sq.ft. of general fill but in no case fewer than two tests per layer.
   4. Dam Crest Fill: At subgrade and at each compacted fill and backfill layer, perform at least one field in-place density test for every 500 sq.ft. or less of paved area, but in no case fewer than three tests.

D. When test results indicate that fills or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depth required, recompact, and retest until obtaining required density at no cost to the Owner.

3.08 STOCKPILING AND DISPOSAL
A. Stockpiling: Satisfactory soil materials are to be temporarily stored in designated stockpiles for reuse as directed by the Construction Representative.

B. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it in accordance with the following paragraphs.
   1. All disposal of materials shall be done in accordance with all Federal, State, County and local regulations.

END OF SECTION
SECTION 32 0000
SURFACE RESTORATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.
B. Section 01 4000 - Independent Testing
C. Section 01 3300 - Submittals
D. Section 31 2200 - Earthwork
E. MODOT Missouri Standard Specifications for Highway Construction
   1. Division 600 Incidental Construction
   2. Division 800 Roadside Development.

1.02 SUMMARY
A. All disturbed areas require surface restoration.
B. Surface Restoration includes:
   1. Revegetation Blanket
   2. Topsoil, seed, and mulch
   3. Fence

1.03 DEFINITIONS
A. Erosion Control Blanket (ECB) - manufactured rolled material used as surface lining for revegetation blanket and vegetated swale.
B. Revegetation Blanket and Vegetated Swale: Stabilization of vegetated soil slopes and vegetated swales shall be as shown on the drawings, including seed mixture and Erosion Control Blanket.
C. Seed & Mulch: restoration of disturbed areas that are not stabilized using Rock Lined Channel, Rock Blanket, pavement, or gravel service roads.
D. Topsoil: finished grade capable of sustaining vigorous growth of grass seed specified on the drawings.

1.04 SUBMITTALS
A. See Section 01 3300 - Submittals, for submittal procedures.
B. Seed - Contractor shall submit seed tag from the seed as delivered to the construction site with certification from the supplier that the seed is in conformance with the Drawings and Specifications.
C. Erosion Control Blanket - manufacturer product data sheets including material specifications and installation instructions
D. Seed & Mulch - Contractor shall document dates of maintenance.

1.05 COORDINATION AND SCHEDULING
A. Planting Season: Install seed during normal planting seasons for type of lawn work required.
B. Weather Limitations: Proceed with work only when existing and forecast weather conditions are suitable for work
C. Contractor shall coordinate with Owner to provide alternate plan to stabilize the site for the winter if it is not feasible to establish acceptable Seed and Mulch before end of the growing season.

1.06 REFERENCES
PART 2 PRODUCTS

2.01 MATERIALS

A. Revegetation Blanket: Erosion Control Blanket, seed, and fertilizer shall be as shown on the drawings.

B. Seed mix shall be in accordance with the Drawings. The remaining material requirements for Seed and Mulch shall be in accordance with Sections 805 and 802, respectively, of MODOT Missouri Standard Specifications for Highway Construction Division 800 Roadside Development.

C. Topsoil shall be material used to construct the upper 6 inches of the final surface cover of all disturbed areas that are not covered by rock. The following additional requirements apply to the Topsoil:
   1. The material shall consist of loam texture soils from the A horizon of soil profiles of local soils, as defined in the USDA Soil Texture Triangle, and shall meet the following requirements:
      a. It shall be relatively free of large roots, sticks, weeds, brush, refuse, frozen earth, or stones larger than 3/4 in. in diameter, or other litter and waste products.
      b. It shall be capable of supporting and germinating vegetation in accordance with Sections 805 and 802, respectively, of MODOT Missouri Standard Specifications for Highway Construction Division 800 Roadside Development.

D. Fence: Fence shall be four (4) feet high chain link.
   1. Chain link fence fabric: In accordance with ASTM Standard A491, latest revision; 48" high, made of No. 9 gauge steel wire, woven in a 2" mesh and coated with a Class II aluminum coating of 0.4 oz./sf.
   2. Fabric Ties: Fabric shall be fastened to line posts and top rail with 9 gauge steel tie wires and coated with a Class II aluminum coating of 0.4 oz./sf. (aluminum ties are not permitted), spaced no more than 24 inches apart. Standard fabric stretcher bars and stretcher bar bands shall be furnished where required.
   3. Tension Bar: Tension bar for fabric to SS-40/WT-40 pipe and gate posts shall be a minimum 1/4" diameter galvanized steel bar and shall conform with ASTM Standard A153. Heavy gauge wire is unacceptable.
   4. Metal line posts, corner posts, and top rails shall be Allied SS-40 or Wheatland WT-40, with a galvanized coating not less than 1.8 oz. per square foot of total coated surface. Minimum pipe sizes shall be as follows:
      a. Line Posts; 2.375" OD (3.12 lb./ft.)
      b. Terminal (end/corner/pull) Posts: 4.00" OD (6.57 lb./ft.)
      c. Top Rails; 1.625" O.D. (1.84 lb./ft)
   5. Posts shall be evenly spaced, but in no instance should spacing greater than 15 feet be used.
   6. Galvanized steel pipe for posts, gates, top rail and removable panels shall be in accordance with ASTM Standard A53, latest revision. No used, re-rolled, or open seam material will be permitted. Other fittings and hardware shall be galvanized according to ASTM Standard A153, latest revision.
   7. Bottom tension wire should be No. 7 gauge aluminum coated spring coil or crimped wire and conform to ASTM Standard A491. Minimum weight of coating shall be 0.40 oz./sf. of wire surface. Tension wire shall be stretched taut from terminal to terminal post and evenly fastened to each intermediate post 6 inches above grade line. Tension wire shall be attached to fence fabric with steel hog rings (aluminum hog rings are not permitted) every 24 inches.
   8. Ultimate strength of 3,000 psi at 28 days; 5.5 sacks (minimum) of cement per cubic yard; 6.5 gallons (maximum, including free moisture on aggregate) per sack of cement; 3/4" maximum aggregate size; 3% 5% air entrainment; mixed per ASTM Standard C94.
2.02 CERTIFICATION AND SAMPLING:

A. Certification of Seed and Mulch shall be in accordance with Sections 805 and 802, respectively, of MODOT Missouri Standard Specifications for Highway Construction Division 800 Roadside Development.

PART 3 EXECUTION

3.01 TOPSOIL

A. Per Section 024113 Selective Demolition and Section 320000 Earthwork, stockpile topsoil to be re-used on site.

B. Material to be used as topsoil shall be amended in accordance with the lab recommendations specified under Part 2 Products.

C. Contractor shall apply topsoil, seed and mulch to all disturbed areas maintained as mowed grass prior to the start of construction, where alternate surface restoration (revegetation blanket, rock lining) is not required by the Drawings. Construction Requirements, Acceptance, and Corrective Action of Seed and Mulch shall be in accordance with Sections 805 and 802, respectively, of MODOT Missouri Standard Specifications for Highway Construction Division 800 Roadside Development.

D. Topsoil

1. Place Topsoil where indicated on the Drawings.
2. Work area when material is dry and friable. Do not create muddy conditions.
3. Grade soil to bring areas to thicknesses and grades as indicated on drawings to assure that all surfaces are left in an even and properly compacted condition, and to prevent ponding of water in depressions. Make changes in grade gradual. Blend slopes into level areas.
4. Remove foreign material, weeds, and undesirable plants and their roots. Remove and replace any contaminated topsoil.
5. Blend topsoil with fertilizer using a rake to achieve a homogenous material placement.

3.03 SEED & MULCH

A. Seed and Mulch shall be in accordance with the Seed and Mulch notes on the Drawings and these specifications.

B. The seed shall be evenly sown on the prepared, moist, fertilized surface, at the rates specified, lightly raked, and covered with pulverized straw, rolled, watered with a fine spray to avoid washing of the seed, and kept moist until acceptance of the work.

C. Maintenance:

1. Contractor shall provide a minimum of 1 inch per week of water to the turf areas during the months of June, July, and August.
2. Water thoroughly whenever turf areas evidences excessive drying.
3. Within 10 working days, reseed areas which show bare spots.
4. Mow grass to a height of 50 mm (2 inches) as soon as there is enough top growth to cut with mower. Remove no more than 40% of grass leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted.
5. Apply second fertilizer application after first mowing and when grass is dry. Use fertilizer which will provide not less than 0.45 kilogram (pound) of actual nitrogen per 93 square meters (1,000 square feet) of lawn area.
6. Perform maintenance until the date of final acceptance, and document dates of maintenance.

D. Acceptance:

1. When Work is Substantially Complete, including maintenance, Engineer and Owner will, upon request, make an inspection to determine acceptability.
2. MODOT Section 805 states: Acceptance of permanent seeding will be made when seeded disturbed areas meet the requirements for final stabilization as defined in the
current state operating permit for land disturbance. Inspection for acceptance will be made within 60 days after seeding, excluding seeding dates that fall between September 30 and March 1. Seeding that occurs between September 30 and March 1 will be inspected no earlier than May 1.

3. Turf areas will be acceptable provided requirements, including maintenance, have been complied with and healthy, well-rooted, even-colored, viable turf is established free of weeds, open joints, bare areas, and surface irregularities.

3.04 REVEGETATION BLANKET

A. Revegetation Blanket shall be installed in the locations as indicated on the Drawings.
B. Prepared slope shall be topsoil of adequate depth per the Drawings, and amended in accordance with these Specifications.
C. The prepared slope shall be smooth and have all uneven areas and low spots eliminated. Contractor shall fine grade the subgrade by hand dressing where necessary to remove local deviations. Debris, roots, branches, and stones larger than 1 inch shall be removed. Surface shall be scarified to a depth of 3 inches. Areas where equipment was used for excavation and slope shaping shall have the compacted subsoil scarified to a depth of 6 inches.
D. Seed shall be applied prior to placing the erosion control blanket (ECB).
E. Follow Manufacturer's installation instructions. Add mulch to seed before applying ECB, only if suggested by ECB manufacturer's instructions.
F. The placed ECB shall be firmly in direct contact with the soil surface and shall not exhibit tenting or wrinkles. The top, sides, and toe of the blanket shall be trenched in or anchored in accordance with Manufacturer's installation instructions and the Drawings.

3.05 FENCE

A. Fence Installation
   1. Fence shall follow ground line unless otherwise specified. It shall be neat, plumb, aligned true, stretched taut, and free from sags and bellies. Sufficient terminal posts must be provided to assure that bottom closure shall be within three inches of ground surface elevation.
B. Chain Link Footings
   1. Post shall be set in the center of concrete footings and extend 34" below finished earth grade. Footings shall be set 1" above and extend 36" below finished earth grade. Footings shall be 10" or greater in diameter for line posts and 15" or greater for terminal and gate posts. Diagonal struts shall be provided from top of each corner post to the next line post in each direction.
      a. footing Concrete: Ultimate strength of 3,000 psi at 28 days; 5.5 sacks (minimum) of cement per cubic yard; 6.5 gallons (maximum, including free moisture on aggregate) per sack of cement; 3/4" maximum aggregate size; 3% 5% air entrainment; mixed per ASTM Standard C94.
   2. Where solid rock is encountered less than 36" below the finished earth grade, footings shall be cored into solid rock. Posts shall be set in the center of grout footings and extend 12" below the top of rock, or 36" below the finished earth grade. Footing diameter shall be a minimum of 1 inch greater in diameter than the line or terminal post being installed.
   3. Top of footing shall be sloped away from post to drain moisture. Installer shall make sure that concrete/grout footing extends 1" above earth subgrade.

END OF SECTION
SECTION 33 0000
UTILITIES - PIPE SEWER CONSTRUCTION

PART 1 GENERAL
1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary
      Conditions, Bid Form and other Division 1 Specification Sections, apply to this Section.
   B. 01 5000 - Construction Facilities and Temporary Controls
   C. 02 2100 - Surveys
   D. 02 4113 - Selective Site Demolition
   E. 03 6200 - Non-shrink Grout Construction
   F. 31 2200 - Earthwork

1.02 SUMMARY
   A. Work includes work shown on Drawings, of summary of which is installation of:
      1. Filter Diaphragm on existing primary spillway
      2. Existing Primary Spillway to be grouted full and abandoned

1.03 DEFINITIONS
   A. Exposed Installations: Exposed to view outdoors or subject to outdoor ambient temperatures
      and weather conditions.
   B. CMP: Corrugated Metal Pipe

1.04 SUBMITTALS
   A. Gradations for Sand and Riprap Bedding
   B. Product data on Filter Fabric Type 1 that is laid under riprap bedding on Filter Diaphragm.

PART 2 PRODUCTS (NOT USED)
PART 3 EXECUTION
3.01 PIPE EXCAVATION
   A. Installation of Gravel Diaphragm requires excavation below the pipe flowline. Perform
      excavation and backfill in accordance with the Drawings and this section.
   B. Grout full and abandon the primary spillway in accordance with Section 03 6200 Non-shrink
      Grout Construction, and this section.

3.02 PIPE LAYING
   A. Handling of Pipe - Equipment used to handle, lay, and joint pipe shall be so equipped and used
      as to prevent damage to the pipe and its jointing materials. All pipe and fittings shall be
      carefully handled and lowered into the trench. Damaged pipe or jointing material shall not be
      installed.
   B. Cutting
      1. Cut in neat manner without damage to pipe.
      2. Observe Specifications regarding joint locations.
      3. Cut cast-iron, ductile-iron, and steel pipe with carborundum saw or other acceptable
         method per manufacturer's instructions.
         a. Smooth cut by power grinding to remove burrs and sharp edges.
         b. Repair lining as required and approved.
   C. Bedding, Cradling, or Encasement
      1. Special care shall be taken to insure that the pipes are solidly and uniformly bedded,
         cradled, or encased in accordance with the type of bedding, cradle, or encasement
required by the Drawings and specifications. No pipes shall be brought into position until the preceding length has been bedded and secured in place.

D. Water in Excavation
1. Water shall not be allowed to rise in the excavation until the non-shrink grout is hardened and cannot be damaged by the water. Particular care shall be used to prevent disturbance or damage to the pipe and the joints during backfilling, or at any other time.
2. Precautions shall be taken to prevent floating of pipe in the trench.

E. Cleaning of Pipe Interior
1. As the work progresses, the interior of the sewer shall be cleaned of all dirt, cement, extruded joint materials, debris, and other extraneous materials.

F. Protection of Pipe
1. Whenever pipe laying is stopped for any significant length of time, such as at the end of a workday, the unfinished end shall be protected from displacement, flotation, cave-in, in-wash of soil or debris, or other injuries. A suitable temporary tight-fitting plug, stopper, or bulkhead shall be placed in the exposed bell, groove, or socket end.

3.03 UNDERGROUND UTILITIES
A. Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Perform work adjacent to utilities as indicated in accordance with procedures outlined by utility company. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, excavate by hand. Report damage to utility lines or subsurface construction immediately to the Construction Representative.

END OF SECTION
Appendix A:

Dam & Reservoir Safety Council Construction Permit
December 16, 2020

Department of Natural Resources
C/O Mr. Jonathan Fitch, P.E.
P.O. Box 176
Jefferson City, Missouri 65102

jon.fitch@dnr.mo.gov

RE: Firepit Lake Dam (MO31042) Reynolds County

Dear Mr. Fitch:

As a result of our review of the construction permit application, plans, and specifications for the Firepit Lake Dam, I am pleased to inform you a construction permit has been issued and is enclosed for your use. A copy of the permit is also being sent to Eric J. Karch, P.E., the engineer of record.

It is the owner’s responsibility to obtain all other necessary permits and or approvals. This permit does not preclude the owner from compliance with other applicable federal, state and local requirements.

Please notify us at least 5 days prior to starting construction. If you have any questions about this letter or the permit requirements in general, please call me.

Sincerely,

MISSOURI GEOLOGICAL SURVEY

Ryan P. Stack, P.E.
Chief Engineer
Dam and Reservoir Safety Program

c: Eric J Karch P.E.
  ekarch@reitzjens.com
Pursuant to Chapters 236.400 through 236.500 of the Revised Statutes of Missouri and the rules established by the Dam and Reservoir Safety Council, and on the basis of statements and information contained in the permit application, letters, maps, plans, specifications and reports prepared by Eric J. Karch, PE-2007005040, hereafter known as the permittee's engineer, for the Firepit Lake Dam, Reynolds County, all of which are made a part hereof by reference, PERMISSION IS HEREBY GRANTED TO, Department of Natural Resources Hereafter known as the permittee, whose address for the purpose of notices and other communications pertaining to this permit is Jonathon Fitch, P.E.; P.O. Box 176; Jefferson City, Missouri 65102, which address is subject to change by written notice from the permittee, TO MODIFY a dam having a height of 60 feet and a reservoir surface area of approximately 48 acres at the normal water storage elevation. The modifications consist of abandoning the existing principal spillway outlet pipe and inlet structure by grouting. A filter diaphragm will be constructed at the downstream end of the existing pipe outlet. The open channel spillway will be expanded to 85 feet and the sill lowered to elevation 1085.9 (from 1086.44). A variable width channel as described on the plans will be excavated into a downstream portion of the open channel spillway to form a two-stage spillway. Additional work includes repairing and raising the existing training berm and adding crushed stone to level the dam crest to elevation 1095.79. The dam is located in Section 1, Township 33 North, Range 2 East, and assigned the identification number of MO31042. The approximate UTM Coordinates are 4,162,910 meters North and 696,120 meters East, Zone 15. This permit is subject to the following provisions:
GENERAL PROVISIONS:

1. No liability shall be imposed upon or incurred by the State of Missouri and/or the Dam and Reservoir Safety Council, or any of their officers, agents, employees and members, officially or personally, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors or closed corporations of successors or assigns relating to any matter hereunder. This permit shall not be construed as estopping or limiting any legal claim or right of action of the state against the permittee, its agents, employees or contractors for any damages or injury resulting from any such act or omission by them or for violation of or failure to comply with the provisions of the permit or applicable provisions of law.

2. The permittee shall comply with all Federal, State, and local laws and regulations, and shall obtain such other permits as may be required.

3. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property rights or interest of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, it is the sole responsibility of the permittee, before proceeding therewith, to obtain the written consent of all persons, agencies, or authorities concerned, and to acquire all property rights, and interests necessary therefor, including flood easements or permissions for all properties which may be inundated by the dam on a temporary or permanent basis in the upstream impoundment area below the top of dam elevation.

4. The permittee shall notify the Dam and Reservoir Safety Council in writing upon the sale or other transfer of interest in said dam or reservoir.

5. Based on conditions existing at the time of issuing this permit, the Downstream Environment Zone is Class I.

SPECIAL PROVISIONS:

1. The Chief Engineer of the Dam and Reservoir Safety Program shall be notified in writing at least five (5) days in advance of the commencement of the work authorized herein.

2. Construction work authorized under this permit shall be completed on or before December 16, 2021, unless extended in writing by the Dam and Reservoir Safety Council or the Chief Engineer of the Dam and Reservoir Safety Program.

3. No changes shall be made in the construction of the dam which adversely affect the dam or reservoir with regard to its integrity or to the environment, public safety, life or property.

4. If the permittee finds at any time during construction or operation that, in order to adequately protect the integrity of the dam, the environment or public health, safety or welfare, immediate alterations to the approved plans and specifications are required, the alterations may be started, but the permittee shall promptly notify the Chief Engineer of such requirements. If the alterations are to remain as permanent project features, the permittee shall, as soon as practicable, revise the plans and specifications and submit the revisions to the Dam and Reservoir Safety Council for approval. Such alteration shall be discontinued if disapproved by the Council, upon notice of such disapproval.

5. The permittee shall immediately notify in writing, the Chief Engineer of any unforeseen conditions discovered during construction that may adversely affect the structural stability of the dam.
6. The permittee, in cooperation with the permittee's engineer, shall be responsible for providing adequate controls on construction activities, compliance with plans and specifications authorized herein and verification of design, construction, and operating assumptions.

7. The permittee shall, as soon as practicable following construction, cover or protect all exposed soil resulting from the construction by placing riprap, sod and/or seed on banks and slopes of said construction for the prevention of soil erosion.

8. Within two (2) weeks of completion of the work authorized under this permit, the owner shall notify the Chief Engineer in writing that construction was completed in accordance with the approved plans and specifications. As-built plans and drawings shall be submitted if significant changes were made during construction.

9. Undertaking or initiating any work or part thereof authorized herein by the permittee constitutes acceptance of the permit and all its terms and conditions.

Executed at Rolla, Missouri on this 16th day of December, 2020

DAM AND RESERVOIR SAFETY COUNCIL

By: _______________________
Chief Engineer
Dam and Reservoir Safety Program
Appendix B:

USACE Permit
Regulatory Division

NATIONWIDE PERMIT NO. SWL-2020-00277

Eric Hibdon
Missouri Office of Administration
301 West High Street, Room 730
P.O. Box 809
Jefferson City, Missouri 65102

Dear Mr. Hibdon:

Please refer to your letter dated October 29, 2020, concerning Department of the Army permit requirements pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344). You requested authorization for the placement of dredged and fill material in waters of the United States associated with maintenance of a dam. The project is located in Black Creek, Lat 37.594, Long -90.778, near Ironton, Reynolds County, Missouri.

The proposed activities are authorized by Department of the Army Nationwide Permit (NWP) No. 3 (copy enclosed), provided that the conditions therein are met. You should become familiar with the conditions and maintain a copy of the permit at the worksite for ready reference. If changes are proposed in the design or location of the facilities, you should submit revised plans to this office for approval before construction of the change begins.

Please refer to NWP General Condition No. 12, which stipulates that appropriate erosion and siltation controls be used during construction and all exposed soil be permanently stabilized. Erosion control measures must be implemented during and after construction of the proposed project to comply with this permit condition.

In order to fully comply with the conditions of the NWP, you must submit the enclosed compliance certification within 30 days of completion of the project. This is required pursuant to NWP General Condition No. 30 of the permit.

This permit action is based upon a Corps of Engineers determination that the subject work is within the jurisdiction of the Department of the Army regulatory program. You may contact the Little Rock District Regulatory Division if you wish to discuss your options for appealing this determination.

The NWP determination will be valid until March 18, 2022. If NWP No. 3 is modified, suspended, or revoked during this period, your project may not be authorized unless you have begun or are under contract to begin the project. If work has started or the work is under
contract, you would then have twelve (12) months to complete the work.

The authorization of this work by a NWP does not relieve you of complying with other applicable local, state, and Federal laws, nor does it grant any property rights or exclusive privileges.

If you have any questions about this permit or any of its provisions, please contact me at (870) 886-3610 and refer to Permit No. **SWL-2020-00277**.

Please submit your comments or suggestions on our Customer Service Survey: [http://corpsmapu.usace.army.mil/cm_apex/?p=regulatory_survey](http://corpsmapu.usace.army.mil/cm_apex/?p=regulatory_survey).

Sincerely,

Chris Wrbas

Chris Wrbas
Project Manager

Enclosures

cc:
Ch, Regulatory Enf
PERMITTEE COMPLIANCE CERTIFICATION

PERMIT NO.: SWL-2020-00277       NWP/S NO.: 3

PERMITTEE NAME: Missouri Office of Administration

DATE OF ISSUANCE: November 16, 2020

PROJECT MANAGER: Chris Wrbas

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US Army Corps of Engineers, Little Rock
ATTENTION: CESWL-RD
PO Box 867
Little Rock, Arkansas 72203-0867

Please note that your permitted activity is subject to a compliance inspection by a US 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.

DATE WORK COMPLETED: ________________

_______________________________            ____________________
SIGNATURE OF PERMITTEE                            DATE
Appendix C:

Hennesey Easement
Space Above Line Reserved For Recorder's Use

1. **Title of Document:** Declaration of Easement

2. **Date of Document:** November 14, 2011

3. **Declarant:** Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased
c/o Marti A. Gurley, SVP & Trust Counsel
8077 Maryland Avenue
St. Louis, Missouri 63105

4. **Legal description:** See Exhibits "B" and "C"
DECLARATION OF EASEMENT AGREEMENT

THIS DECLARATION EASEMENT ("Declaration") is made and entered into this 14th day of November, 2011, by Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased ("Declarant").

RECITALS

A. As of the date of this Declaration, Declarant is the owner in fee simple of that certain real property, fronting on the public road known as State Highway N ("Hwy N"), situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-ONE" on Exhibit "A", and is legally described on Exhibit "B", attached hereto (the "Hennessey-1 Property").

B. As of the date of this Declaration, Declarant is also the owner in fee simple of that certain real property situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-TWO" on Exhibit "A", and is legally described on Exhibit "C", attached hereto (the "Hennessey-2 Property").

C. As of the date of this Declaration, James R. Sohn, Trustee of Trust dated June 13, 2000 ("Sohn") is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "SOHN" on Exhibit "A" (the "Sohn Property").

D. As of the date of this Declaration, Marilyn Collins-Townsend, a married person, is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "TOWNSEND" on the drawing attached hereto as Exhibit "A" (the "Townsend Property").

E. Declarant desires a roadway for vehicular and pedestrian ingress, egress and travel between Hwy N, and the Hennessey-2 Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A" ("Road").

F. Contemporaneously with the execution and filing of record of this Declaration, there was or shall be filed of record other agreements of even date herewith, which grant to Declarant certain easements on, over and across the Sohn Property and the Townsend Property so as to allow Declarant ingress and egress between Hwy. N and the Hennessey-2 Property.

G. The purpose of this Declaration is to create an easement on the Hennessey-1 Property for the benefit of the from time to time owner of the Hennessey-2 Property, that will allow the from time to time owner of the Hennessey-2 Property ingress and egress on, over and across the Hennessey-1 Property, in the event the from time to time owner of Hennessey-1 Property is or becomes different than the from time to time owner of the Hennessey-2 Property. It is intended that the easement created by this instrument remain in place and be senior to all liens and encumbrances, now of record and hereafter of record, so that said easement will run with the land, when and if the current owner of the Hennessey-1 Property sells, leases, trades, assigns, pledges, mortgages or otherwise in any manner transfers, encumbrances or hypothecates the Hennessey-1 Property or any interest therein.
NOW, THEREFORE, Declarant does hereby create and establish the easement described herein, upon the following terms and conditions.

1. **Creation of Easement.** Subject to the terms and conditions set forth in this Declaration, Declarant hereby establishes and creates, a perpetual non-exclusive right, privilege and easement ("Easement") on, over and across a portion of the Hennessey-1 Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A", as more particularly described as follows: a path or strip of land ("Easement Area"), twenty (20) feet in width, or such greater width (i) as may be necessary for vehicles to reasonably use the Easement Area, or (ii) as required by any Federal, State or local law, rule or ordinance (collectively, "Law"), where there exists, as of the date of the Declaration, the existing road on the Hennessey-1 Property, constituting the first portion of the Road from Hwy. N to/from the Hennessey-2 Property. The owner of the Hennessey-1 Property shall have the right from time to time to relocate the Easement Area to another location on the Hennessey-1 Property, provided (a) the relocated Easement Area is of the aforesaid width (b) there is construction on such relocated Easement Area a road for vehicular use of a type and quality at least as good as the road being replaced; and (c) such relocated road connects Hwy N to the portion of the Road located on the Sohn Property for vehicular use; and further provided, the relocated road is constructed prior to the abandonment of the road being replaced, so at all times there is free and unobstructed access between Hwy N and the portion of the Road on the Sohn Property. At the from time to time request of the owner of the Hennessey-2 Property, the owner of the Hennessey-1 Property shall cause a survey to be made of the Road and the Easement Area on the Hennessey-1 Property. Upon completion of such survey, a copy of such survey shall be attached to this Declaration as an exhibit, and this Declaration shall be refiled in the office of the Recorder of Deeds in the county where the Hennessey-1 Property is situated. The location of the Easement Area as shown on such survey shall then constitute the Easement Area for all purposes under this Declaration. The cost to prepare and file of record any such survey shall be borne by the owner of the Hennessey-2 Property, unless the request for such survey follows the relocation of the Easement Area on the Hennessey-1 Property, in which event, the owner of the Hennessey-1 Property shall bear the cost of the survey and filing of the record of the same.

2. **Drainage Ditch.** If at any time the owner of the Hennessey-2 Property determines that a drainage ditch for storm water runoff may be necessary on the appropriate side(s) of the Road ("Drainage Ditches"), in order to better preserve the existing Road or any improved or reconstructed Road in the Easement Area, the owner of the Hennessey-2 Property shall have the right to construct upon the Hennessey-1 Property Drainage Ditches, of a design, kind and construction similar to the design, kind and construction of the drainage ditches for similar purposes within Reynolds County, Missouri, on one or both sides of the Road, in which event the Easement Area shall be expanded to include such additional land on each side of the Road as reasonably determined by the owner of the Hennessey-2 Property to be necessary for the construction, maintenance and repair of the Drainage Ditches. All costs incurred to construct the Drainage Ditches shall be borne by the Owner of the Hennessey-2 Property.

3. **Construction.** The owner of the Hennessey-2 Property shall have the right from time to time to construct, reconstruct, alter, modify, and improve the Road within the Easement Area, at the cost of the owner of the Hennessey-2 Property. All designs, materials and labor in connection with any construction of the Road and the Drainage Ditches, shall be in compliance with all Laws.
4. **Maintenance.** The owner of the Hennessey-2 Property shall have the right, but not the obligation, to maintain, repair, replace and/or remove the Road, unless such maintenance, repair, replacement or removal is required by Law, in which event the owner of the Hennessey-2 Property shall perform such maintenance, repair, replacement or removal pursuant to Law. Should the owner of the Hennessey-2 Property undertake to perform any maintenance, repairs, replacements or removal of the Road, all such work shall be performed in a good and workmanlike manner based upon recommendations of a civil engineer, or as required by Law. In the event the owner of the Hennessey-2 Property fails to perform any obligation under Law in the maintenance and repair of the Road on the Hennessey-1 Property, the owner of the Hennessey-1 Property may notify the owner of the Hennessey-2 Property; and in the event the owner of the Hennessey-2 Property does not perform such obligation within thirty (30) days after receipt of written notice from the owner of the Hennessey-1 Property, (or such additional time as may be necessary to perform such obligation due to weather conditions or other factors of force majeure, the owner of the Hennessey-1 Property shall have the right, but not the obligation, to perform such reasonable maintenance and repairs to the Road on the Hennessey-1 Property as owner of the Hennessey-1 Property reasonably determines is necessary, at the cost of the owner of the Hennessey-2 Property. Acknowledging that the rights and obligations under Section 3 (Construction) and this Section 4 (Maintenance) may require the owner of the Hennessey-2 Property to from time to time use additional portions of the Hennessey-1 Property to perform such work, the Easement Area shall be expanded during such times of construction and maintenance as is reasonably necessary for the purposes set forth in Section 3 and this Section 4 of this Declaration.

5. **Use of Road.** Use of the Road under the easement herein created is limited to the owner of the Hennessey-2 Property and said owner’s agents, contractors and invitees (collectively, "**Hennessey-2 Permits**") with the understanding that such permits shall include the owner of the Sohn Property and the owner of the Townsend Property, and their respective permits, as identified in and pursuant to the terms of separate agreements of even date herewith, between the Declarant and Sohn, and between the Declarant and Townsend, relative to the use of the Road. At no time shall the Road be used for access to any commercial activities on the Hennessey-2 Property (such as a commercial camp or fishing lake). The purpose of this Declaration is for the owners of the Hennessey-2 Property, and its successors, assigns, agents and invitees to use the Road between Hwy N and the Hennessey-2 Property. If at any time the owner of the Hennessey-2 Property obtains a public road or a separate easement from a public road to the Hennessey-2 Property which, in the determination of the owner of the Hennessey-2 Property is superior to the Easement created by this Declaration, the owners of the Hennessey-2 Property shall have the right to terminate this Agreement by written notice to the owner of the Hennessey-1 Property.

6. **Covenants to Run with Land.** All easements created and covenants contained in this Declaration shall run with the land against the Hennessey-1 Property for the benefit of owners of the Hennessey-2 Property and the Hennessey-2 Permits.

7. **Indemnification.** The owner of the Hennessey-2 Property agrees to indemnify, hold harmless and defend the owner of the Hennessey-1 Property and said owner’s, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of: (i) the use of the Easement Area by the owner of the Hennessey-2 Property or the Hennessey-2 Permits; or (ii) the breach by the owner of the Hennessey-2 Property of any term or provision to this Declaration. In connection therewith, so long as the owner of the Hennessey-2 Property is
using the Easement Area and has not abandoned such use, the owner of the Hennessey-2 Property shall carry liability insurance on the Easement Area, of such type and in such amounts as is reasonable and consistent with the type and amounts of liability insurance carried by property owners in Reynolds County, Missouri for property rights of this kind, insuring the owner of the Hennessey-2 Property and naming the owner of the Hennessey-1 Property as an additional insured, against all liability for injury to persons and damage to property arising from the use of the Road by the owner of the Hennessey-2 Property or any Hennessey-2 Permittees.

8. **Default.** The failure of either the owner of Hennessey-1 Property or the owner of Hennessey-2 Property to perform any material term of this Declaration shall constitute a default hereunder for which the non-defaulting owner shall have any and all remedies available at law or in equity; provided, however, before the non-defaulting owner may proceed with any such remedies, the non-defaulting owner shall deliver to the defaulting owner written notice of the failure of the defaulting owner; and the defaulting owner shall then have thirty (30) days (or such additional time as may be necessary to cure such failure due to weather conditions or other factors outside the reasonable control of the defaulting owner) from the receipt of such notice within which to cure the failure. The remedies permitted or available under this Declaration or at law or in equity shall be cumulative, and the commencement of any remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy. Notwithstanding the aforesaid, or anything to the contrary in this Declaration, at law or in equity, it is expressly agreed that no breach of this Declaration shall entitle any owner to cancel, rescind, or otherwise terminate the easement created by this instrument. If either owner brings an action to construe or enforce any term of this Declaration, the prevailing owner shall be entitled to recover its reasonable attorneys’ fees for the prosecution or defense of such action.

9. **Estoppel.** If requested by either the owner of Hennessey-2 Property or the owner of Hennessey-1 Property, the requested owner shall within thirty (30) days provide a written statement for the benefit of the requesting owner and its assignee or lender, stating that this Declaration is in full force and effect without modification or default, if the same is true; or, if not true, stating what manner the Declaration has been modified and/or the requesting owner is in default, and such other reasonable information as may be requested. If within said thirty (30) days the requested owner does not respond in writing to the requesting owner with respect to the aforesaid, then, absent manifest error, it shall be deemed that the information contained in the requesting owner’s notice is correct.

10. **Liens.** If any mechanics’ or materialmen’s liens are filed against the Hennessey-1 Property arising from any act or omission by the owner of Hennessey-2 Property or anyone claiming through said owner, the owner of Hennessey-2 Property shall hold the owner of Hennessey-1 Property harmless and defend the owner of Hennessey-1 Property from all damages, claims and expenses arising therefrom; and the owner of Hennessey-2 Property, after notice from the owner of Hennessey-1 Property, shall commence action to remove, satisfy or bond against any such lien within thirty (30) days after receipt of such notice. In the event that the owner of Hennessey-2 Property does not remove or bond against any lien within said thirty (30) day period, the owner of Hennessey-1 Property shall have the right to discharge such lien by any reasonable method, and the owner of Hennessey-2 Property shall reimburse the owner of Hennessey-1 Property for any and all expenses incurred by the owner of Hennessey-1 Property in connection therewith.
11. **Notices.** All notices that are required to be given under this Declaration shall be in writing, and delivered by either (a) United States registered or certified mail, return receipt requested, or (b) a reputable overnight commercial courier/delivery service; provided, however, no notices shall be required to be send when and whenever the Hennessey-1 Property and the Hennessey-2 Property are owned by the same person. All notices which are required to be sent shall be sent postage prepaid, addressed to the applicable owner at their last known address. Each owner may designate a different address by giving notice to the other owner at any other address as such owner may subsequently designate. Notices shall be deemed received upon the earlier of actual receipt or the date of the return receipt. If any such notices are refused, or if the owner to whom any such notice is sent has relocated without leaving a forwarding address, then the notice shall be deemed received on the date the notice-receipt is returned stating that the same was refused or is undeliverable at such address.

12. **Modification.** This Declaration shall not be modified or amended except pursuant to an instrument in writing executed and delivered on behalf of each of the owner of Hennessey-1 Property and the owner of Hennessey-2 Property; provided, that so long as the Hennessey-1 Property and the Hennessey-2 Property are owned by the same person, said singular party may amend this Declaration without restriction.

13. **No Rights in Public.** Nothing contained in this Declaration shall be deemed to be a gift or dedication of any portion of the Hennessey-1 Property to any owner or to the general public for any public use or purpose whatsoever; it being the intention of the Declarant that the easement created by this instrument is for the exclusive benefit of the owner of Hennessey-2 Property and the Hennessey-2 Permittees, and nothing in this Declaration, express or implied, shall confer upon any person other than the owner of Hennessey-2 Property or the Hennessey-2 Permittees any rights in the Hennessey-1 Property.

IN WITNESS WHEREOF, the Declarant has executed this Declaration as of the date first above written.

[The remainder of this document was intentionally left blank.]
DECLARANT:

Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased

By: Martia Durley
Its: EVP & Debt Counsel

STATE OF Missouri)
COUNTY OF St. Louis ) SS

On this 14th day of November, 2011, before me, Patricia A. Harrer, a Notary Public, personally appeared Martia Durley, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she is a duly authorized representative of Enterprise Trust, that he/she executed the same as his/her free act and deed in his/her capacity as an authorized representative of Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year above written.

(SEAL)

Patricia A. Harrer
Notary Public
Print Name: Patricia A. Harrer
My Commission Expires: 10/7/12

PATRICIA A. HARRER
NOTARY PUBLIC-NOTARY SEAL
STATE OF MISSOURI
ST. LOUIS COUNTY
MY COMMISSION EXPIRES 10/7/2012
COMMISSION #08414287
Exhibit “B”
HENNESSEY-1 Property
Legal Description

A part of the East Half of Lot 9 of the Northeast Quarter of Section 2, Township 33 North, Range 2 East, described as: Beginning at a point on the East boundary line of Missouri State Highway “N”, said point is 343 feet South and West of the Iron-Reynolds County line, thence South 59° East 225 feet, thence South 21° West 112 feet, thence North 59° West 225 feet to a point on the East side of right of way line of Missouri State Highway “N”, thence in a Northerly direction along East side of said right of way 112 feet to the point and place of beginning, containing .58 acre, more or less.
Exhibit “C”
HENNESSEY-2 Property
Legal Description

All of Lots 1, 2, 3, 4, 5, 6, 7, and 8 of the Northwest Quarter of Section 1, and Lots 5, 6, 7, 8, and 9 of the Northeast Quarter of Section 1, all being a part of Section One (1), Township Thirty-three (33) North, Range Two (2) East.
Appendix D:

Road Easement Agreement
Title of Document: Reciprocal Road Easement Agreement

Date of Document: November 14, 2011

Grantor: Marilyn Collins-Townsend, f/k/a Dorothy Marilyn Collins and Kenneth Townsend, wife and husband
140 Pine Street
Ironton, Missouri 63650

Grantee: Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased c/o Marti A. Gurley, SVP & Trust Counsel
8077 Maryland Avenue
St. Louis, Missouri 63105

Legal description: See Exhibits “B”, “C” and “D”
RECIPROCAL ROAD EASEMENT AGREEMENT

THIS RECIPROCAL ROAD EASEMENT ("Agreement") is made and entered into this 14th day of November, 2011, by and between Marilyn Collins-Townsend, f/k/a Dorothy Marilyn Collins and Kenneth Townsend, wife and husband (collectively "Townsend") and Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased ("Hennessey").

RECATALS

A. As of the date of this Agreement, Townsend is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "TOWNSEND" on the drawing attached hereto as Exhibit "A", and is legally described on Exhibit "B", attached hereto (the "Townsend Property").

B. As of the date of this Agreement, Hennessey is the owner in fee simple of that certain real property, fronting on the public road known as State Highway N ("Hwy N"), situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-ONE" on Exhibit "A", and is legally described on Exhibit "C", attached hereto (the "Hennessey-1 Property").

C. As of the date of this Agreement, Hennessey is the owner in fee simple of that certain real property situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-TWO" on Exhibit "A", and is legally described on Exhibit "D", attached hereto (the "Hennessey-2 Property").

D. As of the date of this Agreement, James Robert Sohn, Trustee of Trust dated June 13, 2000 ("Sohn") is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "SOHN" on Exhibit "A" (the "Sohn Property").

E. Hennessey desires a roadway for vehicular and pedestrian ingress, egress and travel between Hwy N, and the Hennessey-2 Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A" ("Road").

F. Townsend desires to grant to Hennessey a non-exclusive right of ingress, egress and travel across the Townsend Property subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, for and in consideration of Ten and 00/100 Dollars ($10.00) and other valuable consideration, receipt of which is hereby acknowledged, and in consideration of the premises and of the covenants herein contained, Townsend and Hennessey agree as follow:

1. Townsend Grant of Easement. Subject to the terms and conditions set forth in this Agreement, Townsend hereby grants to Hennessey, its successors and assigns, a perpetual non-exclusive right, privilege and easement ("Hennessey Easement") on, over and across a
portion of the Townsend Property, in the location generally depicted and labeled as the “NEW ROAD” on Exhibit “A”, as more particularly described as follows: a path or strip of land (“Hennessey Easement Area”), twenty (20) feet in width, or such greater width (i) as may be necessary for vehicles to reasonably use the Road to be constructed on the Hennessey Easement Area, or (ii) as required by any Federal, State or local law, rule or ordinance (collectively, “Law”). Townsend and Hennessey acknowledge that, as of the date of this Agreement, Hennessey (with the permission of Townsend) has staked the approximate center line of the Hennessey Easement Area. Townsend hereby approves the location of the Hennessey Easement Area, as staked. Hennessey shall not materially move any of the stakes which, as of the date of this Agreement, are in place without the written consent of Townsend, which consent shall not be unreasonably withheld. Upon the completion of the construction of the Road, Hennessey, at Hennessey’s cost, shall cause a survey to be made of the Road and the Hennessey Easement Area on the Townsend Property. Upon completion of such survey, a copy of such survey shall be attached to this Agreement as Exhibit “E”, and this Agreement shall be filed in the office of the Recorder of Deeds in the county where the Townsend Property, the Hennessey-1 Property and the Hennessey-2 Property are situated. The location of the Hennessey Easement Area as shown on such survey shall then constitute the Hennessey Easement Area for all purposes under this Agreement, as amended.

2. Hennessey Grant of Easement. Subject to the terms and conditions set forth in this Agreement, Hennessey hereby grants to Townsend, and their successors and assigns, including Teresa L. Jenkins, a non-exclusive right, privilege and easement (“Townsend Easement”) on, over and across the Hennessey-1 Property, and over and across the Sohn Property as a permittee of Hennessey under a separate agreement between Sohn and Hennessey, filed of record contemporaneously with the filing of record of this Agreement. The Townsend Easement shall be limited to the area constituting the Road located on the Hennessey-1 Property and on the Sohn Property, from and after the construction of said Road into perpetuity, or until this Agreement is otherwise terminated pursuant to the terms of this Agreement. The right of Townsend to use such Road shall be limited to those times, if any, in emergency situations as reasonably determined by Townsend, and at times if/when Townsend’s access to Hwy N from other roadways, easements or right of ways on the Townsend Property is restricted.

3. Drainage Ditch. Townsend and Hennessey agree that a drainage ditch for storm water runoff may be necessary on the appropriate side(s) of the Road (“Drainage Ditches”), in order to better preserve any Road constructed in the Hennessey Easement Area. Therefore, in addition to the Hennessey Easement Area described in Section 1 of this Agreement, the Hennessey Easement Area shall include such additional land on each side of such twenty (20) foot strip of land as from time to time is reasonably determined by Hennessey to be necessary for the construction, maintenance and repair of the Drainage Ditches.

4. Construction. Hennessey shall have the right to construct upon the Hennessey Easement Area a Road and Drainage Ditches of a design, kind and construction similar to the design, kind and construction of roads and drainage ditches for similar purposes within Reynolds County. All designs, materials and labor in connection with the construction of the Road and the Drainage Ditches, shall be in compliance with all Laws.
5. **Maintenance.** Hennessey shall have the right, but not the obligation, to maintain, repair, replace and/or remove the Road. Should Hennessey undertake to perform any maintenance, repairs, replacements or removal of the Road, all such work shall be performed in a good and workmanlike manner based upon recommendations of a civil engineer, or as required by Law. Townsend shall have no obligation to inspect or perform any maintenance, repair, replacement or removal of the Road. In the event Hennessey fails to perform any obligation of Hennessey in the maintenance and repair of the Road on the Townsend Property, Townsend may notify Hennessey; and in the event Hennessey does not perform such obligation within thirty (30) days after receipt of Townsend’s notice (or such additional time as may be necessary to perform such obligation due to weather conditions or other factors outside the reasonable control of Hennessey), Townsend shall have the right, but not the obligation, to perform such reasonable maintenance and repairs to the Road on the Townsend Property as Townsend reasonably determines is necessary, at Hennessey’s cost. Townsend and Hennessey acknowledge that Hennessey’s rights and obligations under Section 4 (Construction) will require Hennessey to use additional portions of the Townsend Property to perform such work; and Townsend and Hennessey also acknowledge that Hennessey’s rights and obligations under this Section 5 (Maintenance) may require Hennessey to from time to time use additional portions of the Townsend Property to perform such work. Therefore, in addition to the Hennessey Easement herein granted, Townsend hereby grants to Hennessey and to Hennessey’s agents and contractors a from time to time temporary non-exclusive easement on, over and across so much of the Townsend Property as is reasonably necessary for the purposes set forth in Section 4 and this Section 5 of this Agreement; (“Temporary Easement” and “Temporary Easement Area” as applicable), upon the following terms and conditions. Except in emergencies, Hennessey shall notify Townsend prior to the entering upon the Temporary Easement Area, and secure Townsend’s approval, which approval shall not be unreasonably withheld, conditioned or delayed. Hennessey’s notice shall set forth (a) Hennessey’s assessment of the problem which Hennessey believes requires the use of the Temporary Easement Area; (b) Hennessey’s proposed resolution of such problem; (c) Hennessey’s approximation of the number of days that Hennessey requires the Temporary Easement Area; and such other information as Townsend may reasonably request. In the event Townsend does not reply to Hennessey within fifteen (15) days after Townsend’s receipt of Hennessey’s notice, it shall be deemed that Townsend has approved Hennessey’s entry onto the Temporary Easement Area for the limited purpose and time set forth in Hennessey’s notice. In no event shall the Temporary Easement Area be greater than the parallel tract of land adjacent to the Road, extending a width of twenty (20) feet from the Road.

6. **Use of Road.** Use of the Road under this Agreement is limited to Hennessey and to Hennessey’s agents, contractors and invitees (collectively, “Hennessey’s Permittees”) with the understanding that, until the latter to die of Marilyn Collins-Townsend and Teresa L. Jenkins, the Hennessey-2 Property shall not be subdivided beyond five (5) home sites. Should the Hennessey-2 Property be subdivided, only the successors and assigns of each owner of each subdivided lot, and their respective agents, contractors and invitees, shall be allowed to use the Road. At no time shall the Road be used for access to any commercial activities on the Hennessey Property (such as a commercial camp or fishing lake). The purpose of this Agreement is for Hennessey, its successors, assigns, agents and invitees to obtain the right to use the Road between Hwy N and the Hennessey-2 Property. If at any time Hennessey obtains a
public road or a separate easement from a public road to the Hennessey-2 Property which, in the determination of Hennessey is superior to the Hennessey Easement created by this Agreement, Hennessey shall have the right to terminate this Agreement by written notice to Townsend.

7. **Covenants to Run with Land.** All easements and covenants contained in this Agreement shall run with the land: (a) against the Townsend Property for the benefit of Hennessey and Hennessey’s Permittees; and (b) against the Hennessey-2 Property for the benefit of Townsend.

8. **Indemnification.** Hennessey agrees to indemnify, hold harmless and defend Townsend and its successors, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of: (i) the use of the Hennessey Easement Area by Hennessey or Hennessey’s Permittees; or (ii) Hennessey’s breach under any term or provision to this Agreement. In connection therewith, so long as Hennessey is using the Hennessey Easement Area and has not abandoned such use, Hennessey, at Hennessey’s cost, shall carry liability insurance on the Hennessey Easement Area, of such type and in such amounts as is reasonable and consistent with the type and amounts of liability insurance carried by property owners in Reynolds County, Missouri for property rights of this kind, insuring Hennessey and naming Townsend as an additional insured, against all liability for injury to persons and damage to property arising from the use of the Road by Hennessey or Hennessey’s Permittees.

Townsend agrees to indemnify, hold harmless and defend Hennessey and its successors, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of: (i) the use of the Road by Townsend; or (ii) Townsend’s breach under any term or provision to this Agreement.

9. **Default.** The failure of Townsend or Hennessey to perform any material term of this Agreement shall constitute a default hereunder for which the non-defaulting party shall have any and all remedies available at law or in equity; provided, however, before the non-defaulting party may proceed with any such remedies, the non-defaulting party shall deliver to the defaulting party written notice of the failure of the defaulting party; and the defaulting party shall then have thirty (30) days (or such additional time as may be necessary to cure such failure due to weather conditions or other factors outside the reasonable control of the defaulting party) from the receipt of such notice within which to cure the failure. The remedies permitted or available under this Agreement or at law or in equity shall be cumulative, and the commencement of any remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy. Notwithstanding the aforesaid, or anything to the contrary in this Agreement, at law or in equity, it is expressly agreed that no breach of this Agreement shall entitle any party to cancel, rescind, or otherwise terminate this Agreement. However, such limitation shall not affect in any manner any other rights or remedies which any party may have hereunder by reason of any such default. If either party brings an action to construe or enforce any term of this Agreement, the prevailing party shall be entitled to recover its reasonable attorneys’ fees for the prosecution or defense of such action.
10. **Estoppe**l. If requested by either Hennessey or Townsend, the requested party shall within thirty (30) days provide a written statement for the benefit of the requesting party and its assignee or lender, stating that this Agreement is in full force and effect without modification or default, if the same is true; or, if not true, stating what manner the Agreement has been modified and/or the requesting party is in default, and such other reasonable information as may be requested. If within said thirty (30) days the requested party does not respond in writing to the requesting party with respect to the aforesaid, then, absent manifest error, it shall be deemed that the information contained in the requesting party’s notice is correct.

11. **Liens.** If any mechanics’ or materialmens’ liens are filed against the Hennessey Easement Area arising from any act or omission by Hennessey or anyone claiming through Hennessey, Hennessey shall hold Townsend harmless and defend Townsend from all damages, claims and expenses arising therefrom; and Hennessey, after notice from Townsend, shall commence action to remove, satisfy or bond against any such lien within thirty (30) days after Hennessey’s receipt of such notice. In the event that Hennessey does not remove or bond against any lien within said thirty (30) day period, Townsend shall have the right to discharge such lien by any reasonable method, and Hennessey shall reimburse Townsend for any and all expenses incurred by Townsend in connection therewith.

12. **Notices.** All notices that are required to be given under this Agreement shall be in writing, and delivered by either (a) United States registered or certified mail, return receipt requested, or (b) a reputable overnight commercial courier/delivery service. All notices to Townsend and Hennessey shall be sent postage prepaid, addressed to the parties hereto at their respective addresses set forth below. Either party may designate a different address by giving notice to the other party at the address set forth herein, or at any other address as the parties may subsequently designate. Notices shall be deemed received upon the earlier of actual receipt or the date of the return receipt. If any such notices are refused, or if the party to whom any such notice is sent has relocated without leaving a forwarding address, then the notice shall be deemed received on the date the notice-receipt is returned stating that the same was refused or is undeliverable at such address. Said addresses for notices are to be as follows:

   **If to Hennessey:**  
   Enterprise Trust, in its capacity as the Personal  
   Representative of the Estate of Thomas E.  
   Hennessey, Jr., deceased  
   c/o Rob Arthur, Vice President  
   8077 Maryland Avenue  
   St. Louis, Missouri 63105

   **If to Townsend:**  
   Marilyn Collins-Townsend  
   140 Pine Street  
   Ironton, Missouri 63650

13. **Entire Agreement; Modification.** This Agreement constitutes the entire agreement between Townsend and Hennessey relating to the Hennessey’s Easement and the
Townsend Easement. This Agreement shall not be modified or amended except pursuant to an instrument in writing executed and delivered on behalf of each of Townsend and Hennessey.

14. **No Rights in Public.** Nothing contained in this Agreement shall be deemed to be a gift or dedication of any portion of the Property to any party or to the general public for any public use or purpose whatsoever; it being the intention of the parties hereto that: (a) with respect to the Hennessey Easement, this Agreement is for the exclusive benefit of Hennessey and Hennessey’s Permittees, and nothing in this Agreement, express or implied, shall confer upon any person other than Hennessey or Hennessey’s Permittees any rights in the Townsend Property; and (b) with respect to Townsend Easement, this Agreement is for the exclusive benefit of Townsend, and nothing in this Agreement, express or implied, shall confer upon any person other than Townsend any rights in the Hennessey-1 Property or the Hennessey-2 Property.

15. **Townsend and Hennessey’s Representations.** Townsend and Hennessey hereby represent and warrant to each other that there are no current liens, mortgages, or other encumbrances on their respective properties that would prevent this Agreement from being executed and enforced, the Road being constructed, or otherwise prevent the parties from performing their obligations hereunder.

16. **Closing and Contingencies.** Townsend and Hennessey recognize and understand that, while each of them fully intends to be bound by this Agreement and perform their respective obligations hereunder, this Agreement is subject to the following contingencies.

   a. Approval of this Agreement by the Probate Court of Reynolds County, as Hennessey is a supervised personal representative in the Estate of Thomas E. Hennessey, Jr., Cause No. 10RE-PR00016.

   b. Approval of the title to the Townsend Property by Hennessey.

In the event both of the above contingencies are not satisfied or waived within sixty (60) days of the date of the Agreement, this Agreement shall be null and void upon the written election of Hennessey. All closing costs shall be borne by Hennessey. Hennessey shall have the right to record this Agreement, at Hennessey’s cost, in the Recorder of Deeds office in Reynolds County. Each party shall be responsible for their own attorney’s fees in connection with this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

TOWNSEND:

Marilyn Collins-Townsend

Kenneth Townsend
On this 3rd day of November, 2011, before me, Jamie L. Inman, a Notary Public, personally appeared Marilyn Collins-Townsend and Kenneth Townsend, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year first above written.

(SEAL)

Jamie L. Inman
Notary Public
Print Name: Jamie L. Inman
My Commission Expires: 11-16-14
HENNESSEY:

Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased

By:  

Its:  

STATE OF  

COUNTY OF  

On this ___ day of ___ , 2011, before me, ___ , a Notary Public, personally appeared ___ , to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she is a duly authorized representative of Enterprise Trust, that he/she executed the same as his/her free act and deed in his/her capacity as an authorized representative of Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year above written.

(SEAL)

Notary Public  
Print Name:  
My Commission Expires:  

PATRICIA A. HARRER  
NOTARY PUBLIC-NOTARY SEAL  
STATE OF MISSOURI  
ST. LOUIS COUNTY  
MY COMMISSION EXPIRES 10/7/2012  
COMMISSION #08414297
Exhibit "B"

TOWNSEND Property

Legal Description

A tract of land situated in the County of Reynolds and State of Missouri, lying in part of Lot 9 of the Northwest Quarter of Fractional Section 1, Township 33 North, Range 2 East, of the Fifth Principal Meridian, described as follows: Commencing at a found 1/2 inch pin in stonepile, marking the Northwest corner of said Section, said point also being the Northwest corner of Lot 9 of said Section, thence along and with the West line of said Section South 05° 29' 45" East 771.07 feet to a set 5/8" pin with cap the POINT OF BEGINNING of the tract herein described; thence leaving said West line North 88° 36' 25" East 2863.64 feet to a set 5/8" pin with cap, thence South 04° 54' 28" East 763.08 feet to a found 5/8" pin in stonepile, thence South 88° 36' 25" West 2855.79 feet to a found 2" pipe on said West line, thence along and with said West line North 05° 29' 45" West 763.60 feet to the POINT OF BEGINNING, containing 50.00 acres more or less, as surveyed by Ruble Land Surveying.

Also, an easement for the purpose of ingress and egress, 20.00 feet in width, lying 10.00 feet to both sides of a centerline described as follows: Commencing at a found 1/2 inch pin in stonepile, marking the Northwest corner of Fractional Section 1, Township 33 North, Range 2 East, of the Fifth Principal Meridian, Reynolds County, Missouri, said point also being the Northwest corner of Lot 9 of said Section, thence along and with the West line of said Section South 05° 29' 45" East 771.07 feet to a set 5/8" pin with cap, thence leaving said West line North 88° 36' 25" East 2285.22 feet to the POINT OF BEGINNING of the easement herein described; thence North 18° 45' 47" West 92.34 feet, North 44° 13' 43" West 493.51 feet, North 72° 19' 46" West 271.89 feet, North 47° 20' 53" West 284.91 feet, North 32° 02' 25" West 756.15 feet, North 19° 24' 23" East 199.23 feet, North 65° 10' 27" East 324.56 feet, North 52° 47' 23" East 337.19 feet, North 51° 17' 10" East 223.85 feet, North 37° 19' 18" East 128.41 feet, North 23° 01' 20" East 63.90 feet, North 14° 37' 07" East 200.50 feet, North 09° 47' 44" East 101.26 feet, North 02° 55' 31" East 141.07 feet, North 00° 58' 17" West 133.48 feet to a point on the South right-of-way line of State Route "N". Subject to Easements, conditions, restrictions and reservations of record or not of record.
Exhibit “C”
HENNESSEY-1 Property
Legal Description

A part of the East Half of Lot 9 of the Northeast Quarter of Section 2, Township 33 North, Range 2 East, described as: Beginning at a point on the East boundary line of Missouri State Highway “N”, said point is 343 feet South and West of the Iron-Reynolds County line, thence South 59º East 225 feet, thence South 21º West 112 feet, thence North 59º West 225 feet to a point on the East side of right of way line of Missouri State Highway “N”, thence in a Northerly direction along East side of said right of way 112 feet to the point and place of beginning, containing .58 acre, more or less.
Exhibit “D”
HENNESSEY-2 Property
Legal Description

All of Lots 1, 2, 3, 4, 5, 6, 7, and 8 of the Northwest Quarter of Section 1, and Lots 5, 6, 7, 8, and 9 of the Northeast Quarter of Section 1, all being a part of Section One (1), Township Thirty-three (33) North, Range Two (2) East.
Exhibit "E"
Survey

[TO BE INSERTED]
Appendix E:

Declaration of Easement
Title of Document: Declaration of Easement

Date of Document: November 14, 2011

Declarant: Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased
c/o Marti A. Gurley, SVP & Trust Counsel
8077 Maryland Avenue
St. Louis, Missouri 63105

Legal description: See Exhibits “B” and “C”
DECLARATION OF EASEMENT AGREEMENT

THIS DECLARATION EASEMENT ("Declaration") is made and entered into this 14th day of November, 2011, by Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased ("Declarant").

RECITALS

A. As of the date of this Declaration, Declarant is the owner in fee simple of that certain real property, fronting on the public road known as State Highway N ("Hwy N"), situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-ONE" on Exhibit "A", and is legally described on Exhibit "B", attached hereto (the "Hennessey-1 Property").

B. As of the date of this Declaration, Declarant is also the owner in fee simple of that certain real property situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-TWO" on Exhibit "A", and is legally described on Exhibit "C", attached hereto (the "Hennessey-2 Property").

C. As of the date of this Declaration, James R. Sohn, Trustee of Trust dated June 13, 2000 ("Sohn") is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "SOHN" on Exhibit "A" (the "Sohn Property").

D. As of the date of this Declaration, Marilyn Collins-Townsend, a married person, is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "TOWNSEND" on the drawing attached hereto as Exhibit "A" (the "Townsend Property").

E. Declarant desires a roadway for vehicular and pedestrian ingress, egress and travel between Hwy N, and the Hennessey-2 Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A" ("Road").

F. Contemporaneously with the execution and filing of record of this Declaration, there was or shall be filed of record other agreements of even date herewith, which grant to Declarant certain easements on, over and across the Sohn Property and the Townsend Property so as to allow Declarant ingress and egress between Hwy. N and the Hennessey-2 Property.

G. The purpose of this Declaration is to create an easement on the Hennessey-1 Property for the benefit of the from time to time owner of the Hennessey-2 Property, that will allow the from time to time owner of the Hennessey-2 Property ingress and egress on, over and across the Hennessey-1 Property, in the event the from time to time owner of Hennessey-1 Property is or becomes different than the from time to time owner of the Hennessey-2 Property. It is intended that the easement created by this instrument remain in place and be senior to all liens and encumbrances, now of record and hereafter of record, so that said easement will run with the land, when and if the current owner of the Hennessey-1 Property sells, leases, trades, assigns, pledges, mortgages or otherwise in any manner transfers, encumbrances or hypothecates the Hennessey-1 Property or any interest therein.
NOW, THEREFORE, Declarant does hereby create and establish the easement described herein, upon the following terms and conditions.

1. **Creation of Easement.** Subject to the terms and conditions set forth in this Declaration, Declarant hereby establishes and creates, a perpetual non-exclusive right, privilege and easement ("Easement") on, over and across a portion of the Hennessey-1 Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A", as more particularly described as follows: a path or strip of land ("Easement Area"), twenty (20) feet in width, or such greater width (i) as may be necessary for vehicles to reasonably use the Easement Area, or (ii) as required by any Federal, State or local law, rule or ordinance (collectively, "Law"), where there exists, as of the date of the Declaration, the existing road on the Hennessey-1 Property, constituting the first portion of the Road from Hwy. N to/from the Hennessey-2 Property. The owner of the Hennessey-1 Property shall have the right from time to time to relocate the Easement Area to another location on the Hennessey-1 Property, provided (a) the relocated Easement Area is of the aforesaid width (b) there is construction on such relocated Easement Area a road for vehicular use of a type and quality at least as good as the road being replaced; and (c) such relocated road connects Hwy N to the portion of the Road located on the Sohn Property for vehicular use; and further provided, the relocated road is constructed prior to the abandonment of the road being replaced, so at all times there is free and unobstructed access between Hwy N and the portion of the Road on the Sohn Property. At the from time to time request of the owner of the Hennessey-2 Property, the owner of the Hennessey-1 Property shall cause a survey to be made of the Road and the Easement Area on the Hennessey-1 Property. Upon completion of such survey, a copy of such survey shall be attached to this Declaration as an exhibit, and this Declaration shall be recorded in the office of the Recorder of Deeds in the county where the Hennessey-1 Property is situated. The location of the Easement Area as shown on such survey shall then constitute the Easement Area for all purposes under this Declaration. The cost to prepare and file of record any such survey shall be borne by the owner of the Hennessey-2 Property, unless the request for such survey follows the relocation of the Easement Area on the Hennessey-1 Property, in which event, the owner of the Hennessey-1 Property shall bear the cost of the survey and filing of the record of the same.

2. **Drainage Ditch.** If at any time the owner of the Hennessey-2 Property determines that a drainage ditch for storm water runoff may be necessary on the appropriate side(s) of the Road ("Drainage Ditches"), in order to better preserve the existing Road or any improved or reconstructed Road in the Easement Area, the owner of the Hennessey-2 Property shall have the right to construct upon the Hennessey-1 Property Drainage Ditches, of a design, kind and construction similar to the design, kind and construction of the drainage ditches for similar purposes within Reynolds County, Missouri, on one or both sides of the Road, in which event the Easement Area shall be expanded to include such additional land on each side of the Road as reasonably determined by the owner of the Hennessey-2 Property to be necessary for the construction, maintenance and repair of the Drainage Ditches. All costs incurred to construct the Drainage Ditches shall be borne by the Owner of the Hennessey-2 Property.

3. **Construction.** The owner of the Hennessey-2 Property shall have the right from time to time to construct, reconstruct, alter, modify, and improve the Road within the Easement Area, at the cost of the owner of the Hennessey-2 Property. All designs, materials and labor in connection with any construction of the Road and the Drainage Ditches, shall be in compliance with all Laws.
4. **Maintenance.** The owner of the Hennessey-2 Property shall have the right, but not the obligation, to maintain, repair, replace and/or remove the Road, unless such maintenance, repair, replacement or removal is required by Law, in which event the owner of the Hennessey-2 Property shall perform such maintenance, repair, replacement or removal pursuant to Law. Should the owner of the Hennessey-2 Property undertake to perform any maintenance, repairs, replacements or removal of the Road, all such work shall be performed in a good and workmanlike manner based upon recommendations of a civil engineer, or as required by Law. In the event the owner of the Hennessey-2 Property fails to perform any obligation under Law in the maintenance and repair of the Road on the Hennessey-1 Property, the owner of the Hennessey-1 Property may notify the owner of the Hennessey-2 Property; and in the event the owner of the Hennessey-2 Property does not perform such obligation within thirty (30) days after receipt of written notice from the owner of the Hennessey-1 Property, (or such additional time as may be necessary to perform such obligation due to weather conditions or other factors of force majeure), the owner of the Hennessey-1 Property shall have the right, but not the obligation, to perform such reasonable maintenance and repairs to the Road on the Hennessey-1 Property as owner of the Hennessey-1 Property reasonably determines is necessary, at the cost of the owner of the Hennessey-2 Property. Acknowledging that the rights and obligations under Section 3 (Construction) and this Section 4 (Maintenance) may require the owner of the Hennessey-2 Property to from time to time use additional portions of the Hennessey-1 Property to perform such work, the Easement Area shall be expanded during such times of construction and maintenance as is reasonably necessary for the purposes set forth in Section 3 and this Section 4 of this Declaration.

5. **Use of Road.** Use of the Road under the easement herein created is limited to the owner of the Hennessey-2 Property and said owner’s agents, contractors and invitees (collectively, "Hennessey-2 Permittees") with the understanding that such permittees shall include the owner of the Sohn Property and the owner of the Townsend Property, and their respective permittees, as identified in and pursuant to the terms of separate agreements of even date herewith, between the Declarant and Sohn, and between the Declarant and Townsend, relative to the use of the Road. At no time shall the Road be used for access to any commercial activities on the Hennessey-2 Property (such as a commercial camp or fishing lake). The purpose of this Declaration is for the owners of the Hennessey-2 Property, and its successors, assigns, agents and invitees to use the Road between Hwy N and the Hennessey-2 Property. If at any time the owner of the Hennessey-2 Property obtains a public road or a separate easement from a public road to the Hennessey-2 Property which, in the determination of the owner of the Hennessey-2 Property is superior to the Easement created by this Declaration, the owners of the Hennessey-2 Property shall have the right to terminate this Agreement by written notice to the owner of the Hennessey-1 Property.

6. **Covenants to Run with Land.** All easements created and covenants contained in this Declaration shall run with the land against the Hennessey-1 Property for the benefit of owners of the Hennessey-2 Property and the Hennessey-2 Permittees.

7. **Indemnification.** The owner of the Hennessey-2 Property agrees to indemnify, hold harmless and defend the owner of the Hennessey-1 Property and said owner’s, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of: (i) the use of the Easement Area by the owner of the Hennessey-2 Property or the Hennessey-2 Permittees; or (ii) the breach by the owner of the Hennessey-2 Property of any term or provision to this Declaration. In connection therewith, so long as the owner of the Hennessey-2 Property is
using the Easement Area and has not abandoned such use, the owner of the Hennessey-2 Property shall carry liability insurance on the Easement Area, of such type and in such amounts as is reasonable and consistent with the type and amounts of liability insurance carried by property owners in Reynolds County, Missouri for property rights of this kind, insuring the owner of the Hennessey-2 Property and naming the owner of the Hennessey-1 Property as an additional insured, against all liability for injury to persons and damage to property arising from the use of the Road by the owner of the Hennessey-2 Property or any Hennessey-2 Permittees.

8. **Default.** The failure of either the owner of Hennessey-1 Property or the owner of Hennessey-2 Property to perform any material term of this Declaration shall constitute a default hereunder for which the non-defaulting owner shall have any and all remedies available at law or in equity; provided, however, before the non-defaulting owner may proceed with any such remedies, the non-defaulting owner shall deliver to the defaulting owner written notice of the failure of the defaulting owner; and the defaulting owner shall then have thirty (30) days (or such additional time as may be necessary to cure such failure due to weather conditions or other factors outside the reasonable control of the defaulting owner) from the receipt of such notice within which to cure the failure. The remedies permitted or available under this Declaration or at law or in equity shall be cumulative, and the commencement of any remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy. Notwithstanding the aforesaid, or anything to the contrary in this Declaration, at law or in equity, it is expressly agreed that no breach of this Declaration shall entitle any owner to cancel, rescind, or otherwise terminate the easement created by this instrument. If either owner brings an action to construe or enforce any term of this Declaration, the prevailing owner shall be entitled to recover its reasonable attorneys’ fees for the prosecution or defense of such action.

9. **Estoppel.** If requested by either the owner of Hennessey-2 Property or the owner of Hennessey-1 Property, the requested owner shall within thirty (30) days provide a written statement for the benefit of the requesting owner and its assignee or lender, stating that this Declaration is in full force and effect without modification or default, if the same is true; or, if not true, stating what manner the Declaration has been modified and/or the requesting owner is in default, and such other reasonable information as may be requested. If within said thirty (30) days the requested owner does not respond in writing to the requesting owner with respect to the aforesaid, then, absent manifest error, it shall be deemed that the information contained in the requesting owner’s notice is correct.

10. **Liens.** If any mechanics’ or materialmens’ liens are filed against the Hennessey-1 Property arising from any act or omission by the owner of Hennessey-2 Property or anyone claiming through said owner, the owner of Hennessey-2 Property shall hold the owner of Hennessey-1 Property harmless and defend the owner of Hennessey-1 Property from all damages, claims and expenses arising therefrom; and the owner of Hennessey-2 Property, after notice from the owner of Hennessey-1 Property, shall commence action to remove, satisfy or bond against any such lien within thirty (30) days after receipt of such notice. In the event that the owner of Hennessey-2 Property does not remove or bond against any lien within said thirty (30) day period, the owner of Hennessey-1 Property shall have the right to discharge such lien by any reasonable method, and the owner of Hennessey-2 Property shall reimburse the owner of Hennessey-1 Property for any and all expenses incurred by the owner of Hennessey-1 Property in connection therewith.
11. **Notices.** All notices that are required to be given under this Declaration shall be in writing, and delivered by either (a) United States registered or certified mail, return receipt requested, or (b) a reputable overnight commercial courier/delivery service; provided, however, no notices shall be required to be send when and whenever the Hennessey-1 Property and the Hennessey-2 Property are owned by the same person. All notices which are required to be sent shall be sent postage prepaid, addressed to the applicable owner at their last known address. Each owner may designate a different address by giving notice to the other owner at any other address as such owner may subsequently designate. Notices shall be deemed received upon the earlier of actual receipt or the date of the return receipt. If any such notices are refused, or if the owner to whom any such notice is sent has relocated without leaving a forwarding address, then the notice shall be deemed received on the date the notice-receipt is returned stating that the same was refused or is undeliverable at such address.

12. **Modification.** This Declaration shall not be modified or amended except pursuant to an instrument in writing executed and delivered on behalf of each of the owner of Hennessey-1 Property and the owner of Hennessey-2 Property; provided, that so long as the Hennessey-1 Property and the Hennessey-2 Property are owned by the same person, said singular party may amend this Declaration without restriction.

13. **No Rights in Public.** Nothing contained in this Declaration shall be deemed to be a gift or dedication of any portion of the Hennessey-1 Property to any owner or to the general public for any public use or purpose whatsoever; it being the intention of the Declarant that the easement created by this instrument is for the exclusive benefit of the owner of Hennessey-2 Property and the Hennessey-2 Permittees, and nothing in this Declaration, express or implied, shall confer upon any person other than the owner of Hennessey-2 Property or the Hennessey-2 Permittees any rights in the Hennessey-1 Property.

IN WITNESS WHEREOF, the Declarant has executed this Declaration as of the date first above written.

[The remainder of this document was intentionally left blank.]
DECLARANT:

Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased

By: **Martia Durley**

Its: **V.P. & Trust Counsel**

STATE OF **Missouri** SS

COUNTY OF **St. Louis**

On this **14th** day of **November** 2011, before me, **Patricia A. Hurren**, a Notary Public, personally appeared **Martia A. Durley**, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she is a duly authorized representative of Enterprise Trust, that he/she executed the same as his/her free act and deed in his/her capacity as an authorized representative of Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year above written.

(SEAL)

**Patricia A. Hurren**

Notary Public
Print Name: **Patricia A. Hurren**

My Commission Expires: **10/1/12**
Exhibit "B"
HENNESSEY-1 Property
Legal Description

A part of the East Half of Lot 9 of the Northeast Quarter of Section 2, Township 33 North, Range 2 East, described as: Beginning at a point on the East boundary line of Missouri State Highway "N", said point is 343 feet South and West of the Iron-Reynolds County line, thence South 59° East 225 feet, thence South 21° West 112 feet, thence North 59° West 225 feet to a point on the East side of right of way line of Missouri State Highway "N", thence in a Northerly direction along East side of said right of way 112 feet to the point and place of beginning, containing .58 acre, more or less.
Exhibit "C"
HENNESSEY-2 Property
Legal Description

All of Lots 1, 2, 3, 4, 5, 6, 7, and 8 of the Northwest Quarter of Section 1, and Lots 5, 6, 7, 8, and 9 of the Northeast Quarter of Section 1, all being a part of Section One (1), Township Thirty-three (33) North, Range Two (2) East.
Appendix F:

Sohn Easement
Title of Document: Road Easement Agreement

Date of Document: November 14, 2011

Grantor: James Robert Sohn, Trustee of Trust Agreement, u/t/a dated June 13, 2000
1519 Big Bill Road
Arnold, Missouri 63010

Grantee: Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased
c/o Marti A. Gurley, SVP & Trust Counsel
8077 Maryland Avenue
St. Louis, Missouri 63105

Legal description: See Exhibits “B”, “C” and “D”
ROAD EASEMENT AGREEMENT

THIS ROAD EASEMENT ("Agreement") is made and entered into this 14th day of November, 2011, by and between James Robert Sohn, Trustee of Trust Agreement, u/t/a dated June 13, 2000 ("Grantor") and Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased ("Grantee").

RECITALS

A. As of the date of this Agreement, Grantor is the owner in fee simple of that certain real property, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "SOHN" on the drawing attached hereto as Exhibit "A", and is legally described on Exhibit "B", attached hereto (the "Grantor Property").

B. As of the date of this Agreement, Grantee is the owner in fee simple of that certain real property, fronting on the public road known as Highway N, situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-ONE" on Exhibit "A", and is legally described on Exhibit "C" attached hereto (the "Grantee-1 Property").

C. As of the date of this Agreement, Grantee is the owner in fee simple of that certain real property situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "HENNESSEY-TWO" on Exhibit "A", and is legally described on Exhibit "D", attached hereto (the "Grantee-2 Property").

D. As of the date of this Agreement, Marilyn Collins-Townsend, a married person ("Townsend") is the owner in fee simple of that certain real property situated in Reynolds County, State of Missouri, which parcel of property is generally depicted as the parcel labeled "TOWNSEND" on Exhibit "A" (the "Townsend Property").

E. Grantee desires a roadway for vehicular and pedestrian ingress, egress and travel between Hwy N, and the Grantee-2 Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A" ("Road").

F. Grantor desires to grant to Grantee a non-exclusive right of ingress, egress and travel across the Grantor Property subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, for and in consideration of Ten and 00/100 Dollars ($10.00) and other valuable consideration, receipt of which is hereby acknowledged, and in consideration of the premises and of the covenants herein contained, Grantor and Grantee agree as follow:

1. Grant of Easement. Subject to the terms and conditions set forth in this Agreement, Grantor hereby grants to Grantee, its successors and assigns a perpetual non-exclusive right, privilege and easement ("Easement") on, over and across a portion of the Grantor Property, in the location generally depicted and labeled as the "NEW ROAD" on Exhibit "A", as more particularly described as follows: a path or strip of land ("Easement Area"), approximately fifteen (15) feet in width, or such greater width (i) as may be necessary
for vehicles to reasonably use the Road to be constructed on the Easement Area, or (ii) as required by any Federal, State or local law, rule or ordinance (collectively, “Law”). Grantor and Grantee acknowledge that, as of the date of this Agreement, Grantee (with the permission of Grantor) has staked the approximate center line of the Easement Area. Grantor hereby approves the location of the Easement Area, as staked. Grantee shall not materially move any of the stakes which, as of the date of this Agreement, are in place, without the written consent of Grantor, which consent shall not be unreasonably withheld. Unless Grantor objects to the exact location of the Easement Area at the time the Road is being constructed, it shall be deemed that Grantor has approved the location of the Easement Area, and such location shall be final and binding upon Grantor and Grantee for all purposes under this Agreement.

2. **Drainage Ditch.** Grantor and Grantee agree that a drainage ditch for storm water runoff may be necessary on each side of the Road (“Drainage Ditches”), in order to better preserve any Road constructed in the Easement Area. Therefore, in addition to the Easement Area described in Section 1 of this Agreement, the Easement Area shall include such additional land on each side of such fifteen (15) foot strip of land as from time to time is reasonably determined by Grantee to be necessary for the construction, maintenance and repair of the Drainage Ditches.

3. **Construction.** Grantee shall have the right to construct upon the Easement Area a Road and Drainage Ditches of a design, kind and construction similar to the design, kind and construction of roads and drainage ditches for similar purposes within Reynolds County. All designs, materials and labor in connection with the construction of the Road and the Drainage Ditches, shall be in compliance with all Laws.

4. **Woodcutting License.** So long as this Agreement is in full force and effect, and so long as James R. Sohn and/or his son, Stephen Dewayne Sohn (singularly or collectively, as applicable, “Sohn”), is alive, Grantee hereby grants to Sohn, and to no other persons, a license to from time to time enter upon a designated portion of the Grantee-2 Property for the sole purpose of harvesting downed trees for firewood for personal use by Sohn, subject to the following terms and conditions. The designated portion of the Grantee-2 Property (“License Area”) is defined as the area of the Grantee-2 Property, along the old road generally depicted and labeled as “OLD ROAD” on Exhibit “A”, and extending on each side of the OLD ROAD a distance to the nearest hilltop, but not to exceed 500 linear feet in each direction perpendicular from the OLD ROAD. The license herein granted is to cut and remove from the Grantee-2 Property trees that are dead and downed by natural causes; in no event shall Sohn cut, kill or injure living trees. Sohn shall remove all trash brought onto the Grantee-2 Property or generated by Sohn in connection with the license herein granted, each day during any period that Sohn is cutting and removing trees from the Grantee-2 Property. For purposes of this license, trash shall not include wood chips, branches or other portions of cut trees. Grantee makes no representations regarding the Grantee-2 Property or any trees or conditions thereof or thereon; and Sohn, for itself and anyone assisting Sohn from time to time in connection with Sohn’s rights under such license (collectively “Sohn’s Permittees”) hereby waives all claims against Grantee for any injuries to persons or damage to property of Sohn, Sohn’s Permittees or of third persons occurring on the Grantee-2 Property. Further, Sohn agrees to indemnify and defend Grantee and its successors, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of:
(i) the use of the License Area by Sohn or Sohn’s Permittees; or (ii) Grantor’s breach under any term or provision under such license or this Agreement. If so required or recommended by Grantee’s insurance carrier, Grantor, at Grantor’s cost, shall carry liability insurance on the License Area, of such type and in such amounts as is reasonable and consistent with the type and amounts of liability insurance carried by property owners in Reynolds County, Missouri for license rights of this kind, insuring Grantor and naming Grantee as an additional insured, against all liability for injury to persons and damage to property arising from the use of such license by Sohn or Sohn’s Permittees.

5. **Gate.** Upon Grantee’s completion of the construction of the Road, Grantee shall construct a ten (10) foot wide gate and posts, at the location where the Road crosses the existing power line easement, which easement is generally depicted and labeled as the “POWER LINE EASEMENT” on Exhibit “A”; such gate to be constructed on and running parallel to the south side of the Road, across the power line easement, for the purpose of restricting persons, other than Grantor and the Grantor’s agents, contractors and invitees (collectively, “Grantor’s Permittees”), and the grantees of record of said easement from using said power line easement on the Grantor Property. In addition to the aforesaid gate to be constructed across the power line easement pursuant to the immediately preceding sentence, Grantee shall construct a second gate (ten foot wide with posts) at the location where the Road crosses the existing all terrain vehicle trail the location of which trail is generally depicted and labeled as “ATV TRAIL” on Exhibit “A” and runs generally from the principal residence of Grantor, generally depicted and labeled as the SOHN HOUSE” on Exhibit “A”, to the northeast corner of the Grantor Property; such gate to be constructed on and running parallel to the south side of the Road, across the ATV trail, for the purpose of restricting persons, other than Grantor and Grantor’s Permittees, from using the ATV trail on the Grantor Property. The location of the Gate shall be reasonably determined by Grantor, subject to Grantee’s approval, which approval shall not be unreasonably withheld. Grantor shall have the right to place a lock on the gates herein referenced.

6. **Maintenance.** Grantee shall have the right, but not the obligation, to maintain, repair, repair, replace or remove the Road, unless any such maintenance, repair, replacement or removal is required by Law, in which event Grantor shall promptly comply with such Law. Should Grantee undertake to perform any maintenance, repairs, replacements or removal of the Road on the Sohn Property, all such work shall be performed in a good and workmanlike manner based upon recommendations of a civil engineer, or as required by Law. Should Grantee elect (or is required by Law) to make any maintenance, repair, replacement or removal of the Road, all costs associated with such maintenance, repair, replacement or removal shall be solely borne by Grantee, unless the cause for such maintenance, repair, replacement or removal is due to the willful misconduct or negligence of Grantor or any of Grantor’s Permittees, in which event Grantor shall be liable for such costs. In the event Grantee fails perform any obligation of Grantee in the maintenance and repair of the Road, Grantor may notify Grantee; and in the event Grantee does not perform such obligation within thirty (30) days after receipt of Grantor’s notice (or such additional time as may be necessary to perform such obligation due to weather conditions or other factors outside the reasonable control of Grantee), Grantor shall have the right, but not the obligation, to perform such reasonable maintenance and repairs to the Road as Grantor reasonably determines is necessary, at Grantee’s cost. Grantor and Grantee acknowledge that Grantor’s rights and obligations under Section 3 (Construction) and this
Section 5 (Maintenance) will require Grantee to from time to time use additional portions of the Grantor Property to perform such work. Therefore, in addition to the Easement herein granted, Grantor hereby grants to Grantee and to Grantee’s agents and contractors a from time to time temporary non-exclusive easement on, over and across so much of Grantor’s Property as is reasonably necessary for the purposes set forth in Section 3 and this Section 5 of this Agreement. Grantee shall be and remain liable for any actual, monetary damages to Grantor Property outside the Easement Area caused by Grantee or any of Grantee’s agents, contractors or invitees ("Grantee’s Permittees"); provided any of Grantee’s agents or contractors; provided however, Grantee shall have the right to remove tree limbs, roots and whole trees outside the Easement Area if in Grantee’s reasonable determination such trees will restrict access on or use of the Road, or cause additional costs to the maintenance, repair, replacement or removal of the Road. With respect to the removal of any trees by Grantee pursuant to Grantee’s rights and obligations under this Section, Grantee agrees to push all removed trees on to the Grantor Property to a location outside the Easement Area, reasonably accessible by Grantor, so that Grantor may harvest the wood from such trees.

7. **Use of Road.** Use of the Road under this Agreement is limited to Grantee and to Grantee’s Permittees with the understanding that, so long as James R. Sohn and/or his son, Stephen Dewayne Sohn, is alive, the Grantee-2 Property shall not be subdivided beyond three (3) home sites. Should the Grantee-2 Property be subdivided, only the successor, assigns and Grantee’s Permittees of each owner of each subdivided lot shall be allowed to use the Road. At no time shall the Road be used for access to any commercial activities on the Grantee-2 Property (such as a commercial camp or fishing lake). So long as James R. Sohn and/or his son, Stephen Dewayne Sohn, is alive, Sohn shall have the right to use the Road, to access the License Area for the sole purpose set forth in Section 4 of this Agreement, when in and under those circumstances, access to the License Area via the OLD ROAD is impassable. The purpose of this Agreement is for Grantee, its successors, assigns, agents and invitees to obtain the right to use the Road between Hwy N and the Grantee-2 Property. If at any time Grantee obtains a public road or a separate easement from a public road to the Grantee-2 Property which, in the determination of Grantee, is superior to the Easement created by this Agreement, Grantee shall have the right to terminate this Agreement by written notice to Grantor.

8. **Covenants to Run with Land.** All easements and covenants contained in this Agreement shall run with the land and against the Grantor Property for the benefit of the Grantee and Grantee’s Permittees.

9. **Indemnification.** Grantee agrees to indemnify, hold harmless and defend Grantor and its successors, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of: (i) the use of the Easement Area by Grantee or Grantee’s Permittees; or (ii) Grantee’s breach under any term or provision to this Agreement. In connection therewith, so long as Grantee is using the Easement Area and has not abandoned such use, Grantee, at Grantee’s cost, shall carry liability insurance on the Easement Area, of such type and in such amounts as is reasonable and consistent with the type and amounts of liability insurance carried by property owners in Reynolds County, Missouri for property rights of this kind, insuring Grantee and naming Grantor as an additional insured, against all liability for injury.
to persons and damage to property arising from the use of the Road by Grantee or Grantee’s Permittees.

Grantor agrees to indemnify, hold harmless and defend Grantee and its successors, and assigns from and against any and all claims, actions, suits, damages and liabilities arising from or out of: (i) the use of the Road by Grantor; or (ii) Grantor’s breach under any term or provision to this Agreement.

10. **Default.** The failure of Grantor or Grantee to perform any material term of this Agreement shall constitute a default hereunder for which the non-defaulting party shall have any and all remedies available at law or in equity; provided, however, before the non-defaulting party may proceed with any such remedies, the non-defaulting party shall deliver to the defaulting party written notice of the failure of the defaulting party; and the defaulting party shall then have thirty (30) days (or such additional time as may be necessary to cure such failure due to weather conditions or other factors outside the reasonable control of the defaulting party) from the receipt of such notice within which to cure the failure. The remedies permitted or available under this Agreement or at law or in equity shall be cumulative, and the commencement of any remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy. Notwithstanding the aforesaid, or anything to the contrary in this Agreement, at law or in equity, it is expressly agreed that no breach of this Agreement shall entitle any party to cancel, rescind, or otherwise terminate this Agreement. However, such limitation shall not affect in any manner any other rights or remedies which any party may have hereunder by reason of any such default. If either party brings an action to construe or enforce any term of this Agreement, the prevailing party shall recover its reasonable attorneys’ fees for the prosecution or defense of such action.

11. **Estoppel.** If requested by either Grantee or Grantor, the requested party shall within thirty (30) days provide a written statement for the benefit of the requesting party and its assignee or lender, stating that this Agreement is in full force and effect without modification or default, if the same is true; or, if not true, stating what manner the Agreement has been modified and/or the requesting party is in default, and such other reasonable information as may be requested. If within said thirty (30) days the requested party does not respond in writing to the requesting party with respect to the aforesaid, then, absent manifest error, it shall be deemed that the information contained in the requesting party’s notice is correct.

12. **Liens.** If any mechanics’ or materialmensch liens are filed against the Easement Area arising from any act or omission by Grantee or anyone claiming through Grantee, Grantee shall hold Grantor harmless and defend Grantor from all damages, claims and expenses arising therefrom; and Grantee, after notice from Grantor, shall commence action to remove, satisfy or bond against any such lien within thirty (30) days after Grantor’s receipt of such notice. In the event that Grantee does not remove or bond against any lien within said thirty (30) day period, Grantor shall have the right to discharge such lien by any reasonable method, and Grantee shall reimburse Grantor for any and all expenses incurred by Grantor in connection therewith.

13. **Notices.** All notices that are required to be given under this Agreement shall be in writing, and delivered by either (a) United States registered or certified mail, return receipt
requested, or (b) a reputable overnight commercial courier/delivery service. All notices to Grantor and Grantee shall be sent postage prepaid, addressed to the parties hereto at their respective addresses set forth below. Either party may designate a different address by giving notice to the other party at the address set forth herein, or at any other address as the parties may subsequently designate. Notices shall be deemed received upon the earlier of actual receipt or the date of the return receipt. If any such notices are refused, or if the party to whom any such notice is sent has relocated without leaving a forwarding address, then the notice shall be deemed received on the date the notice-receipt is returned stating that the same was refused or is undeliverable at such address. Said addresses for notices are to be as follows:

If to Grantee: Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased
c/o Rob Arthur, Vice President
8077 Maryland Avenue
St. Louis, Missouri 63105

If to Grantor or to Sohn: James Robert Sohn,
Trustee of Trust Agreement
u/t/a dated June 13, 2000
c/o James R. Sohn
1519 Big Bill Road
Arnold, Missouri 63010

14. **Entire Agreement; Modification.** This Agreement constitutes the entire agreement between Grantor and Grantee relating to the subject Easement. This Agreement shall not be modified or amended except pursuant to an instrument in writing executed and delivered on behalf of each of Grantor and Grantee.

15. **No Rights in Public.** Nothing contained in this Agreement shall be deemed to be a gift or dedication of any portion of the Property to any party or to the general public for any public use or purpose whatsoever, it being the intention of the parties hereto that this Agreement is for the exclusive benefit of Grantee and Grantee’s Permittees; and that nothing in this Agreement, express or implied, shall confer upon any person other than the Grantee and Grantee’s Permittees any rights in the Grantor Property.

16. **Grantor and Grantee’s Representations.** Grantor hereby represents and warrants to Grantee that there are no current liens, mortgages, or other encumbrances on the Grantor Property that would prevent this Agreement from being executed and enforced, the Road being constructed, or otherwise prevent the parties from performing their obligations hereunder.
17. **Closing and Contingencies.** Grantor and Grantee recognize and understand that, while each of them fully intends to be bound by this Agreement and perform their respective obligations hereunder, this Agreement is subject to the following contingencies.

a. Approval of this Agreement by the Probate Court of Reynolds County, as Grantee is a supervised personal representative in the Estate of Thomas E. Hennessey, Jr., Cause No. 10RE-PR00016.

b. Approval of the title to the Grantor Property by Grantee.

In the event both of the above contingencies are not satisfied or waived within sixty (60) days of the date of the Agreement, this Agreement shall be null and void upon the written election of Grantee. Grantee shall have the right to record this Agreement, at Grantee’s cost, in the Recorder of Deeds office in Reynolds County. Each party shall be responsible for their own attorney’s fees in connection with this Agreement.
IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

GRANTOR:

James Robert Sohn, Trustee of Trust Agreement, u/t/a dated June 13, 2000

For and in consideration of the rights and covenants contained in this Agreement, the undersigned hereby agrees to be bound by all of the terms and conditions of Sections 4 and 7 of this Agreement, as applicable.

Stephen Dewayne Sohn

STATE OF MISSOURI )
COUNTY OF St. Francois ) SS

On this 4th day of November, 2011, before me, Geralyn A. Cash, a Notary Public, personally appeared James Robert Sohn, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed as Trustee of Trust Agreement, u/t/a dated June 13, 2000.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year above written.

(SEAL)

Geralyn A. Cash
Notary Public
Print Name: Geralyn A. Cash
My Commission Expires: March 3, 2015
GRANTEE:

Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr., deceased

By: [Signature]

Its: [Position]

STATE OF (Missouri) SS

COUNTY OF (St. Louis)

On this 14th day of November, 2011, before me, Patricia A. Hanner, a Notary Public, personally appeared [Signature], to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she is a duly authorized representative of Enterprise Trust, that he/she executed the same as his/her free act and deed in his/her capacity as an authorized representative of Enterprise Trust, in its capacity as the Personal Representative of the Estate of Thomas E. Hennessey, Jr.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year above written.

(SEAL)

[Notary Public]

Print Name: Patricia A. Hanner

My Commission Expires: 10/7/13
Exhibit “B”
SOHN Property
Legal Description

A tract of land being part of Lots 7, 8, and 9 of the Northeast Quarter of Section 2, Township 33 North, Range 2 East of the Fifth Principal Meridian, Reynolds County, Missouri, described as follows: Begin at the Northeast corner of Section 2, T33N, R2E, found marked by a rebar pin in a rockpile; thence along and with the East line of Section 2, South 02 degrees 00 minutes 01 second East 3145.73 feet to a metal bolt set for corner; thence leaving the Section line along and with the North line of a tract of land described and recorded in Book 295, Page 252, North 42 degrees 11 minutes 56 seconds West 2928.68 feet to a metal bolt set on the South marginal Right of Way line of Missouri Route “N”; thence along and with said Right of Way on a curve to the right having a radius of 1397.70 feet an arc distance of 146.60 feet; thence North 55 degrees 01 minute 38 seconds East 509.79 feet to a metal bolt; thence on a curve to the left having a radius of 1181.30 feet an arc distance of 338.67 feet to a metal bolt set for the Southwest corner of a 0.58 acre tract of land described and recorded in Book 291, Page 167; thence leaving said Highway Right of Way along and with the boundary of said 0.58 acre tract and a second tract described and recorded in book 291, Page 622-623, the following courses; South 62 degrees 39 minutes 44 seconds East 225.00 feet to a metal bolt; thence North 36 degrees 48 minutes 13 seconds East 112.00 feet to a metal bolt; thence North 29 degrees 10 minutes 23 seconds East 160.00 feet to a rebar pin found set; thence North 62 degrees 24 minutes 00 seconds West 125.00 feet to a metal bolt; thence North 29 degrees 10 minutes 23 seconds East 50.00 feet to a metal bolt; thence North 62 degrees 24 minutes 00 seconds West 100.59 feet to a metal bolt set on the South marginal Right of Way line of Missouri Route “N”; thence along and with said Right of Way North 24 degrees 11 minutes 38 seconds East 124.78 feet to a metal bolt set on the North line of Section 2, being the County Line; thence along and with said Section and County Line South 88 degrees 11 minutes 00 seconds East 857.96 feet to the point of beginning. Containing 74.55 acres more or less and excepting therefrom all Right of Ways, Easements, Reservations, and Restrictions of record.
Exhibit "C"
HENNESSEY-1 Property
Legal Description

A part of the East Half of Lot 9 of the Northeast Quarter of Section 2, Township 33 North, Range 2 East, described as: Beginning at a point on the East boundary line of Missouri State Highway "N", said point is 343 feet South and West of the Iron-Reynolds County line, thence South 59° East 225 feet, thence South 21° West 112 feet, thence North 59° West 225 feet to a point on the East side of right of way line of Missouri State Highway "N", thence in a Northerly direction along East side of said right of way 112 feet to the point and place of beginning, containing .58 acre, more or less.
Exhibit "D"
HENNESSEY-2 Property
Legal Description

All of Lots 1, 2, 3, 4, 5, 6, 7, and 8 of the Northwest Quarter of Section 1, and Lots 5, 6, 7, 8, and 9 of the Northeast Quarter of Section 1, all being a part of Section One (1), Township Thirty-three (33) North, Range Two (2) East.
Appendix G:

Land Disturbance Permit
JUL 11 2017

OA-Facilities Mgmt, Design, and Construction
301 West High Street, Hst Rm 370
Jefferson City, MO 65101

Dear OA-Facilities Mgmt,

Enclosed please find your Missouri State Operating Permit which authorizes land disturbance activities for Office of Administration. This permit has been issued at your request and is based upon information submitted in your application to the Missouri Department of Natural Resources.

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, Third Floor, 131 West High Street, Jefferson City, MO 65101 (Mailing address: PO Box 1557, Jefferson City, MO 65102-1557), 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

David J. Lamb
Acting Director

DJL/sm

Enclosure
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: MOR100038
Owner: OA-Facilities Mgmt, Design, and Construc
Address: 301 West High Street, Hst Rm 370
Jefferson City, MO 65101

Continuing Authority: OA Facilities Mgmt Design Construction
301 West High St.
Hst Rm 730
Jefferson City, MO 65102

Facility Name: Office of Administration
Facility Address: OA-FMDC, PO Box 809 301 W High street
JEFFERSON CITY, MO 65102

Legal Description: Land Grant 681, Cole County
UTM Coordinates: 571840.000/4270368.000
Receiving Stream: Various State Wide (U)
First Classified Stream - ID#: Missouri R. (P) 701.00
USGS# and Sub Watershed#: 10300102 - 1305

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, filling 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 RS Mo Section 644.051.6 and 621.250, 10 CSR 20-6.020, and 10 CSR 20-1.020.

July 01, 2017
Issue Date
Edward B. Galbraith, Director
Division of Environmental Quality

June 22, 2022
Expiration Date
David J. Lamb, Acting Director
Water Protection Program
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 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)].

2. 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.

3. A general 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. 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.

4. A Missouri State Operating Permit must be issued before any site vegetation is removed or the site disturbed. Any site owner/operator subject to these requirements for stormwater discharges and who disturbs land prior to permit issuance from the department is in violation of both State regulations per 10 CSR 20-6.200(1)(A) and Federal regulations per 40 CFR 122.26. The legal owner of the property, right-of-way or the holder of an easement on the property, and operator on which the site is located are responsible for compliance with this permit.

5. 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.

   The permittee is responsible for compliance with this permit for any construction support activities.

6. This permit authorizes non-stormwater discharges from the following activities provided that these discharges are addressed in the permittee’s specific SWPPP required by this general permit:
   a. Dewatering activities if there are no contaminants other than sediment present in the discharge, and the discharge is treated as specified in Requirements, Section 10.o. 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.

7. This general permit does not authorize the:
   a. placement of fill materials in waters or floodplains
   b. obstruction of stream flow,
   c. redirection of stormwater across private property not owned or operated by the permittee, or...
d. Changing the channel of a defined drainage course. These actions may be regulated by other federal, state, or local entities, such as the U.S. Army Corps of Engineers or Federal Emergency Management Agency. This general permit addresses only the quality of the stormwater runoff and the minimization of off-site migration of sediments and other water contaminants.

8. This permit does not authorize land disturbance activity in jurisdictional waters of the United States, unless the permittee has obtained the required Clean Water Act Section 404 Department of the Army permit from the U.S. Army Corps of Engineers and its associated Section 401 Water Quality Certification from the department. Land disturbance activities may not begin in the affected waters of the United States until the required §404 permit and §401 water quality certification have been obtained.

9. This general permit prohibits any discharge of wastewater generated from air pollution control equipment or the containment of scrubber water in lined ponds to waters of the state.

10. This general permit prohibits any discharge of sewage or pollutants to waters of the state 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. Domestic wastewaters, including gray waters; or
   g. Industrial stormwater runoff.

11. 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.

12. If at any time the department determines that the quality of waters of the state may be better protected by requiring the owner/operator of the permitted site to apply for a site-specific or different general permit, the department may do so [10 CSR 20-6.010(13)(C)]. Examples of when this may occur:
   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.

The permittee will be notified in writing of the requirement to apply for a site-specific permit or a different general permit. When 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.

13. 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)].
14. This operating permit does not affect, remove, or replace any requirement of the National Environmental Policy Act; the Endangered Species Act; the National Historic Preservation Act; the Comprehensive Environmental Response, Compensation and Liability Act; or the Resource Conservation and Recovery Act. Determination of applicability for the above mentioned acts is the responsibility of the permittee.

15. This permit does not supersede any requirement for obtaining project approval under an established local authority.

16. This permit is not transferable to other owners or operators.

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 20-6.010(1)(B) and 10 CSR 20-6.200(1)(B).

3. Oil and gas related activities as listed in 40 CFR 122.26(a)(2)(ii).

REQUIREMENTS

1. **Electronic Discharge Monitoring Report (eDMR) Submission System.**
   Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally-consistent set of data about the NPDES program. All general permit covered facilities under this master general permit shall comply with the department’s requirements for electronic reporting.
   a. **Reporting Requirements.**
      (1) Application to participate in the department’s eDMR system is required as part of the application for general permit coverage in order to constitute a complete permit application and may be accessed at [dnr.mo.gov/env/wpp/edmr.htm](http://dnr.mo.gov/env/wpp/edmr.htm).
      (2) The permittee must electronically submit quarterly reports via the eDMR system.
   b. **Other actions.** The following shall be submitted electronically after such a system has been made available by the department:
      (1) General Permit Applications/Notices of Intent to discharge (NOIs);
      (2) Notices of Termination (NOTs);
      (3) No Exposure Certifications (NOEs); and
      (4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs).
   c. **Electronic Submissions.** To access the eDMR system, use the following web link: [https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx](https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx).
   d. **Waivers from Electronic Reporting.**
      (1) The permittee must electronically submit reports unless a waiver is granted by the department in compliance with 40 CFR Part 127.
      (2) The permittee may obtain a temporary or permanent electronic reporting waiver by first submitting an eDMR Waiver Request Form (Form 780-2692: [http://dnr.mo.gov/forms/780-2692-f.pdf](http://dnr.mo.gov/forms/780-2692-f.pdf), by contacting the appropriate permitting office or emailing edm@dnr.mo.gov). The department will either approve or deny this electronic reporting waiver request within 120 calendar days of receipt.
      (3) Only permittees with an approved waiver request may submit reports on paper to the Department for the period that the approved electronic reporting waiver is effective.

2. **Quarterly Reports:** Permittees shall prepare a quarterly report with a list of active land disturbance sites including any off-site borrow or depositional areas associated with the construction project.
and submit the following information electronically as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:

a. The name of the project;
b. The location of the project (including the county);
c. The name of the primary receiving water(s) for each project;
d. A description of the project;
e. The number of acres disturbed;
f. The percent of completion of the project;
g. The projected date of completion.

The quarterly report(s) shall be maintained by the permittee and readily available for review by the department at the address provided on the application as well as submitted to the department quarterly via the department’s eDMR system. When a permittee terminates permit coverage, the permittee shall submit with the request for termination, the final quarterly report for the current calendar quarter. The permittee shall submit quarterly reports according to Table A.

<table>
<thead>
<tr>
<th>Table A</th>
<th>Schedule for Quarterly Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity for the months of:</td>
<td>Report is due:</td>
</tr>
<tr>
<td>January, February, March (1st Quarter)</td>
<td>April 28</td>
</tr>
<tr>
<td>April, May, June (2nd Quarter)</td>
<td>July 28</td>
</tr>
<tr>
<td>July, August, September (3rd Quarter)</td>
<td>October 28</td>
</tr>
<tr>
<td>October, November, December (4th Quarter)</td>
<td>January 28</td>
</tr>
</tbody>
</table>

3. This permit is to ensure the design, installation and maintenance of effective erosion and sediment controls minimize the discharge of pollutants by:

a. Controlling stormwater volume and velocity within the site to minimize soil erosion;
b. Controlling 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 and scour in the immediate vicinity of discharge points;
c. Minimizing the amount of soil exposed during construction activity;
d. Minimizing the disturbance of steep slopes;
e. Addressing 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 to minimize sediment discharges from the site;
f. Providing and maintaining natural buffers around surface waters as detailed in 10.f,
g. Directing stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration and filtering, unless infeasible; and
h. Minimizing soil compaction and, unless infeasible, preserve topsoil. Minimizing soil compaction or preserving topsoil is not required where the intended function of a specific area of the site dictates that it be compacted or the topsoil be disturbed or removed.

4. Installation of Best Management Practices (BMPs) necessary to prevent soil erosion at the project boundary must be complete prior to the start of all phases of construction.

5. Install sediment controls along any perimeter areas of the site.
   a. Remove any sediment per the manufacturer’s instructions or before it has accumulated to one-half of the above-ground height of any perimeter control.
   b. For sites where perimeter controls are infeasible, other practices shall be implemented to minimize discharges to perimeter areas of the site.

6. BMPs shall be maintained and remain in effective operating condition during the entire duration of the project, with repairs made within the timeframe specified in the Requirements Section 9 of this permit, until final stabilization has been achieved.

7. Minimize sediment track-out from the site.
   a. Restrict vehicle traffic to properly designed exit points such as an aggregate stone with an underlying geotextile or non-woven filter fabric.
b. Use appropriate stabilization techniques at all points that exit onto paved roads.

c. Remove any sediment that has been tracked out within the same business day or by the end of the next business day if track-out occurs on a non-business day.

8. SWPPP Development and Implementation: 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 the land disturbance project. **The SWPPP must be developed prior to issuance of the permit and must be updated with details specific to the land disturbance site prior to conducting any land disturbance activities at the site.** Either an electronic copy or a paper copy of the SWPPP must be accessible to anyone on-site at all times when land disturbance operations are in progress, or other operational activities that may affect the maintenance or integrity of the BMP structures and made available as specified under the Records Section of this permit.

9. The SWPPP must:
   a. List and describe all points of discharge to receiving water(s);
   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 additional authorizations, such as a Section 404 permit and associated Section 401 Water Quality Certification are 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 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 following manuals are acceptable resources for the selection of appropriate BMPs. **Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites**, (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 https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp; 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 department 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.

10. 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 state within one mile of the site.
b. Site Map: The SWPPP must contain a legible site map showing the site boundaries and points of discharge to receiving water(s) and identifying:
   (1) Direction(s) of stormwater flow and approximate slopes for all phases of construction 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 permanent and temporary 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 state (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 points of discharge to 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. Selection of Temporary and Permanent BMPs: The permittee shall select, install, use, operate and maintain appropriate BMPs for the permitted site and list them in the SWPPP.

e. Preservation of trees and vegetation: The SWPPP shall require existing vegetation and trees to be preserved where practical.

f. Surface Water Buffers: For surface waters of the state, defined as “all waters within the jurisdiction of this state, including all rivers, streams, lakes and other bodies of surface and subsurface water lying within or forming a part of the boundaries of the state which are not entirely confined and located completely upon lands owned, leased or otherwise controlled by a single person or by two or more persons jointly or as tenants in common, located on or adjacent to the site,” the permittee must comply with (1)-(3), except as noted in (4):
   (1) Provide and maintain a 50-foot undisturbed natural buffer;
   (2) Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or
   (3) If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

   (4) The permittee is not required to comply with (1), (2) or (3) above if one of the following exceptions apply and documentation is provided in the SWPPP:
      (a) As authorized per Clean Water Act Section 404 Department of the Army permit and its associated Section 401 Water Quality Certification from the department.
       1. The angle of any crossing shall be as perpendicular as feasible to the water course or natural stream buffer to minimize adverse impacts.
      (b) If there is no discharge of stormwater to waters of the state through the area between the disturbed portions of the site and waters of the state located within 50 feet of your site. This includes situations where you have implemented permanent control measures that will prevent such discharges, such as a berm or other barrier.
      (c) Where no natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for the current development of the site.
       1. Where some natural buffer exists but portions of the area within 50 feet of the waters of the state are occupied by preexisting development disturbances, you are required to comply with (1), (2), or (3) above.
      (d) For linear projects where site constraints make it infeasible to implement a buffer or equivalent provided you limit disturbances within 50 feet of any waters of the state and/or you provide supplemental erosion and sediment controls to treat stormwater
discharges from earth disturbances within 50 feet of the water of state. (e) For small residential lot construction as defined as ‘a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part a larger common plan of development or sale,’ one has the option of complying with (1), (2) or (3) above or one of the following alternatives:

1. Tiered-technology approach where:
   a. A 50-foot or larger buffer is retained, no additional requirements are needed,
   b. The buffer is greater than 30 feet but less than 50 feet wide, implement double perimeter controls spaced a minimum of at least 5 feet apart between land disturbance and water of the state, or
   c. A less than or equal to 30-foot buffer is maintained, implement double perimeter controls between land disturbance and water of the state and stabilization activities completed with 7 calendar days of temporary or permanent cessation of land disturbance; or

2. Sediment discharge risk based on the site’s slope, location and soil type when combined with buffer width.

g. Measuring Buffer Width: Where the permittee is retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:
   (1) The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
   (2) The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

h. Description of BMPs: The SWPPP shall include a description of both structural and non-structural BMPs used one or more times at the site, providing the following general information for each:
   (1) Physical description of the BMP;
   (2) Site 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.

i. Specific Instance of BMPs: 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.

j. 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. (1) For soil disturbing activities that have temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days:
   (a) The permittee shall construct BMPs to establish interim stabilization; and
   (b) Stabilization must be initiated immediately and completed within 14 calendar days.
   (2) For soil disturbing activities that have been permanently ceased on any portion of the site, final stabilization of disturbed areas must be initiated immediately and completed within 14 calendar days.
   (3) Allowances to the 14 day completion period for temporary and final stabilization may be made due to weather and equipment malfunctions. In drought-stricken areas where initiating vegetative stabilization measures immediately are infeasible, alternative stabilization measures must be employed. The use of allowances shall be documented in the SWPPP.
(4) Interim 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 (three 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 interim stabilization within seven days of ceasing operations on that part of the site.

(5) In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

k. Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP.

(1) 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.

(2) For phased projects, BMPs shall be properly installed as necessary prior to construction activities.

(3) 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/or silt fences prior to leaving the land disturbance site.

(4) A drainage course change shall be clearly marked on a site map and described in the SWPPP.

(5) If vegetative stabilization measures are being implemented, stabilization is considered “installed” when all activities necessary to seed or plant the area are completed.

l. Sedimentation Basins: The SWPPP shall include a sedimentation basin for each drainage area with ten or more acres disturbed at one time.

(1) The sedimentation basin shall be sized to a local 2-year, 24-hour storm. A 2-year, 24-hour storm event shall be determined for the project location using the National Oceanic and Atmospheric Administration's National Weather Service Atlas 14 which can be located at http://hdsc/nws.noaa.gov/hdsc/pfds/.

(2) Basins designed and initiated under the 2012 Area-Wide Land Disturbance General Permit MO-R100038 or prior authorizations shall comply with the requirements held in those authorizations. Any construction activities designed and initiated under this authorization shall comply with the local 2-year, 24-hour storm event by January 1, 2018.

(3) Accumulated sediment shall be removed from the basin when basin is 50% full.

(4) Utilize outlet structures that withdraw water from the surface when discharging from basins and impoundments unless infeasible.

(5) Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream.

(6) The SWPPP shall require the basin be maintained until final stabilization of the disturbed area served by the basin.

(7) 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.

(8) Where use of a sediment basin is infeasible, 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 selected from appropriate BMP guidance documents authorized by this permit. The BMPs must provide equivalent water quality protection to achieve compliance with this permit.
m. **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. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk or stormwater contamination (such as final products and material intended for outdoor use);
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; and

n. **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.

1. Stormwater inlets susceptible to receiving sediment from the permitted land disturbance site shall have curb inlet protection.
2. 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.
3. Curb inlets shall be cleaned weekly or following a precipitation event that generates a run-off.

o. **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.

1. 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.

11. **Good housekeeping** practices shall be maintained at all times to keep waste from entering waters of the state. Solid and hazardous waste management include providing trash containers and regular site cleanup for proper disposal of solid waste such as scrap building material, product/material shipping waste, and 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.

12. All fueling facilities present shall at all times adhere to applicable federal and state regulations concerning underground storage, above ground storage and dispensers.

13. **Hazardous substances** 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.

14. **Containers:** 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 inspection of BMPs.
15. **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. Department notifies the permittee in writing of deficiencies in the SWPPP;
   d. 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); and/or
   e. Department determines violations of water quality standards may occur or have occurred.

16. **Individual:** An individual shall be designated by the permittee as the lead for environmental matters. The lead individual for environmental matters shall have a thorough and demonstrable knowledge of the site’s SWPPP and sediment and erosion control practices in general. The lead individual 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.

17. **Site Inspections:** The permittee (or a representative of the permittee) shall conduct regularly scheduled inspections.
   a. 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.
   b. Inspections are only required during the project’s normal working hours.
   c. 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.
   d. Areas on-site that have been stabilized must be inspected at least once per month.
      (1) For areas where disturbed portions have undergone temporary stabilization at the same time active construction continues on other areas, inspections shall occur at least once a month while stabilized and when re-disturbed shall follow either frequency outlined in subsection h. below.
      (2) For areas where disturbed portions have undergone final stabilization at the same time active construction continues on other areas, inspection frequency may be cease on the finally stabilized areas according to the following:
         (a) After the first monthly inspection, inspect once more within 24 hours of a storm event of 0.25 inches or greater.
         (b) If there are no issues or evidence of stabilization problems, further inspections may cease.
         (c) If unstable site conditions or sediment movement are observed, the site must be re-stabilized and monthly inspections shall occur until final stabilization is confirmed following a storm event of 0.25 inches or greater.
   e. All stormwater outfalls shall be inspected for evidence of erosion or sediment deposition.
   f. When practicable the receiving stream shall also be inspected for 50 feet downstream of the outfall.
   g. Any structural or maintenance problems shall be noted in an inspection report and corrected as soon as possible but no more than seven calendar days after the inspection.
      (1) If weather conditions prevent correction of BMPs within seven 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 seven day time period.
      (2) The documentation must be filed with the regular inspection reports.
      (3) The permittee shall correct the problem as soon as weather conditions allow.
   h. All BMPs must be inspected in accordance to one of the two schedules listed below, and any
changes to the frequency of inspections, including switching between the options listed below, must be documented in the SWPPP:

(1) At least once every seven calendar days and within 48 hours after any storm event equal to or greater than a 2-year, 24-hour storm has ceased during a normal work day and within 72 hours if the event ceases during a non-work day such as a weekend or holiday; or

(2) Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater or the occurrence of runoff from snowmelt. To determine if a storm event of 0.25 inches or greater has occurred on-site, the permittee must either keep a properly maintained precipitation gauge on site, or obtain the storm event information from a weather station near the site.
   (a) Inspections shall be conducted within 24 hours once a storm event has produced 0.25 inches within a 24 hour period, even if the storm event is still continuing.
   (b) If the permittee has elected to inspect every 14 calendar days and there is a storm event at the site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, the permittee is required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

18. The SWPPP must explain how the person responsible for erosion control will be notified when stormwater runoff occurs

19. Site Inspections Reports: A log of each inspection and copy of the inspection report shall be kept readily accessible and must be available upon request by the department. Electronic logs are acceptable as long as reports can be provided in a timely manner. If inspection reports are kept off-site, the SWPPP must indicate where they are stored. 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.

20. Notification to All Contractors: The permittee shall be responsible for notifying each contractor or entity (including utility crews and city employees or their agents) who 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 SWPPP shall contain a record of notification; for example, a list of contractors or entities given a copy of the SWPPP or education session sign-in sheet. The permittee is responsible for any damage a subcontractor may do to established BMPs and any subsequent water quality violation resulting from the damage.

21. Public Notification: The permittee shall post a copy of the public notification sign on page 15 of this permit 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.

OTHER DISCHARGES

A record of each reportable release of hazardous substance shall be retained with the SWPPP and made available to the department upon request. The department may also require the submittal of a written or electronic report detailing measures taken to clean up the spill within five (5) days of the spill. Such a report must include the type of material spilled, volume, date of spill, date clean-up was completed, clean-up method, and final disposal method.
SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

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.

RECORDS

1. The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site, results of any monitoring and analysis, and all site inspection records. 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 provide 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.

LAND PURCHASE AND CHANGE OF OWNERSHIP

1. If the permittee sells any portion of the permitted site to a developer for commercial, industrial, or residential use, this land remains a part of the common sale and the new owner must obtain a permit prior to conducting any land disturbance activity. Therefore, the original permittee must amend the SWPPP to show that the property has been sold and therefore no longer under the original permit coverage.

2. 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 unless exempted per 10 CSR 20-6.010(1)(B), 10 CSR 20-6.200(1)(B), and 40 CFR 122.26(a)(2)(ii).

3. 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.

4. If a portion of a larger common plan of development is sold to an individual for the purpose of building his or her own private residence, a permit is required if the portion of land sold is equal to or greater than one acre while no permit is required for less than one acre of land sold.

TERMINATION

This permit may be terminated when all projects are stabilized. The project is considered to be finally 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% over 100% of the site. In order to terminate the permit, the permittee shall notify the department by submitting Form H- Request for Termination of a General Permit (http://dnr.mo.gov/forms/780-1409-f.pdf).

DUTY TO REAPPLY

Unless terminated, the permittee shall submit an application for the renewal of this permit by submitting Form E-Application for General Permit (http://dnr.mo.gov/forms/780-0795-f.pdf) and
Form G – Application for Stormwater Permit Under the General Permit: Land Disturbance (http://dnr.mo.gov/forms/780-1408-F.pdf) no later than thirty (30) days prior to the permit’s expiration date. If a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(5)(B), (5)(C), and (10)(E)1, as well as § 644.051.10, RSMo 2015, if the department is unable, through no fault of the permittee, to issue a renewal prior to expiration of the previous permit, the terms and conditions of the expired permit are administratively continued and will remain fully effective and enforceable until such time when a permit action is taken. Failure to submit a renewal application for a facility that is still in operation is a violation of the Missouri Clean Water Law. As part of the complete application and as required by the federal NPDES eReporting rule, participation in the department’s Electronic Discharge Monitoring Report Submission System (eDMR) will be required. Facilities already participating in eDMR need not re-apply upon renewal. More information can be found at: http://dnr.mo.gov/env/wpp/edmr.htm. Failure to apply for renewal of a permit may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law. This permit may be applied for and issued electronically once made available by the director in accordance with Section 644.051.10, RSMo.

MODIFICATION, REVOCATION, AND REOPENING

1. The full implementation of this operating permit shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
   a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
   b. controls any pollutant not limited in the permit.

2. If this permit is reopened, 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.

STANDARD CONDITIONS

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

1. Other Information: Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or information.

2. Duty to Comply: The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

3. Duty to Provide Information: The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the department upon request, copies of records required to be kept by this permit.
4. **Inspection and Entry:** The permittee shall allow the department, or an authorized representative (including an authorized contractor acting as a representative of the department), upon presentation of credentials and other documents as may be required by law, to:
   a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
   d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

5. **Signatory Requirement:**
   a. All permit applications, reports required by the permit, or information requested by the department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
   b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance 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 by both.
   c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
STORMWATER DISCHARGES FROM THIS LAND DISTURBANCE SITE ARE AUTHORIZED BY THE MISSOURI STATE OPERATING PERMIT NUMBER:

___________________________

ANYONE WITH QUESTIONS OR CONCERNS ABOUT STORMWATER DISCHARGES FROM THIS SITE, PLEASE CONTACT THE MISSOURI DEPARTMENT OF NATURAL RESOURCES AT 1-800-361-4827
Missouri Department of Natural Resources
Fact Sheet
MO-R100038

The Federal Water Pollution Control Act [Clean Water Act (CWA)] Section 402 of 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 CWA). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (permit) are issued by the Missouri Department of Natural Resources (department) under an approved program, operated in accordance with federal and state laws (Federal CWA and Missouri Clean Water Law Section 644 as amended). Permits are issued for a period of five (5) years unless otherwise specified.

Per 40 CFR 124.56, 40 CFR124.8, and 10 CSR 20-6.020(1)(A)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 permit. A Fact Sheet is not an enforceable part of a permit.

This Fact Sheet is for a:
- [ ] Major
- [ ] Minor
- [ ] Industrial Facility
- [ ] Variance
- [X] Master General Permit
- [ ] Permit with widespread public interest

Definitions

Common Promotional Plan: A plan undertaken by one (1) or more persons, to offer lots for sale or lease; where land is offered for sale by a person or group of persons acting in concert, and the land is contiguous or is known, designated or advertised as a common unit or by a common name or similar names, the land is presumed, without regard to the number of lots covered by each individual offering, as being offered for sale or lease as part of a common promotional plan.

Immediately: For the purposes of this permit, immediately should be defined as within 24 hours.

Infeasible: Infeasible means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale: A contiguous area where multiple separate and distinct construction activities are occurring under one plan.

Non-structural Best Management Practice: Institutional, educational or pollution prevention practices designed to limit the amount of stormwater runoff or pollutants that are generated in the landscape. An example includes ordinance development.

Ordinary High Water Mark: The line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation and/or the presence of litter and debris.

Peripheral: For the purposes of this permit, peripheral should be defined as the outermost boundary of the area that will be disturbed.

Permanently: For the purposes of this permit, permanently should be defined as any activity that has been
ceased without any intentions of future disturbance.

Structural Best Management Practice: Physical controls working individually or as a group, appropriate to the source, location, and area climate for the pollutant to be controlled. Examples include moving earth for sedimentation basin and planting vegetation.

Waters of the state: Section 644.016.1(27), RSMo defines waters of the state as, “All waters within the jurisdiction of this state, including all rivers, streams, lakes and other bodies of surface and subsurface water lying within or forming a part of the boundaries of the state which are not entirely confined and located completely upon lands owned, leased or otherwise controlled by a single person or by two or more persons jointly or as tenants in common.”

**Part I – Facility Information**

Facility Type: Industrial Stormwater
Facility Description: Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, filling, and other activities that result in the destruction of the root zone and/or land disturbance activity that is reasonably certain to cause pollution to waters of the state).

This permit establishes a SWPPP requirement to minimize pollutants of concern from this type of facility or for all facilities covered under this permit. 10 CSR 20-6.200(6)(A)7. specifies that “general permits shall contain BMP requirements and/or monitoring and reporting requirements to keep the stormwater from becoming contaminated.” Local conditions are not considered when developing conditions for a general permit. A facility may apply for a site-specific permit if they desire a review of local conditions.

While drafting this permit for renewal, the department hosted four public meetings on January 27, February 24, April 18, and May 19, 2016, which allowed stakeholders to voice concerns about conditions within the permit and submit comments during the period of initial involvement. These concerns were taken into consideration when drafting the permit.

**Part II – Receiving Stream Information**

**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**
Per Missouri Effluent Regulations (10 CSR 20-7.015), the waters of the state are divided into seven (7) categories. This permit applies to facilities discharging to the following water body categories:

- ☒ Missouri or Mississippi River [10 CSR 20-7.015(2)]
- ☒ Lakes or Reservoirs [10 CSR 20-7.015(3)]
- ☒ Losing Streams [10 CSR 20-7.015(4)]
- ☒ Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]
- ☒ Special Streams [10 CSR 20-7.015(6)]
- ☒ Subsurface Waters [10 CSR 20-7.015(7)]
- ☒ All Other Waters [10 CSR 20-7.015(8)]

Missouri Water Quality Standards (10 CSR 20-7.031) defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1st classified receiving stream’s beneficial water uses shall be maintained in accordance with 10 CSR 20-7.031(4). The BMP requirement established by this permit are intended to be protective of all streams that fall within the categories of receiving water bodies indicated above. A general permit does not take into consideration site-specific conditions.
Part III – Applicability

Condition number 5 includes support activities. Those support activities are to become part of the land disturbance permitted area and included in the acreage calculations, whether the support activities are located adjacent to, on-site or off-site from the main land disturbance construction area. For example, if the main land disturbance site is 0.6 acres and the project needs fills that is gathered from a borrow site specific to this project which equals 0.5 acres, then the total acreage for this project is an acre or more and the conditions of this permit apply to both the main construction area and the borrow area.

Condition number 14 was expanded to include a more comprehensive list of state and federal requirements that must be taken into consideration.

If the proposed project encounters and will potentially affect a species of concern, please report it to the Missouri Department of Conservation and the United States Fish and Wildlife Service. For more information about requirements of the Endangered Species Act, please visit the following links:

1. To determine the potential for species of concern within or near a project, please visit the United States Fish and Wildlife Services’ “Information, Planning and Conservation” website at http://ecos.fws.gov/ipac/.
2. 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 map view tool at http://criticalhabitat.fws.gov/crithab/ to find data specific to the state and county.

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, https://naturalheritagereview.mdc.mo.gov/.

Part IV – Exemptions

Condition Number 2 was added to cite all state exemptions from permitting requirements, combining several previous cited exemptions into one condition and reference. This includes an exemption for linear construction where the entire disturbance, including clearing of land to access the linear disturbance, is less than two feet in width.

Condition Number 3 was added to cite federal regulations that exclude land disturbance projects related to the installation or maintenance work for oil and gas related activities.

Part V – Rationale of Technology Based Limitations & Permit Conditions

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):
Section 303(d) of the Federal CWA requires that each state identify waters that are not meeting Water Quality Standards and for which adequate water pollution controls have not been required. Water Quality Standards protect such beneficial uses of water as whole body contact, maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

ANTI-BACKSLIDING:
A provision in the Federal Regulations [CWA Section 303(d) (4); CWA Section 402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

Applicable: Backsliding proposed in this permit conforms to the anti-backsliding provisions of Section 402(o) of the CWA and 40 CFR 122.44. The department has determined that technical mistakes were made in the previous permit [CWA 402(o)(2)(B)(ii)]. The Department has determined that technical mistakes or mistaken interpretations of law were made in issuing the
permit under section 402(a)(1)(b).

**Settleable Solids:** The Settleable Solids limitation was removed since has been determined to not be a statewide technology or water quality based limitation given a variability of soil type in the state. Increased technology based best management practices have been included and are a more appropriate technology based requirement.

**Water Quality Standard Narrative Prohibitions.** The previous permit contained language which referenced compliance with the water quality standards found in 10 CSR 20-7.031. In order to comply with 40 CFR 122.44(d)(1), the permit writer has conducted reasonable potential determinations for each general and applicable specific criterion and established numeric effluent limitations where reasonable potential exists. While the removal of the previous permit language creates the appearance of backsliding, the permit writer has evaluated discharges associated with this general permit as to whether reasonable potential to cause excursions of specific or general criteria on a statewide level and found that no reasonable potential exists given the proper implementation of a Stormwater Pollution Prevention Plan and associated best management practices and that the requirements of this permit are equally protective as compared to the previous permit. Therefore, given this new information, and the fact that the previous permit special condition was not consistent with 40 CFR 122.44(d)(1), an error occurred in the establishment of the general criteria as a special condition of the previous permit.

**ANTIDEGRADATION:**
Antidegradation policies ensure protection of water quality for a particular water body on a pollutant by pollutant basis to ensure Water Quality Standards are maintained to support beneficial uses such as fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as an Outstanding National Resource Water or Outstanding State Resource Water [10 CSR 20-7.031(3)(C)]. Antidegradation policies are adopted to minimize adverse effects on water. The department has determined that the best avenue forward for implementing the Antidegradation requirements into general permits is by requiring the appropriate development and maintenance of a SWPPP. The SWPPP must identify all Best Management Practices (BMPs) that are reasonable and effective, taking into account environmental impacts and costs. This analysis must document why no discharge or no exposure options are not feasible at the facility. This selection and documentation of appropriate control measures will then serve as the analysis of alternatives and fulfill the requirements of the Antidegradation Rule and Implementation Procedure 10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.

Any facility seeking coverage under this permit, which undergoes expansion or discharges a new pollutant of concern, must update their SWPPP and select new BMPs that are reasonable and cost effective. New facilities seeking coverage under this permit are required to develop a SWPPP that includes this analysis and documentation of appropriate BMPs. Renewal of coverage for a facility requires a review of the SWPPP to assure that the selected BMPs continue to be appropriate.

☑ Applicable: The main pollutant of concern in this permit is sediment. Compliance with the technology-based limitations established in this permit for the protection of General Criteria, along with the evaluation and implementation of BMPs as documented in the SWPPP, meets the requirements of Missouri’s Antidegradation Review [10 CSR 20-7.031(3), 10 CSR 20-7.031 Table A, and 10 CSR 20-7.015(9)(A)5].

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP):**
In accordance with 40 CFR 122.44(3)(k) Best Management Practices (BMPs), BMPs are implemented to control or abate the discharge of pollutants when: (1) Authorized under Section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under Section 402(p) of the CWA for the control of stormwater discharges; (3) Numeric effluent limitations are infeasible; or (4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.
In accordance with Developing Your Stormwater Pollution Prevention Plan, a Guide for Construction Sites (EPA 833-R-06-004; https://www3.epa.gov/npdes/pubs/sw_swppp_guide.pdf) published by the United States Environmental Protection Agency (EPA) in May 2007, BMPs are measures or practices used to reduce the amount of pollution entering waters of the state. BMPs may take the form of a process, activity, or physical structure. EPA developed resources and tools related to construction stormwater along with the BMPs to control and minimize stormwater (https://www.epa.gov/npdes/stormwater-discharges-construction-activities). Along with EPA’s resources and tools, the International Stormwater BMP database (www.bmpdatabase.org/index.htm) may provide guidance on BMPs appropriate for specific industries.

Additionally in accordance with Stormwater Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of stormwater discharges.

☐ Applicable: A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

The new permit has been revised to allow permittees to store SWPPP documents electronically as long as they can be provided in an expedient manner.

Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the department’s 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. Leaving a message on a department staff member voice-mail does not satisfy this reporting requirement.

WATER QUALITY STANDARDS:
Per 10 CSR 20-7.031(4), General Criteria shall be applicable to all waters of the state at all times, including mixing zones. Additionally, 40 CFR 122.44(d)(1) directs the department to include in each NPDES permit conditions to achieve water quality established under Section 303 of the CWA, including state narrative criteria for water quality.

SPECIFIC CRITERIA CONSIDERATIONS:
An evaluation of discharges associated with land disturbance activities has been conducted to determine if any pollutants discharged under this general permit would have reasonable potential to cause or contribute toward an excursion of specific water quality criterion. Pollutants discharged from land disturbance activities are not commonly associated with pollutants listed as specific criteria in the Missouri Water Quality Standards; therefore, reasonable potential to cause an excursion of a specific criterion does not exist.

GENERAL CRITERIA CONSIDERATIONS:
In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into the permit for those pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states that pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation to protect that narrative criterion. In order to comply with this regulation, the permit writer will complete reasonable potential determinations on whether the discharge will violate any of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion [the lettering matches that of the rule itself, under 10 CSR 20-7.031(4)]. It should also be noted that Section 644.076.1, RSMo states that it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri that is in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any
standard, rule or regulation promulgated by the commission.

(a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses. The SWPPP requires implementation of best management practices to store, prevent, or minimize stormwater and/or any related land disturbance activity discharges (namely sediment). If one follows their SWPPP and other permit conditions including timely inspections, no reasonable potential to cause an excursion of this narrative exists. Additionally, there had been no indication to the Department that a stream has had issues maintaining beneficial uses as a result of the controlled and managed stormwater discharges per the SWPPP. Therefore, based on the information reviewed during the drafting of this permit, no reasonable potential to cause or contribute to an excursion of this criterion exists.

(b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses. Please see (a) above as justification is the same.

(c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses. Please see (a) above as justification is the same.

(d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life. This permit addresses discharges from land disturbance activities and if not expected to include an toxic pollutants. Best management practices are to be addressed in the SWPPP should any toxic pollutant of concern be on-site.

(e) There shall be no significant human health hazard from incidental contact with the water. Please see (a) above as justification is the same.

(f) There shall be no acute toxicity to livestock or wildlife watering. Please see (d) above as justification is the same.

(g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community. Please see (a) above as justification is the same.

(h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247. Please see (a) above. Additionally, any solid wastes received or produced at this facility are wholly contained in appropriate storage facilities, are not discharged, and are disposed of offsite. Therefore, this discharge does not have reasonable potential to cause or contribute to an excursion of this criterion.

The settleable solids requirement was removed from this permit and was replaced with additional, more specific BMP requirements. The settleable solids limit was determined not to be protective of all waters across the state, therefore, it was removed. Examples of these BMPs include requirements to:

- Install and maintain perimeter controls along areas of the site that will receive pollutant discharges;
- Minimize sediment track-out from the site;
- Provide storage for runoff up to and including a 2-year, 24-hour storm event when designing sedimentation basins; and
- Direct stormwater to vegetated areas.

The minimum buffer width was increased from 25 feet to 50 feet. Studies have shown that a 50 foot vegetative buffer more adequately treats sediment from stormwater discharges. This appears to be standard in EPA's permit as well as in many other states. A literature review was conducted to assess the effectiveness of buffer widths in relation to sediment removal. In an early literature review on grass buffers in agricultural settings, Dosskey (2001) concluded that 40-100% of sediment entering from cultivated fields was removed using buffer strips 0.5 to 20 meters. Liu et al. (2008) conducted an analysis of 85 estimates of sediment removal by vegetated buffers. They found that sediment removal efficiency \( E_s \) (the percentage of inflowing sediment trapped within a buffer) increased with buffer width according to the relationship: \( E_s = 13.4 \log_e (w) + 56.9 \) in
which \( w \) (m) is buffer width. This equation predicts that \( E_a \) increases from 78% for a 5 meter wide buffer to 88% and 97% at widths of 10 meters and 20 meters, respectively. Yaun et al. (2009; 93 estimates) and Zhang et al. (2010; 81 estimates) garnered similar results to Liu et al.

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, first the permittee must know what this efficiency is for the site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of sediment controls used to reduce the discharge of sediment prior to the buffer.

Sediment removal efficiencies are based on the U.S. Department of Agriculture’s RUSLE2 (Revised Universal Soil Loss Equation 2) model for slope profiles using a 100-foot long exposed slopes.

Sediment removal is defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from cleared area (tons/yr/acre).

Sediment removal is in part a function of (1) a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upland edge of the natural buffer and (2) stormwater flows traveling through a 50-foot buffer of undisturbed natural vegetation.

Additional guidance may be found at https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgg_final_appendix_g_-_buffer_reqs_508.pdf.

Inspection frequencies: Site inspection frequencies have been changed from the previous permit based upon guidance from the USEPA and from stakeholder discussions. These frequencies will allow flexibility but will still allow for frequent enough inspections to ensure that all BMPs are adequately functioning.

**Part VI – Effluent Limitations Determination**

In this general permit, Technology-Based Effluent Limitations are established through the SWPPP and BMP requirements. Effective BMPs may have to be designed on a site-specific basis. The implementation of monitoring provides a tool for each facility to evaluate the effectiveness of BMPs to ensure protection of water quality.

**Part VII – Land Purchase and Change of Ownership**

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. This term is used in conjunction with common promotional plan, as defined in §644, RSMo.

Any portion of a project that is sold to a developer is still considered part of a larger common plan of development or sale and will require a permit.

If a portion of a site is sold to an individual for the purpose of building his or her private residence:
- A permit is required if the portion of land sold is equal to or greater than one acre.
- A permit is not required if the portion of land sold is less than one acre.

**Part VIII – Termination**

The word ‘plant density’ was removed from the first paragraph since the department determined that percent of vegetative cover more accurately describes the vegetative requirements of this permit. This decision was made after discussion within the department and with stakeholders.

It is preferable that temporary BMPs such as sediment fence be removed prior to permit termination to
eliminate potential solid waste issues that may occur as a result of unnecessary and unmaintained BMPs.

Additional options for winter site stabilization as part of the vegetation requirement may exist, such as using a seeded erosion control blanket.

**Part IX – Duty to Reapply**

This section has been revised to reflect the current applicable statutes which require applicants to submit an application for coverage 30 days prior to expiration of this permit. Currently, a paper application if required; however, applicants are to submit an application for coverage electronically as soon as they are made available by the director. The department will announce the availability status of the new permit and the process to reapply at least 60 days prior to the expiration of the existing permit.

**Part X – Standard Conditions**

This section was revised to only include the standard conditions that specifically apply to this permit. All other conditions have been removed.

**Part XI – Administrative Requirements**

On the basis of preliminary staff review and applicable standards and regulations, the department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the permit. The proposed determinations are tentative pending public comment.

**PUBLIC NOTICE:**
The department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest or because of water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and facility must be notified of the denial in writing.

The department must give public notice of a pending permit or of a new or reissued Missouri State Operating Permit. The public comment period is a length of time not less than thirty (30) days following the date of the public notice, during which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed permit, please refer to the Public Notice page located at the front of this draft permit. The Public Notice page gives direction on how and where to submit appropriate comments.

☐ The Public Notice period seeking comments on this permit occurred from March 31 to May 1, 2017.

**DATE OF FACT SHEET: 06/16/2017**

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